



# One Plan

The Consolidated Regional Policy Statement, Regional Plan and Regional Coastal Plan for the Manawatu-Wanganui Region







#### Mo te iti - mo te rahi

Translated as "for the little - for the large", mo te iti - mo te rahi provides an added dimension to the title of this resource management plan. In a Maori setting, mo te iti - mo te rahi is often used to indicate the need to apply the same level of respect toward all matters, regardless of significance or scale.

For the purposes of the One Plan, mo te iti - mo te rahi reinforces the overarching goal of the Plan - to promote a holistic approach to managing today's environment with a vision to preserving and enhancing it for generations to come.

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# MANAWATU-WANGANUI REGIONAL COUNCIL ONE PLAN

It is hereby certified that the One Plan, the consolidated Regional Policy Statement and Regional Plan, was approved by resolution of the Manawatu-Wanganui Regional Council on **25 November 2014**.

The Regional Coastal Plan components of the Proposed One Plan were previously adopted by Council resolution on 29 April 2014 and approved by the Minister of Conservation, Hon. Dr. Nick Smith, on 14 August 2014, as set out on the following page.

The Council further resolved that the One Plan will become operative on **19 December 2014**.

Signed under the Seal of the Manawatu-Wanganui Regional Council in the presence of:

Common

Bruce Gordon CHAIRMAN

Michael McCartney
CHIEF EXECUTIVE



# MANAWATU-WANGANUI REGIONAL COUNCIL REGIONAL COASTAL PLAN

It is hereby certified that the Regional Coastal Plan was adopted by the Manawatu-Wanganui Regional Council on 29 April 2014.

Signed under the Seal of the of:	e Manawatu-Wanganui Regional Council in the presence
Bruce Gordon CHAIRMAN	The Common Seal Of S
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It is hereby certified that the regional coastal plan provisions of the Regional Coastal Plan were approved by the Minister of Conservation.

Hon Dr Nick Smith

Michael McCartney
CHIEF EXECUTIVE

MINISTER OF CONSERVATION

Dated this 14h day of Angel 2014.

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# Part I: Regional Policy Statement

Our Region's significant issues



# CHAPTER 1: Setting the Scene

Describes the One Plan, our Region's "Big Four" keystone issues and outlines our approach for codes of practice and other good practice initiatives.

# 1 Setting the Scene

# 1.1 Scope and Introduction

The challenge for the Manawatu-Wanganui Region (Region) is to strike the ideal balance between using natural resources for economic and social wellbeing, while keeping the environment in good health. The Manawatu-Wanganui Regional Council's (Regional Council) role is to find a satisfactory way to make this seemingly conflicting challenge a reality for the community.

The blueprint for this work is the One Plan. It has a lifespan of 10 years. This is an insignificant timeframe in the natural world but in this short period tangible progress must be made to meet this challenge.

This Plan is a full-scale review of the first set of resource management plans for the Region. Progress under these plans was slow because the Regional Council tried to spread its resources over all the many issues identified during development of the plans.

The Regional Council's approach in this Plan is to focus its resources on making significant progress on the four biggest environmental issues identified for the Region. That does not mean the remaining issues identified in this Plan are unimportant, simply that they are lower priority work for the 10-year life of this Plan.

To make the One Plan compact and easy to use we have tried to keep background and explanatory information to a minimum. Further information and explanations can be found in the State of the Environment (SOE) Reports published by the Regional Council and in the technical reports and Consideration of Alternatives, Benefits and Costs (s32 report) which accompany the One Plan.

Where the meaning of the Māori and English text used in this Plan differs, the English interpretation shall be taken as the correct one.

#### 1.2 What is the One Plan?

The One Plan has been prepared by the Regional Council in accordance with its functions under the Resource Management Act 1991 (RMA).

The One Plan can be described as a "one-stop-shop" regional planning document that defines how the natural and physical resources of the Region (including fresh air, clean water, productive land and natural ecosystems) will be cared for and managed by the Regional Council in partnership with Territorial Authorities and the community.

The One Plan combines the requirements for preparation of a Regional Policy Statement and a Regional Plan. Under the RMA, preparation of a Regional Policy Statement is mandatory, whilst the preparation of a Regional Plan is discretionary (except for a Regional Coastal Plan).

The Plan has effect over the entire Region (although some objectives, policies and rules apply only in specific parts of the Region).

To distinguish the different planning functions encompassed by the One Plan, the Plan is split into two main parts.



One Plan - 2014 1-1

Part I is the Regional Policy Statement section of the One Plan. It sets out the regionally significant resource management issues (identified through a process that drew on both community and technical information), and outlines the objectives, policies and methods that will be used to address these issues.

Part II is the Regional Plan section of the One Plan. It specifies the controls on natural and physical resource use (that is, objectives, policies and regional rules). These controls cover both permitted activities (which allow people to use and develop resources without the need for resource consents) and the application for and issuing of resource consents. Chapter 18 (Activities in the Coastal Marine Area) and Schedule I, together with Chapters 11, 12 and 19, and the relevant definitions in the Glossary, are the Regional Coastal Plan, as required by s64 of the RMA.

### 1.3 Our Region's Challenges – the "Big Four"

The focus of the One Plan is four keystone environmental issues: surface water quality degradation, increasing water demand, unsustainable hill country land use and threatened indigenous biodiversity. These issues were identified during public consultation and confirmed by research of the Regional Council's science team.

By focusing on these Big Four issues, substantial progress can be made at an affordable level of expenditure for the Region. The Big Four have significant interconnection and it is expected that work on one issue will also benefit progress on one or more of the other issues. Notwithstanding the focus on these Big Four issues, other resource management issues are also important and are dealt with in the One Plan.

#### **Issue 1: Surface Water Quality Degradation**

#### The Problem:

Run-off of nutrients, sediment and bacteria from farms is now the single largest threat to water quality in the Region. In some water bodies it is risky to swim or gather food, and aquatic life is being damaged. Priority catchments for water quality enhancement include those listed in Table 14.1 in Part II of the Plan which sets out the specified *Water Management Zones\** and *Sub-zones\** (priority catchments) where management of intensive farming land use activities will be specifically controlled. These are: Mangapapa River, Mangatainoka River, Upper Manawatu River above Hopelands, Waikawa Stream, Manawatu River above Gorge, other south-west catchments (Papaitonga), and other coastal lakes (Northern Manawatu).

#### An Example: The Manawatu River

In the Manawatu River nutrient enrichment is one of the most critical problems. Recent research found that on an annual basis, more than 80% of the nitrogen and 50% of the dissolved reactive phosphorus found in the Manawatu River at Hopelands is coming from run-off from agricultural land. This pattern is repeated in many other catchments.

Excessive nutrients cause nuisance algae growth on the river bed, particularly during summertime low flows.

#### **Proposed Approach:**

Set water quality targets for ecosystem, recreational, cultural and water-use values identified for catchment *Water Management Sub-zones\**. Identify *Water Management Sub-zones\** most affected by nutrient enrichment and/or bacterial contamination. Use a mixture of persuasion, advice and rules to manage agricultural run-off in these *Water Management Sub-zones\**.



#### Look For:

Objectives, policies and methods that address this keystone issue in Chapter 5 and rules in Chapter 14.

#### **Issue 2: Increasing Water Demand**

#### The Problem:

The amount of water used from ground and surface water resources increases each year. At certain times of the year *public water supply\** and irrigation demand exceed what some water bodies in the Region can supply.

#### An Example: The Upper Manawatu River

Across the Region, total consented abstraction volumes have more than doubled since 1997 (Horizons Regional Council, 2005, SOE Report). In the upper Manawatu River and its tributaries, the current demand for water is close to three times that of 1997. Most of this increased demand is for agricultural irrigation which, in 2005, was four times the 1997 levels and took up over 80% of the water allocated.

#### **Proposed Approach:**

The Regional Council has set minimum environmental flows and defined core allocation volumes for *Water Management Sub-zones\** under pressure from surface takes. These will be used to manage and allocate water. The Regional Council is also working with water users to encourage water-use efficiency and accurately define abstraction rates using telemetered water meters.

#### Look For:

Objectives, policies and methods that address this keystone issue in Chapter 5 and rules in Chapter 16.

#### Issue 3: Unsustainable Hill Country Land Use

#### The Problem:

Unsustainable pasture-based farming practices in the Region's steeper hill country damage soil structure and accelerate erosion causing muddy rivers, increasing river siltation downstream and reducing the protection level of flood control schemes.

#### An Example: February 2004 Storm

The Region has 300,000 hectares of hill country land at risk of moderate to severe erosion. In the severe storm events of February 2004, huge quantities of soil poured off the hills of the middle catchments west of the Ruahine Ranges and into some water bodies such as the Whanganui, Rangitikei, Oroua and Pohangina Rivers. Many areas of the Region were badly affected, with severe hillside scarring and valley in-filling often reported in national media coverage.

#### **Proposed Approach:**

Implementation of a Sustainable Land Use Initiative (SLUI) on hill country land that is subject to an elevated risk of *accelerated erosion*\* within the Region, in combination with rules where appropriate. The initiative is underpinned by the development of voluntary management plans. These voluntary plans provide paddock-scale best land management advice while optimising economic return to the landowner. The first voluntary management plan was piloted on a farm in the Pohangina Valley in 2005 and the programme is currently being rolled out in priority areas.

The SLUI has the additional benefit of assisting the Region to adapt to the effects of climate change.



#### Look For:

Objectives, policies and methods that address this keystone issue in Chapter 4 and rules in Chapter 13.

#### Issue 4: Threatened Indigenous Biological Diversity

#### The Problem:

Due to more than a century of landscape modification, the Region has lost much of its indigenous habitat. Habitat remnants continue to be threatened by land development and by pest plants and pest animals.

#### An Example: Vanishing Wetland Habitats

The Manawatu Plains were once covered by a mosaic of wetland habitats. Large-scale drainage has reduced this wetland habitat to about 3% of its former area and, although drainage has mostly stopped, the few remaining wetland habitats are still vulnerable.

#### **Proposed Approach:**

The Regional Council will be the lead agency for indigenous biodiversity management for the Region by controlling activities in rare habitats, threatened habitats and at-risk habitats, and working with landowners to protect and enhance these habitats.

The Regional Council has identified the Region's top 100 wetland habitats and is encouraging their owners through advice and financial incentives to actively manage these habitats. The objective of the programme is to have all 100 wetlands under active management within 10 years.

#### Look For:

Objectives, policies and methods that address this keystone issue in Chapter 6 and rules in Chapter 13.

### 1.4 Planning for Climate Change

Climate change is not one of the Big Four issues dealt with in the One Plan, but it is an overarching issue for the regional community and touches on many of the keystone issues.

#### The Problem:

There is conclusive evidence that our climate is changing. The Region can expect (New Zealand Climate Change Office, 2005):

- a 30-50 cm rise in sea level in the next 100 years
- an increase of up to 3°C in temperature in the next 70-100 years
- more rainfall in the western part of the Region and less in the east
- more westerly winds
- an increase in more extreme weather events floods, droughts and high winds.

Climate change could result in both positive and negative effects for the Region. People are likely to enjoy the benefits of warmer winters with fewer frosts but hotter summers will bring increased risks of heat stress, drought and possibly the introduction of new pests and subtropical diseases. The Region is likely to experience more frequent heavy rainfalls and floods. Changing weather patterns may provide new horticultural or cropping opportunities, but may also impact on biodiversity by affecting the balance of ecosystems. Species that are already under threat or are at the limit of their climatic range may not be able to survive.



<sup>&</sup>quot;Biodiversity" may be used as an alternative to "biological diversity".

### **Proposed Approach:**

The Regional Council's primary focus is to help the Region adapt to the effects of climate change by:

- promoting resilient land-management practices under the SLUI, which will reduce the effects of climate change and provide carbon sinks at the same time
- managing water quality within a values framework responsive to climate change
- managing water quantity according to minimum flows and a core allocation framework responsive to climate change
- planning for changes to the scale and frequency of natural hazards.

#### Look For:

Objectives, policies and methods that directly or indirectly address climate change in Chapters 3, 4, 5 and 9.

# 1.5 Working Towards a Better Future

Achieving the right balance, between encouraging and supporting change and requiring it, using rules in this Plan, is a significant challenge. The Regional Council's overall approach to One Plan implementation is to use methods which encourage responsible resource use, benefit responsible resource users and punish irresponsible resource users.

To make progress on the Big Four issues, a number of changes to the way natural resources are developed and used will need to be made. Some changes are a significant departure from existing practice and may be viewed as daunting by resource users. This is understandable and part of the Regional Council's role is to encourage and support resource users through this period of change.

The Regional Council holds the view that:

- (i) working with people and communities to evaluate and deliver local solutions for local issues is the preferred approach to resource management
- (ii) solutions need to be practical, appropriate to the scale of the problem and affordable for ratepayers and communities in the Region.

To deal with the issues the Regional Council will use a suite of policies and methods. The preference in this Plan is to use approaches that promote and encourage voluntary adoption of environment-friendly resource use practices. These could include encouraging activities that do any of the following:

- (i) operate in accordance with codes of practice and other good practice initiatives
- (ii) have net environmental benefits, especially where the benefits support progress on the Big Four issues
- (iii) assist the Region to adapt to climate change
- (iv) reduce the demand for water at low river flows for example, water harvesting
- (v) provide habitat enhancement, especially if it results in benefits to indigenous biodiversity
- (vi) result in innovative ways to reduce the impact of otherwise adverse effects on the environment for example, the use of new technology or science.

If this emphasis on promoting and encouraging change is not effective, the Regional Council will be forced to switch its policy emphasis to using rules to



require appropriate changes, either at the time of the next Plan review or through the plan change process.

#### 1.6 Codes of Practice and Other Good Practice Initiatives

It is acknowledged that the initiatives of others can be more effective than rules developed by the Regional Council. For this reason, standards produced by Standards New Zealand, industry-developed codes of practice and other good practice initiatives are encouraged and supported by the Regional Council.

The Regional Council is especially supportive of codes of practice or good practice initiatives that:

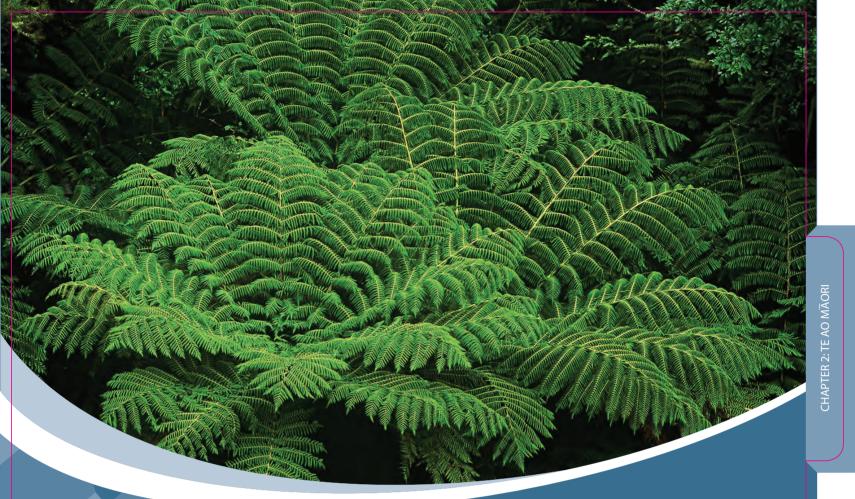
- (i) are consistent with the RMA and the environmental provisions of this Plan
- (ii) are prepared by the users, for the users
- (iii) in cases where they are used as conditions in a rule or resource consent, ensure that they satisfy legal tests.

The Regional Council will recognise codes of practice and other good practice initiatives in one or more of the following ways:

- (i) utilising codes of practice produced by industry groups and standards produced by Standards New Zealand in permitted activity rule conditions, where appropriate
- (ii) preparing rules requiring resource consents that give favourable treatment to activities complying with codes of practice or other good practice initiatives
- (iii) granting consents for longer durations for activities complying with codes of practice or other good practice initiatives
- (iv) recognising codes of practice and other good practice initiatives in consent conditions
- (v) reducing compliance monitoring, especially where the codes of practice or other good practice initiatives include a component of independent audit.

The Regional Council has a particular interest in collaborating with resource users undertaking such activities as forestry, pastoral farming on hill country land that is subject to a risk of *accelerated erosion\**, *dairy farming\**, pig farming, Territorial Authority utilities, and river and drainage scheme works. The purpose of this collaboration is to develop and recognise codes of practice, training programmes and other good practice initiatives that complement changes needed to make progress on the Big Four issues. The Regional Council will also willingly be involved in the preparation of any code of practice or other good practice initiative that is likely to be of environmental benefit in the Region.





# CHAPTER 2: Te Ao Māori

Describes the resource management issues and environmental outcomes sought by tangata whenua, and provides links to provisions in other chapters of the Plan that seek to deliver on these outcomes.



# Te Ao Māori<sup>1</sup> - Resource Management Issues of Significance to *Hapū*\* and *Iwi*\*

# Te Ao Māori - Ngā Take Whakahaere Rauemi e Hirahira ana ki ngā Hapū me ngā lwi

### 2.1 Scope and Background

#### Te Hōkai, Te Takenga Mai

This chapter identifies the resource management issues of significance to  $hap\bar{u}^*$  and  $iwi^*$  of the Region in accordance with s62(1)(b) RMA, and sets out how these issues are addressed. It acts as a central point of reference for  $hap\bar{u}^*$  and  $iwi^*$  resource management issues and sets the scene for examining Māori concepts and expressions within modern resource management practice.

E tautuhi ana tēnei wāhanga i ngā take hirahira o te whakahaere rauemi ki ngā hapū me ngā iwi o te Rohe (e hāngai ana ki s62(1)(b) o te RMA), ā, ka whakatakotoria hoki ka pēhea te whakatau i ēnei take. Ka noho tēnei hei kōrerotanga e pā ana ki ngā take whakahaere rauemi o ngā hapū me ngā iwi, ā, ka whakatakoto kaupapa hei hōpara i ngā tikanga Māori me ngā whakaaro Māori i roto i te mahi whakahaere rauemi.

The chapter provides background on:

- the Region's hapū\* and iwi\*
- hapū\* and iwi\* involvement in resource management
- an understanding of Māori values including *mauri*\*, *taonga*\*, *wāhi tapu*\*, *wāhi tūpuna*\*, tikanga Māori and kaitiakitanga
- resource management issues of concern to hapū\* and iwi\*.

Ka whakarato te wāhanga i te takenga mai e pā ana ki:

- ngā hapū me ngā iwi o te Rohe
- te urunga o ngā hapū me ngā iwi ki roto i te whakahaere rauemi
- te māramatanga ki ngā ūara Māori, ehara tonu ko te mauri, ngā taonga, ngā wāhi tapu, ngā wāhi tūpuna, ngā tikanga Māori me te kaitiakitanga
- ngā take whakahaere rauemi e pā ana ki ngā hapū me ngā iwi.

#### 2.1.1 The Region's *Hapū*\* and *Iwi*\*

#### Ngā Hapū me ngā lwi o te Rohe

More than 12 distinct *iwi\** fall either wholly or partly within the Region. These include (alphabetically) Muaūpoko, Ngāti Maniapoto, Ngā Rauru, Ngāti Apa, Ngāti Hauiti, Ngāti Kahungunu, Ngāti Maru, Ngāti Raukawa, Ngāti Tūwharetoa, Rangitāne, Whanganui (also known as Te Ātihaunui-ā-Pāpārangi and including Ngāti Rangi, Tamaūpoko, Hinengākau, Tūpoho, Tamahaki). Te Iwi Mōrehu at Rātana, an amalgam within which most, if not all, of the country's *iwi\** are represented, is also a significant presence in the Region.

Neke atu i te 12 ngā iwi kei roto katoa, ka hono mai rānei ki te Rohe. Arā (whakarārangi ā-pū nei) ko Muaūpoko, ko Ngāti Maniapoto, ko Ngā Rauru, ko

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Ngāti Apa, ko Ngāti Hauiti, ko Ngāti Kahungunu, ko Ngāti Maru, ko Ngāti Raukawa, ko Ngāti Tūwharetoa, ko Rangitāne, ko Whanganui (e karangatia nei ko Te Ātihaunui-ā-Pāpārangi - whai wāhi atu hoki ko Ngāti Rangi, ko Tamaūpoko, ko Hinengākau, ko Tūpoho, ko Tamahaki). Arā hoki te kohinga iwi o te motu, ko Te Iwi Mōrehu o Rātana, ka kaha kitea i roto tonu i te Rohe.

Māori in the Region represent or associate to one or more of the following groups relevant to resource management:  $wh\bar{a}nau^*$ ,  $hap\bar{u}^*$  or  $iwi^*$ , tribal authorities, marae, Māori land trusts, Māori incorporations and Waitangi Tribunal claimants. Other groupings present in the Region, but which may have a lesser role when dealing with resource management, include urban Māori, taurahere and Māori cultural/religious bodies. Many non-resident tribal members maintain an active presence in day-to-day  $iwi^*$  or  $hap\bar{u}^*$  affairs, particularly with regard to environmental matters.

He kanohi kitea, he tangata whai pānga ngā Māori o te Rohe i roto i te whakahaere rauemi ki tētahi - ētahi rānei o ngā rōpū e whai ake nei: whānau, hapū, iwi, rūnanga, marae, Tarāti Whenua Māori, Kaporeihana Māori, kaitono ki te Taraipunara o Waitangi. Arā ētahi atu rōpū o te Rohe, engari he iti noa pea te wāhanga ki a rātou e pā ana ki te whakahaere rauemi, ehara tonu ko te hunga Māori noho tāone, ko ngā taurahere, me ngā rōpū whakahaere ā-tikanga nei, ā-hāhi nei hoki. Tokomaha ngā mema iwi kei wāhi kē e noho ana kei te kaha whai i ngā take o te iwi, hapū rānei e hāngai ana ki ngā kaupapa taiao.

#### 2.1.2 Hapū\* and lwi\* Involvement in Resource Management

#### Te Whakauru mai a ngā Hapū me ngā lwi ki roto i te Whakahaere Rauemi

Hapū\* and iwi\* are an integral part of the regional community. They make many significant contributions to environmental enhancement via resource management projects and research, including wetland and lake restoration projects, tuna (eel species) enhancement programmes, hapū\* and iwi\* environmental monitoring programmes, riparian planting, iwi\* resource management planning or research, and hapū\* and iwi\* training and workshops. Iwi management plans\* are an important way for hapū\* and iwi\* to express their resource management aspirations. A list of iwi management plans\* relevant to the Region is available on the Regional Council's website.

He wāhanga taketake o te hapori o te rohe ngā hapū me ngā iwi. He nui ō rātou tukunga e pā ana ki te whakarākai taiao, mā ngā kaupapa whakahaere rauemi, rangahau hoki, pērā i ngā kaupapa whakahou papa waiwai - roto hoki, ko ngā kaupapa whakaora tuna, ko ngā kaupapa aroturuki taiao ā-hapū, ā-iwi, ko te whakatō tupu, ko te whakatakoto mahere - rangahau rānei mō te whakahaere ā-iwi i ngā rauemi taiao, ko ngā awheawhe me ngā whakangungu hapū, iwi hoki. He mea whakahirahira ngā mahere whakahaere ā-iwi ki ngā hapū me ngā iwi hei whakaputa i ō rātou wawata mō te whakahaere rauemi. Kei runga tētahi rārangi o ngā mahere whakahaere ā-iwi i te whārangi ipurangi o te Kaunihera ā-Rohe

Tangata whenua have a special and unique role as kaitiaki in the Region. This relationship with the environment is significant to the identity of  $wh\bar{a}nau^*$ ,  $hap\bar{u}^*$  and  $iwi^*$ . Tangata whenua are also significant landowners and contribute to the local economy.

Ko tā te tangata whenua tūranga, motuhake nei - ahurei nei anō hoki, hei kaitiaki i roto i te Rohe. He hirahira tēnei hononga ki te taiao mō te tuakiri o ngā whānau, ngā hapū, me ngā iwi. He kaipupuri whenua hirahira hoki te tangata whenua me tā rātou whāngai i te ohanga o te takiwā.



The special position of *hapū\** and *iwi\** as a Treaty partner is reflected in the specific provisions for Māori under the RMA. The RMA requires the Regional Council to take into account the principles of the Treaty of Waitangi in exercising its functions and powers. The Council does this in a number of ways in the objectives and policies that follow in this chapter, and throughout the rest of the Plan. The key principles of the Treaty of Waitangi which are relevant include:

- (a) principle of active protection,
- (b) duty to act in good faith,
- (c) duty to make informed decisions through consultation,
- (d) principle of redress and a duty not to create new grievances,
- (e) principle of reciprocity, and
- (f) principle of mutual benefit.

Ka whakaaturia te mana motuhake o ngā hapū me ngā iwi hei Tangata Tiriti i roto i ngā whakaratonga motuhake o te RMA e pā ana ki te Māori. Ko te whakatau kei te RMA ka mate ka aro atu te Kaunihera ā-Rohe ki ngā matapono o te Tiriti o Waitangi i roto i āna mahinga me āna tukunga whai mana. He maha ngā huarahi ka tutuki i te Kaunihera i roto i ngā whāinga me ngā kaupapa e whai ana i roto i tēnei wāhanga - i roto hoki i te Mahere. Ko ngā matapono matua o te Tiriti o Waitangi ka whai pānga, arā:

- (a) ko te matapono o te whakamarumaru ngangahau,
- (b) ko te mahi ā-ngākau kia mahi i runga i te ngākau pono,
- (c) ko te mahi ā-ngākau ki te whiriwhiri whakaaro whai mōhio mā te kōrerorero me te tini tangata,
- (d) ko te matapono o te whakatika me te mahi ā-ngākau kia kaua e whakawhānau take whakamau hou,
- (e) ko te matapono o te tau utuutu, me
- (f) ko te matapono o te whiwhi tahi i ngā painga.

In particular, the Regional Council acknowledges the special relationship that  $hap\bar{u}^*$  and  $iwi^*$  in the Region share with the environment. The Council is committed to strengthening relationships and partnerships to involve  $hap\bar{u}^*$  and  $iwi^*$  more actively in managing the Region's resources. This is provided for in particular by Policy 2-1 which identifies how increased  $hap\bar{u}^*$  and  $iwi^*$  involvement in resource management must be enabled.

Ka mihi ake te Kaunihera ā-Rohe ki ngā hapū me ngā iwi kei roto i te Rohe mō ō rātou hononga ki te taiao. Tūturu, ka herea te Kaunihera ki te whakakaha i ngā hononga me ngā whakahoatanga kia tino whai wāhi ai ngā hapū me ngā iwi i roto i te mahi whakahaere i ngā rauemi o te Rohe. Ka whakaratongia ake nei tēnei ki te kaupapa 2-1 - e tautuhi ana ka pēhea ka mate ka āhei ake te kuhunga mai o ngā hapū me ngā iwi ki roto i te mahi whakahaere rauemi.

The major frustration for  $hap\bar{u}^*$  and  $iwi^*$  has been the lack of acknowledgement of their concerns in resource management planning and resource consent processes.

Ko te mea tino hōhā ki ngā hapū me ngā iwi ko te korenga o te aro mai ki ō rātou māharahara e pā ana ki te whakatakoto mahere whakahaere rauemi me ngā tukanga whakaaetanga rauemi.

#### 2.1.3 An Understanding of Māori Values

#### He Māramatanga ki ngā Uara Māori

The Region's natural resources are considered living *taonga\** to *hapū\** and *iwi\**, as they share an intimate relationship and are considered physically and spiritually



intertwined. The general expectation of  $hap\bar{u}^*$  and  $iwi^*$  is that appropriate recognition be given to their respective tikanga Māori in the management of resources by the Regional Council, Territorial Authorities and resource users. Direct and effective dialogue is essential to ensure views are discussed thoroughly in order to effect meaningful consultation.

E ai ki ngā hapū me ngā iwi he taonga ngā rawa māori o te Rohe ānō nei he mea ora nā te mea he honotanga tata o ēnei, ā, ko te whakaaro kua tuia ā-tinana nei, ā-wairua nei. Ko te tūmanako whānui o ngā hapū me ngā iwi kia arohia ō rātou ake tikanga Māori ka tika - i roto i te mahi whakahaere rauemi a te Kaunihera ā-Rohe, ngā Mana Takiwā me ngā kaiwhakamahi rauemi. Me whitiwhiti kōrero ko tētahi ki tētahi kia whai hua ai - kia hua ai hoki ka āta kōrerotia ngā tirohanga a tēnā, a tēnā kia kīia ai he kōrerorero whai tikanga.

Outlined below is an explanation of traditional Māori values and concepts observed in context with the natural environment and resource management practice.

Kei raro nei e rārangitia ana ko tētahi whakamāramatanga mō ngā uara me ngā ariā o te Māori ka whāia me te horopaki ki te taiao māori me ngā mahi whakahaere rauemi.

#### Mauri\*2

*Mauri\** means "essential life force or principle; a metaphysical quality inherent in all things, both animate and inanimate", but the following explains the concept in more detail.

### Mauri 2

Ko tētahi kōrero whakamārama mō te mauri ko tētahi "whakahuawaitanga, matapono oranga e tika ana; he āhuatanga tuakiko ka pū mai nō roto tonu i ngā mea katoa - whakahauora mai, popohe mai hoki", heoi, mā te kōrero e whai ake nei te ariā e wherawhera.

All things, both animate and inanimate, have been imbued with the *mauri\** generated from within the realm of te kore. Nothing in the natural world is without this essential element - *mauri\** represents the interconnectedness of all things that have being. Humans have an added responsibility to ensure that the *mauri\** inherent in natural resources is maintained. Inappropriate use of resources, for example, discharge of sewage to water impacts directly on the *mauri\** of water and therefore all factors associated with it. The natural balance which exists amongst all things is disturbed and, in many cases, irreversibly damaged.

Kua whaona ngā mea katoa - whakahauora mai, popohe mai hoki - ki te mauri i ahu mai nō roto tonu i te kore. Kāore kau he mea o te ao māori kua kore tēnei tino pūmotu - me kī, ko te mauri te hononga o ngā mea whai kiko katoa. Kei runga tētahi kawenga i ngā pakihiwi o te tangata kia hua ai ka tiakina tonutia te mauri kei te mau tūturu ki roto i ngā rauemi māori. Ki te hē te whakamahi rauemi - hei tauira, ko te tuku parakaingaki ki roto i te wai - ka pāngia kinotia te mauri o te wai me ngā āhuatanga whai pānga katoa. Ka whakaraweketia te tautika māori i waenga i ngā mea katoa, ā, i te nuinga ngā wā, kore rawa e taea te whakatika anō.

#### Taonga\*

Taonga\* means "all things prized or treasured, both tangible and intangible", but the following explains the concept in more detail.

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The iwi\* of Whanganui and Taranaki use a dialectal variation, mouri.
Kei ngā mita o ngā iwi o Whanganui me Taranaki ka mahia te kupu, mouri.

#### Taonga

Ko tētahi whakamāramatanga mō te taonga "ko ngā mea katoa ka māpunatia, ka kaingākautia rānei, whai kiko mai, memeha mai hoki", heoi, mā te kōrero e whai ake nei te ariā e wherawhera.

The concept of *taonga\** relates to anything that is prized, treasured or valued for what it is, where it came from and what its potential is. The cultural and spiritual relationship of Māori with their ancestral lands, water, *sites\**, *wāhi tapu\** and other *taonga\** is referred to in the RMA as a matter of national importance. This implies that the word *taonga\** incorporates not only the stated resources in s6(e) RMA, but also anything that is highly prized - physically, mentally, spiritually and culturally. Physically, *taonga\** include traditional forms of food and natural material harvested for traditional purposes. Adverse effects on these would not only see the demise of the physical *taonga\** (food and weaving materials), but the demise of spiritual and cultural *taonga\** also. *Hapū\** and *iwi\** are concerned that resources of cultural and spiritual significance be protected.

Ka pā te ariā o te taonga ki ngā mea katoa ka māpunatia, ka kaingākautia, kua whai wāriu rānei mō tōna hanga anō, nō hea hoki aua mea, me tōna pitomata anō hoki. Ka kōrerotia e te RMA ngā hononga ā-tikanga, ā-wairua hoki o te Māori ki ōna whenua tūpuna, wai, papa, wāhi tapu hoki, me ētahi atu taonga - hei kaupapa nui ki te motu. Ko te tikanga o tēnei, ehara i te mea he taonga ngā rauemi ka kīia i roto i te s6(e) RMA anake, me kī, ka whai wāhi ngā mea katoa ka kaha māpunatia - ōkiko mai, hinengaro mai, wairua mai, tikanga mai anō hoki. Ki te taha ōkiko, he taonga tuku iho te hauhake kai, rawa māori hoki, ka kohikohia hei whakatutuki tikanga. Ki te pāngia kinotia ēnei ehara i te mea ka mimiti o ngā taonga ōkiko (pērā i te kai, rawa raranga) anake, engari ka ngaro haere ngā taonga ā-wairua, ā-tikanga hoki. Kei te whakaaro nui ngā hapū me ngā iwi kia whakamarumarutia ngā rauemi hirahira - tikanga mai nei, wairua mai nei hoki.

#### Wāhi tapu\* and wāhi tūpuna\*

*Wāhi tapu*\* means "a *site*\* sacred to Māori in the traditional, spiritual, religious, ritual, or mythological sense and includes *rua kōiwi*\*".

#### Wāhi tapu, wāhi tūpuna hoki

Ko te wāhi tapu "tētahi papa ka noho tapu ki te Māori i roto i ōna āhuatanga tuku iho, taha wairua, taha hāhi, mahi karakia, pūrākau rānei, arā, ko te rua kōiwi ka whai wāhi i konei."

Wāhi tūpuna\* means "a site\* of cultural and historical significance to hapū\* or iwi\* - though not necessarily in a state of tapu". The following explains these concepts in more detail.

Ko te wāhi tūpuna "tētahi papa ka noho hirahira ā-tikanga nei, ā-hītori nei hoki ki ngā hapū me ngā iwi, ahakoa kāore he tapu kua uhia ki runga". Mā te kōrero e whai ake nei te ariā e wherawhera.

Wāhi tapu\* relates specifically to sites\* including areas or locations that remain in a state of tapu. These may include, but are not exclusively, urupā (burial sites\*), rua kōiwi\* (sites\* where human skeletal remains are traditionally placed), wai tohi (streams where baptismal rites are performed), and wāhi pakanga (battle sites\*). As hapū\* and iwi\* have the knowledge of their wāhi tapu\*, the task of defining wāhi tapu\* must rest with them. However, there may be some ambiguity as to which sites\* remain in a state of tapu. It is important to note that wāhi tūpuna\* exist (though not necessarily in a state of tapu) and should be protected. Such wāhi tūpuna\* may be ancient pā sites\*, important caves, landscape features, ancient pathways or tribal boundary indicators.



Ko te wāhi tapu ko ngā papa pērā i ngā āpure, wāhi rānei ka noho tapu tonu. Ka whai wāhi - ahakoa ko ēnei mea te katoa - ngā mea pērā i ngā urupā (he papa kua nehua te tangata), ngā rua kōiwi (he papa nō mai rānō ka whakatakotoria ngā kōiwi tangata), ngā wai tohi (he manga i tākina ngā kawa tohi), me ngā wāhi pakanga (he papa pakanga). Kei ngā hapū me ngā iwi te mātauranga mō ō rātou wāhi tapu, nā, ka mate ka noho ki a rātou te mahi hei āta whiriwhiri i ngā wāhi tapu. Heoi anō, tērā pea ka āhua rangirua ko ēhea ngā papa me noho tapu tonu. Kia mōhio mai he mea tūturu ngā wāhi tūpuna (ahakoa kāore pea ōna tapu), ā, me whakamarumaru ka tika. He pā tawhito, he ana, he tohu whenua, he ara tawhito, he tohu rohe rānei ērā momo wāhi tūpuna.

#### Tikanga Māori

Tikanga Māori is defined in the RMA as meaning "Māori customary values and practices" and that definition is used in this Plan. The following explains the concept in more detail.

#### Tikanga Māori

E ai ki te RMA ko te whakamāramatanga o te tikanga Māori "ko ngā uara me ngā mahinga whai tikanga a te Māori", ā, ka whakamahia taua whakamāramatanga i roto i tēnei Mahere. Mā te kōrero e whai ake nei te ariā e wherawhera.

Tikanga Māori not only encompasses the lore, customs and practices of Māori but also the guiding principles of social, economic and political life - a way of life that accounts for all these factors whilst practising a close affinity with nature. Tikanga Māori also gives physical expression, through social norms and behaviour, to the concepts of kaitiakitanga and *mana\**.

Ehara i te mea ko ngā kōrero o te wānanga, ngā tikanga tuku iho, me ngā mahinga o te Māori te katoa o ngā mea ka noho hei tikanga Māori, arā hoki ngā matapono hei ārahi i te oranga - pāpori mai, ohaoha mai, tōrangapū mai hoki. Me kī, he tikanga oranga ka huia katoatia ēnei āhuatanga me te hono atu ki te taiao. Ko tā te tikanga Māori mahi ko te whakatinana i ngā ariā o te kaitiakitanga me te mana mā ōna ture ā-noho, whanonga hoki.

#### Kaitiakitanga

Kaitiakitanga is defined in the RMA as meaning "the exercise of guardianship by the tangata whenua of an area in accordance with tikanga Māori in relation to natural and physical resources; and includes the ethic of stewardship" and that definition is used in this Plan. The following explains the concept in more detail.

#### Kaitiakitanga

E ai ki te RMA ko te whakamāramatanga o te kaitiakitanga "ko te mahi tiaki a te tangata whenua i tētahi wāhi i runga i ngā tikanga Māori e pā ana ki ngā rauemi māori, ōkiko hoki; ā, ka whai wāhi te tikanga o te tiakitanga", ā, ka whakamahia taua whakamāramatanga i roto i tēnei Mahere. Mā te kōrero e whai ake nei te ariā e wherawhera.

The concept of kaitiakitanga is based on spiritual and physical guardianship met within the social norms and everyday practices of tikanga Māori. Recognition of the *mauri\** held by particular resources also necessitates communication with the spiritual kaitiaki (guardian) to whom that resource is dedicated. The physical responsibility of kaitiakitanga is met by the recognition of the interconnectedness of all elements - *mauri\** and wairua, tapu and noa, *mana\** and tikanga Māori. Therefore, the ethics that underpin *hapū\** and *iwi\** responsibility to practise kaitiakitanga are based on spiritual and cultural practices and wise resource management to ensure a healthy environment for future generations.

I takea mai te ariā o te kaitiakitanga i te tiakitanga ā-wairua, ōkiko nei hoki ka tutuki i roto i ngā ture ā-noho me ngā mahinga o ia rā o te tikanga Māori. Ki te



arohia te mauri kei tēnā rauemi, kei tēnā rauemi me tuku whakaaro hoki te kaitiaki taha wairua o taua rauemi. Mā te aro atu ki ngā hononga o ngā pūmotu katoa - arā, ko te mauri, te wairua, te tapu, te noa, te mana me ngā tikanga Māori - e tutuki ai te kawenga ōkiko o te kaitiakitanga. Nō reira, ko ngā rapunga whakaaro ka noho hei tūāpapa mō ngā kawenga o ngā hapū me ngā iwi ki te mahi i te kaitiakitanga he mea i takea mai i ngā mahinga taha wairua, taha ahurea hoki me te tika o te whakahaere rauemi kia hua ai ko tētahi taiao whai hauora mā ngā whakatupuranga e haere mai nei.

### 2.2 Resource Management Issues of Significance to *Hapū*\* and *Iwi*\*

# Ngā Take Whakahaere Rauemi e Hirahira ana ki ngā Hapū me ngā lwi

The Region's  $hap\bar{u}^*$  and  $iwi^*$  view present resource management as inadequate for the issues described below. As a consequence, the relationships of  $hap\bar{u}^*$  and  $iwi^*$  with ancestral lands, water,  $sites^*$ ,  $w\bar{a}hi$   $tapu^*$  and other  $taonga^*$  (including  $w\bar{a}hi$   $t\bar{u}puna^*$ ) are being undermined.

Ko te tirohanga o ngā hapū me ngā iwi o te Rohe mō te whakahaere rauemi he takarepa noa mō ngā take e kōrerotia ana i raro nei. Nā whai anō, kua whakaruhia te hononga o ngā hapū me ngā iwi ki ngā whenua tūpuna, ngā wai, ngā papa, ngā wāhi tapu, me ngā taonga a kui mā, a koro mā.

Issues of resource management significance to  $hap\bar{u}^*$  and  $iwi^*$  include but are not limited to the issues identified below:

Ko ngā take whakahaere rauemi ka hirahira ki ngā hapū me ngā iwi, ko ēnei e tautuhia ana i raro nei - me ētahi anō, arā:

#### Issue 2-1: Water quality and demand

#### Take 2-1: Te kounga o te wai me te hiawai

- (a) Management of water quality and quantity throughout the Region does not provide for the special qualities significant to Māori.
  - Kāore te whakahaeretanga o te kounga me te nui o te wai huri noa i te Rohe i te pukumahara mō ngā āhuatanga hirahira ki te Māori.
- (b) Hazardous substances\* and nitrate run-off need to be better managed to avoid contaminants entering water.
  - Me pai ake te whakahaere matū mōrearea me ngā rerenga pākawa ota hei pare i te uru o ngā paru kino ki roto i ngā wai.
- (c) Lakes and streams (for example, Punahau/Waipunahau (Lake Horowhenua) and Hokio Stream) have suffered degradation which continues and are considered culturally unclean.
  - Kua hemo haere ngā roto me ngā manga (pērā i a Punahau/Waipunahau me Hokio) i te whakakinotanga kei te mahia tonutia hoki, ā, kua pokea te tapu.
- (d) Access to and availability of clean water to exercise cultural activities such as food gathering and baptismal rituals have diminished.
  - Kua mimiti haere te putanga ki te wai me te wātea o te wai mō te hāpai i ngā tikanga pērā i te kohikohi kai me te tohi tamariki.



(e) Marae groundwater bore supply is affected in some areas during seasonal drought.

I ngā wā kōpaka o te tau ka pāngia ngā poka waiopapa o ngā marae i roto i ētahi takiwā.

- (f) Excessive groundwater abstraction can adversely affect water and existing groundwater users.
  - Mā nui rawa o te waiopapa ka tangohia e raru ai te wai me ngā kaiwhakamahi wai o nāianei.
- (g) Water diversion from one catchment to another is considered culturally abhorrent.
  - Ko te whakaaro he mea kiriweti te whakataha i te rere a te wai mai i tētahi takiwā ki tētahi atu takiwā.
- (h) Sewage disposed to water, in treated form or otherwise, is culturally abhorrent. Land-based treatment is preferred.

Ko te whakaaro he mea kiriweti te tuku parakaingaki - ahakoa kua tangohia ngā paru, aha rānei - ki roto i ngā wai. Pai kē ake te whakapai ki uta.

#### Issue 2-2: Land use and management

#### Take 2-2: Te whakamahi me te whakahaere whenua

- (i) More riparian retirement and planting is needed to protect river banks from erosion. Several iwi\* believe harakeke (flax) would provide the most desirable outcome.
  - Ko te tikanga me whakarite wāhi whakatū rākau, me whakatō rākau hoki, hei whakamarumaru i ngā parenga i te horo whenua. Ko te whakapono o ētahi iwi mā te harakeke e tutuki pai ai tēnei.
- (j) Land management plans need to be encouraged to ensure consistent land management practices Region-wide.
  - Me kaha akiaki te whakatakoto mahere whakahaere whenua kia hua ai ngā tikanga rite mō te whakahaere whenua huri noa i te Rohe.
- (k) Adverse effects of land use continue to have a detrimental effect on traditional food gathering areas, native habitats and ecosystems.
  - Mā te whakamahi i te whenua me ōna pānga kino e raru ai tonu ngā wāhi kohikohi kai, ngā nohonga taketake me ngā pūnaha rauropi.
- (I) The removal, destruction or alteration of *wāhi tapu\** and *wāhi tūpuna\** by inappropriate activities continues to have a detrimental effect on those *sites\** and upon *hapū\** and *iwi\**.

Ka pāngia kinotia tonu ngā wāhi, me ngā hapū me ngā iwi hoki - i te tango, te wāwāhi, te whakarerekē rānei i ngā wāhi tapu me ngā wāhi tūpuna.

#### Issue 2-3 Indigenous habitat and biodiversity

#### Take 2-3: Ngā wāhi noho taketake me te kanorau koiora

(m) The transfer of indigenous plants from *rohe\** to *rohe\** is considered culturally unnatural.

Kāore i te tika ki te whakaaro Māori te whakawhiti tupu taketake mai i tētahi rohe ki tētahi atu rohe.



(n) Indigenous flora and fauna continue to be under increased threat by human and pest activity.

Kei te whakawetia tonutia ake ngā tupu taketake me te aitanga kararehe taketake e te mahi a te tangata me te orotā.

#### Issue 2-4: Research

#### Take 2-4: Te rangahau

(o) Further research on preventing salt water intrusion into coastal aquifers is a necessity.

Ka mate ka rangahaua tonutia te ārai i te urunga waitai ki roto i ngā kahupapa takutai moana.

(p) Biodiversity research needs more funding.

Me whai putea anō te rangahau e pā ana ki te kanorau koiora.

These issues are largely addressed within the respective resource management chapters in this Plan, as referenced in Table 2.1.

Ka kōrerotia ēnei take i roto i ngā wāhanga whakahaere rauemi o tēnei Mahere, tirohia Table 2.1.

### Issue 2-5: Monitoring and enforcement

#### Take 2-5: Te aroturuki me te ūruhitanga

(q) Monitoring and enforcement of environmental standards, including those contained in regional plans, district plans and resource consents, are insufficient at times.

I ētahi wā he iti rawa te aroturuki me te ūruhitanga o ngā taumata taiao pērā ki ērā kei roto i ngā mahere rohe, ngā mahere takiwā, me ngā whakaaetanga rauemi.

## 2.3 Objectives

#### Whāinga

#### Objective 2-1: Resource management

#### Whāinga 2-1: Te whakahaere rauemi

(a) To have regard to the *mauri*\* of *natural and physical resources*^ to enable *hapū*\* and *iwi*\* to provide for their social, economic and cultural wellbeing.

Kia aro atu ki te mauri o ngā rauemi māori - ōkiko hoki - hei oranga hapori, ōhanga hoki, tikanga hoki mō ngā hapū me ngā iwi.

(b) Kaitiakitanga<sup>^</sup> must be given particular regard and the relationship of hapū<sup>\*</sup> and iwi<sup>\*</sup> with their ancestral lands<sup>^</sup>, water<sup>^</sup>, sites<sup>\*</sup>, wāhi tapu<sup>\*</sup> and other taonga<sup>\*</sup> (including wāhi tūpuna<sup>\*</sup>) must be recognised and provided for through resource management processes.

Ka mate ka tino arohia te kaitiakitanga, ā, ka mate ka whakamanatia te hononga o ngā hapū me ngā iwi ki ō rātou whenua tūpuna, wai, papa, wāhi tapu hoki me ētahi atu taonga (pērā i ngā wāhi tūpuna), ā, ka whakaratongia mā ngā tukanga whakahaere rauemi.



#### 2.4 Policies

#### Kaupapa

Policy 2-1:  $Hap\bar{u}^*$  and  $iwi^*$  involvement in resource management

# Kaupapa 2-1: Te whakauru mai o ngā hapū me ngā iwi ki roto i te whakahaere rauemi

The Regional Council must enable and foster *kaitiakitanga*^ and the relationship between *hapū*\* and *iwi*\* and their ancestral *lands*^, *water*^, *sites*\*, *wāhi tapu*\* and other *taonga*\* (including *wāhi tūpuna*\*) through increased involvement of *hapū*\* and *iwi*\* in resource management processes including:

Ka mate ka tutuki i te Kaunihera ā-Rohe - ka atawhaitia hoki - te kaitiakitanga me te hononga o ngā hapū me ngā iwi ki ō rātou whenua tūpuna, wai, papa, wāhi tapu hoki me ētahi atu taonga (pērā i ngā wāhi tūpuna) mā te piki ake o te whakauru mai o ngā hapū me ngā iwi ki roto i ngā tukanga whakahaere rauemi, arā, ko:

- (a) memoranda of partnership between the Regional Council and  $hap\bar{u}^*$  or  $iwi^*$  which set clear relationship and communication parameters to address resource management objectives,
  - ngā manatū rangapū i waenga i ngā hapū me ngā iwi hei whakatakoto i te āhua o te hononga me te whitiwhiti kōrero hei whakatutuki i ngā whāinga whakahaere rauemi.
- (b) recognition of existing arrangements and agreements between resource users, local authorities and  $hap\bar{u}^*$  or  $iwi^*$ ,
  - te aro atu ki ngā whakaritenga me ngā whakaaetanga kei te tū tonu i waenga i ngā kaiwhakamahi rauemi, ngā mana takiwā, me ngā hapū, iwi rānei.
- (c) development of catchment-based forums, involving the Regional Council,  $hap\bar{u}^*$ ,  $iwi^*$ , and other interested groups including resource users, for information sharing, planning and research,
  - te whakarite wānanga ā-takiwā e whai wāhi ai te Kaunihera ā-Rohe me ngā hapū, ngā iwi, me ētahi atu tira whai pānga pērā i te hunga whakamahi hei tuari pārongo, hei whakatakoto mahere hoki, rangahau anō hoki,
- (d) development, where appropriate, of *hapū*\* and *iwi*\* cultural indicator monitoring programmes by the Regional Council,
  - te whakahiato a te Kaunihera ā-Rohe i ngā kaupapa aroturuki tohu tikanga hapū mai, iwi mai hoki i ngā wā e tika ana,
- (e) assistance from the Regional Council to  $hap\bar{u}^*$  or  $iwi^*$  to facilitate research, projects, seminars and training,
  - te tuku āwhina a te Kaunihera ā-Rohe ki ngā hapū, iwi rānei ki te whakahaere rangahau, kaupapa hoki, awheawhe hoki, whakangungu hoki,
- (f) development of *joint management agreements*^ between the Regional Council and *hapū*\* or *iwi*\* where appropriate,
  - te whakahiato whakaaetanga whakahaere ngātahi i waenga i te Kaunihera me ngā hapū, iwi rānei e tika ana,



(g) the Regional Council having regard to *iwi management plans\** lodged with Council,

te aro atu a te Kaunihera ā-Rohe ki ngā mahere whakahaere ā-iwi kua tukuna ki te Kaunihera,

(h) involvement of hapū\* or iwi\* in resource consent^ decision-making and planning processes in the ways agreed in the memoranda of partnership and joint management agreements^ developed under (a) and (f) above, and

te whakaurunga o ngā hapū, iwi rānei ki roto i ngā tukanga whakatau whakaaetanga rauemi i runga i ngā tikanga i whakaaetia i roto i ngā manatū rangapū me ngā whakaaetanga whakahaere ngātahi i whakahiatongia i raro i te (a) me te (f) kei runga nei, me,

(i) the Regional Council advising and encouraging resource consent<sup> $^{^{^{^{\prime}}}}$ </sup> applicants to consult directly with  $hap\bar{u}^*$  or  $iwi^*$  where it is necessary to identify:

te mahi a te Kaunihera ā-Rohe ki te tuku aratohu, ki te akiaki i ngā kaitono whakaaetanga rauemi ki te kōrerorero me ngā hapū, iwi rānei e tika ana kia tautuhia:

(i) the relationship of Māori and their culture and traditions with their ancestral lands^, water^, sites\*, wāhi tapu\* and other taonga\* (including wāhi tūpuna\*), and

te hononga o te Māori ki tōna ahurea me ngā tikanga e pā ana ki ngā whenua tūpuna, ngā wai, ngā papa, ngā wāhi tapu me ētahi atu taonga (pērā i ngā wāhi tūpuna), me

(ii) the actual and potential adverse *effects*^ of proposed activities on those relationships.

ngā pānga kino ki aua hononga mai i ngā ngohe ka marohitia - ka whakatinanahia, ka pāngia kinotia pea hoki.

# Policy 2-2: Wāhi tapu\*, wāhi tūpuna\* and other sites\* of significance

# Kaupapa 2-2: Ko ngā wāhi tapu, wāhi tūpuna hoki me ētahi atu papa hirahira

(a) Wāhi tapu\*, wāhi tūpuna\* and other sites\* of significance to Māori identified:

Kua tautuhia ngā wāhi tapu me ngā wāhi tūpuna me ētahi atu wāhi hirahira ki te Māori:

- (i) In the Regional Coastal Plan and district plans^,
- (ii) as historic reserves under the Reserves Act 1977,
- (iii) as Māori reserves under the Te Ture Whenua Māori Act 1993,
- (iv) as sites recorded in the New Zealand Archaeological Association's Site Recording Scheme, and
- (v) as registered sites under the Historic Places Act 1993
- (i) kei roto i te Mahere Takutai ā-Rohe me ngā mahere ā-takiwā.
- (ii) hei Historic Reserves i raro i te Reserves Act 1977,
- (iii) hei Māori Reserves i raro i Te Ture Whenua 1993,
- (iv) hei wāhi kua rēhitatia mā te Site Recording Scheme o te New Zealand Archaelogical Association, ā
- (v) hei wāhi kua rēhitatia i raro i te Historic Places Act 1993



must be protected from inappropriate subdivision, use or development that would cause adverse *effects*<sup>^</sup> on the qualities and features which contribute to the values of these *sites*<sup>\*</sup>.

ka whakamarumarutia i te hē o te wehewehe whenua, te whakamahi whenua, whakaahu whenua rānei e puta ai pea he pānga kino ki ngā painga me ngā āhuatanga ka pā ki te ūara o ēnei wāhi.

(b) The Regional Council must facilitate  $hap\bar{u}^*$  and  $iwi^*$  recording the locations of  $w\bar{a}hi$   $tapu^*$ ,  $w\bar{a}hi$   $t\bar{u}puna^*$  and other  $sites^*$  of significance to Māori in an appropriate publicly-available database.

Ka mate ka tūāpā te Kaunihera ā-Rohe te mahi mā ngā hapū me ngā iwi hei hopu kōrero kia pupuritia ki tētahi pātengi raraunga tika - ka taea hoki e te iwi te tono - kei hea aua wāhi tapu, wāhi tūpuna, me ērā atu papa hirahira ki te Māori.

(c) Potential damage or disturbance (including that caused by inappropriate subdivision, use or development) to *wāhi tapu\**, *wāhi tūpuna\** and other *sites\** of significance to Māori not identified (for confidentiality and sensitivity reasons) by *hapū\** or *iwi\** under (a), above, must be minimised by the Regional Council facilitating the compilation of databases by *hapū\** and *iwi\** to record locations which need to remain confidential.

Ka mate ka whakaitingia e te Kaunihera ā-Rohe - e tūāpā ana i te whakahiato pātengi raraunga a ngā hapū me ngā iwi hei hopu kōrero mō ngā wāhi me noho muna - ko te pitomata ka tukitukia, ka raweketia (pērā ki tērā ka hua mai i te hē o te wehewehe whenua, te whakamahi, te whakaahu rānei) ngā wāhi kāore i tautuhia (mō te noho matatapu me te whakaaro rauangi te take) e ngā hapū me ngā iwi ki tā (a) kei runga nei, ka whakamarumarutia i te torohū ka pakaru, ka rawekengia rānei mā.

(d) The Regional Council must ensure that resource users and contractors have clear procedures in the event wāhi tapu\* or wāhi tūpuna\* are discovered.

Mā te Kaunihera ā-Rohe e mahi kia hua ai kua whai tukanga mārama te hunga whakamahi rauemi me ngā kaikirimana me aha ā te wā ka kitea he wāhi tapu, wāhi tūpuna rānei.

#### Policy 2-3: The mauri\* of water^

#### Kaupapa 2-3: Te mauri o ngā wai

(a) The Regional Council must have regard to the *mauri\** of *water^* by implementing Policy 2-1 (a) to (i) above and by restricting and suspending *water^* takes in times of minimum flow consistent with Policy 5-18 in Chapter 5.

Ka mate ka aro atu te Kaunihera ā-Rohe ki te mauri o ngā wai mā te whakamahi i Kaupapa 2-1 (a) ki (i) kei runga nei, me te whakatiki, te aukati hoki i te tango wai i ngā wā o te wai rere iti noa e ai ki Kaupapa 5-18 kei te Wāhanga 5.

(b) In exceptional circumstances the Regional Council, following advice and guidance of *hapū*\* or *iwi*\* and consultation with potentially affected resource users, may facilitate a voluntary *rāhui*\* - temporary cessation of resource activities (with the exception of *public water supply*\*).

I ngā wā tino rerekē ka tūāpā te Kaunihera ā-Rohe i tētahi rāhui tūao - i runga i ngā tohutohu me ngā tohu ārahi a ngā hapū me ngā iwi, me te kōrerorero tahi me ngā kaiwhakamahi rauemi ka pāngia pea - mō te aukati





taupua i ngā ngohe whakamahi rauemi (hāunga ko te puna wai mō te iwi whānui.

#### Policy 2-4: Other resource management issues

#### Kaupapa 2-4: Ētahi take whakahaere rauemi anō

The specific issues listed in 2.2 which were raised by  $hap\bar{u}^*$  and  $iwi^*$  must be addressed in the manner set out in Table 2.1 below.

Ka mate ka whakatauria ngā take motuhake e rārangitia ana ki 2.2, kua whakaarahia e ngā hapū me ngā iwi Māori, i runga hoki i te takoto o Table 2.1 kei raro nei.

Table 2.1 highlights issues of significance to the Region's  $hap\bar{u}^*$  and  $iwi^*$ , provides explanations in the context of Māori belief and demonstrates how the Regional Council must address these matters. The issues and explanations do not in any way represent a complete picture of  $hap\bar{u}^*$  and  $iwi^*$  concerns, but they offer possible explanations as to the depth of feeling and connection  $hap\bar{u}^*$  and  $iwi^*$  have with the Region's natural resources.

Ka tīpako a Table 2.1 i ngā take hirahira ki ngā hapū me ngā iwi o te Rohe, ka whakamārama hoki i runga i te whakaaro Māori, ā, ka whakaatu ka pēhea te Kaunihera ā-Rohe e whakatutuki pai i ēnei take ka tika. Ehara i te mea mā ngā take me ngā kōrero whakamārama kei konei e whakaatu i te katoa o ngā māharahara o ngā hapū me ngā iwi. Heoi, ko tāna he tuku whakamārama pea mō te kaha o te whakaaro aroha me ngā hononga o ngā hapū me ngā iwi ki ngā rauemi māori o te Rohe.





# Table 2.1 Resource management issues of significance to $hap\bar{u}^*$ and $iwi^*$

# Ngā Take Whakahaere Rauemi e Hirahira ana ki ngā Hapū me ngā lwi

Resource issue of significance to hapū* and iwi* He take rauemi e hirahira ana ki ngā hapū me ngā iwi	Resource issue in the context of tikanga Māori^ He take rauemi me te tikanga Māori	Relevant part of One Plan where issue is addressed Te wāhanga o te One Plan ka kōrerotia te take
(a) Management of water^ quality and quantity throughout the Region does not provide for the special qualities significant to Māori. Kāore te whakahaeretanga o te kounga me te nui o te wai huri noa i te Rohe i te whakarato wāhanga ki ngā āhuatanga e hirahira ana ki te Māori.	Mauri* Mauri  Wai Māori (pure water) is essential to hapū* and iwi* in the Region to ensure activities conducted for cultural purposes, such as spiritual cleansing, baptismal rituals and food gathering, are achievable.  He mea nui te Wai-Māori ki ngā hapū me ngā iwi o te Rohe kia hua ai ka taea te whakatutuki i ngā mahi tikanga Māori pērā i te whakanoa, te tohi, me te kohikohi kai.  Mauri* acts as a balancing agent to ensure the lifesupporting qualities within the water^ are maintained. Ko tā te Mauri he whakatautika kia hua ai ka puritia tonutia ngā āhuatanga tuku oranga o te wai.  Human activities, application of impure agents, loss of water^ capacity, and contaminants^ all affect the ability of the mauri* to perform its role effectively, therefore resulting in a standard of water^ not suitable for hapū* and iwi* to perform their relevant tikanga Māori^ or cultural activities associated with its use.  Ka pāngia kinotia te mauri me tōna āhei ki te whakatutuki pai i tōna kaupapa e te mahi a te tangata me te whakamahi mea paruparu, te mimiti o te wai hoki, me te uru mai o ngā paru kino. Ko te hua he wai kāore i te pai ki ngā hapū me ngā iwi hei whakatutuki i ō rātou tikanga e pā ana ki te whakamahi i te wai.	Surface water <sup>A</sup> quality Te kounga o te wai mata  Chapter 2 - Te Ao Māori Objective 2-1 Policy 2-3 Chapter 2 Methods  Chapter 5 - Water Objective 5-1 Policy 5-1 Chapter 5 Methods
		Rules, Chapter 14 - Discharges to Land and Water  Wāhanga 2 - Te Ao Māori Whāinga 2-1 Kaupapa 2-3 Ngā mahi kei Wāhanga 2  Wāhanga 5 - Wai Whāinga 5-1 Kaupapa 5-1 Ngā mahi kei Wāhanga 5  Ngā ture kei Wāhanga 14 - Te Tuku Parakaingaki ki te Whenua me ngā Wai
(b) Hazardous substances^ and nitrate run-off need to be better managed to avoid contaminants^ entering water^.  Me pai ake te whakahaere matū mōrearea me ngā rerenga pākawa ota hei pare i te uru o ngā paru kino ki roto i ngā wai.		Surface water^ quality Te kounga o te wai mata  Chapter 5 - Water Objective 5-2 Policy 5-8 Chapter 5 Methods  Rules, Chapter 14 - Discharges to Land and Water  Wāhanga 5 - Wai Whāinga 5-2 Kaupapa 5-8 Ngā mahi kei Wāhanga 14 - Te Tuku Parakaingaki ki te Whenua me ngā Wai



to h	ource issue of significance apū* and iwi* take rauemi e hirahira ana gā hapū me ngā iwi	Resource issue in the context of tikanga Māori^ He take rauemi me te tikanga Māori	Relevant part of One Plan where issue is addressed Te wāhanga o te One Plan ka kōrerotia te take
(c)	Lakes^ and streams (for example, Punahau/Waipunahau (Lake Horowhenua and Hokio Stream) have suffered degradation which continues and are considered culturally unclean.  Kua hemo haere ngā roto me ngā manga (hei tauira, ko Punahau/Waipunahau, arā, ko Lake Horowhenua me te manga o Hokio) i te whakakinotanga - kei te mahia tonutia hoki, ā, kua pokea te tapu.		Surface water^ quality Te kounga o te wai mata  Chapter 5 - Water Objectives 5-1 and 5-2, Policies 5-1 to 5-5 and 5-8 to 5-10 Chapter 5 Methods  Rules, Chapter 14 - Discharges to Land and Water  Wāhanga 5 - Wai Whāinga 5-1 and 5-2 Kaupapa 5-1 ki 5-5 me 5-8 ki 5-10 Ngā mahi kei Wāhanga 5  Ngā ture kei Wāhanga 14 - Te Tuku Parakaingaki ki te
(d)	Access to and availability of clean water^ to exercise cultural activities such as food gathering and baptismal rituals have diminished.  Kua mimiti haere te putanga ki te wai me te wātea o te wai mō te hāpai i ngā tikanga pērā i te kohikohi kai, te tohi tamariki, te mea, te mea.		Whenua me ngā Wai  Surface water^ quality Te kounga o te wai mata  Chapter 5 - Water Objective 5-2 Policies 5-2 to 5-11 Chapter 5 Methods  Wāhanga 5 - Wai Whāinga 5-2 Kaupapa 5-2 ki 5-11 Ngā mahi kei Wāhanga 5
(e)	Marae groundwater bore supply is affected in some areas during seasonal drought.  I ngā wā kōpaka o te tau ka pāngia ngā poka waiopapa o ngā marae i roto i ētahi takiwā.  Excessive groundwater	Manaakitanga (hospitality) Manaakitanga  The hau kainga (home people) will always ensure the essential needs of their manuhiri (visitors) are accommodated during their stay at the marae, whether it be for hui (social gatherings), tangihanga (funerals), or wānanga (learning institutions). This is a sign of mana*. Ahakoa he hui, he tangihanga, he wānanga rānei, i ngā wā katoa ka manaakitia te manuhiri e te hau kāinga i	Water^ allocation Te tuaritanga o te wai  Chapter 5 - Water Objective 5-3 Policy 5-21 Chapter 5 Methods  Wāhanga 5 - Wai Whāinga 5-3
(1)	abstractions can adversely affect water^ and existing groundwater users.  Mā nui rawa o te waiopapa ka tangohia e raru ai te wai me ngā kaiwhakamahi wai o nāianei.	runga i ngā marae. He tohu whai mana tēnei.  In some circumstances, water^\ shortages have affected the ability to meet these needs.  I ētahi wā, nā te iti o te wai, kāore i taea te whakarato hei whakaea i ēnei matea.	Kaupapa 5-21 Ngā mahi kei Wāhanga 5





to h He	ource issue of significance papū* and <i>iwi</i> * take rauemi e hirahira ana gā hapū me ngā iwi	Resource issue in the context of tikanga Māori^ He take rauemi me te tikanga Māori	Relevant part of One Plan where issue is addressed Te wāhanga o te One Plan ka kōrerotia te take
(g)	Water <sup>^</sup> diversion from one catchment to another is considered culturally abhorrent.  Ko te whakaaro he mea kiriweti te whakataha i te rere noa a te wai mai i tētahi takiwā ki tētahi atu takiwā.	Mauri* Mauri  Hapū* and iwi* may have differing views on the diversion of water^ from one catchment to another. If more information is required on the issue of diverting water^ from one catchment to another, consultation with the relevant hapū* or iwi* may clarify their position on this matter.  Kei tēnā hapū, kei tēnā iwi ōna ake whakaaro pea mō te whakataha wai mai i tētahi takiwā ki tētahi atu takiwā. Ki te pīrangitia ētahi pārongo anō e pā ana ki te take nei o te whakataha wai mai i tētahi takiwā ki tētahi atu takiwā, mā te kōrerorero tahi me ngā hapū, iwi rānei ka whai pānga e whakamāramatia ō rātou whakaaro mō tēnei take.	Water^ diversions Te whakataha wai  Refer to rules regarding water^ diversion in Chapter 16 - Takes, Uses and Diversions of Water, and Bores Tirohia ngā ture e pā ana ki te whakataha wai kei roto i Wāhanga 16 - Te Tango, te Whakamahi, me te Whakataha Wai, Poka hoki
(h)	Sewage disposed to water <sup>A</sup> , in treated form or otherwise, is culturally abhorrent. Land-based treatment is preferred. Ko te whakaaro he mea kiriweti te tuku parakaingaki - ahakoa kua tangohia ngā paru, aha rānei - ki roto i ngā wai. Pai kē ake te whakapai ki uta.	Mahi tautara (sewage waste)  There are serious physical and spiritual connotations to hapū* and iwi* associated with human sewage discharge^ to water^. The act of doing so intentionally is, in itself, regarded as poke - an act of spiritual and physical uncleanliness (this term may vary between iwi*). Land-based treatment of sewage is preferred. Ki ngā hapū me ngā iwi Māori, arā ētahi āhuatanga taha ōkiko, taha wairua hoki e pā ana ki te tuku rukenga parakaingaki tangata ki roto i ngā rerenga wai. He poke, arā, he whakaparu wairua, he whakaparu ōkiko hoki te āta mahi pērā (ka rerekē pea te whakamahi a tēnā iwi, a tēnā iwi i tēnei kupu). Pai kē ake te whakapai ki uta.  The physical and spiritual effects on hapū* and iwi* can be wide-ranging. The best method of avoiding these effects is the prevention of direct discharge^.  Maha kē ngā pānga ōkiko me ngā pānga a-wairua ki ngā hapū me ngā iwi. Ko te tikanga kia āraia te tuku rukenga ki roto tonu i te wai hei pare i ngā pānga.	Sewage discharge^ Te rukenga parakaingaki  Chapter 5 - Water Objective 5-2 Policy 5-11 Chapter 5 Methods  Rules, Chapter 14 - Discharges to Land and Water  Wāhanga 5 - Wai Whāinga 5-2 Kaupapa 5-11 Ngā mahi kei Wāhanga 5  Ture, Wāhanga 14 Te rukenga parakaingaki ki te Whenua me te Wai



Resource issue of significance to hapū* and iwi* He take rauemi e hirahira ana ki ngā hapū me ngā iwi		
(i)	More riparian retirement and planting is needed to	

## Resource issue in the context of tikanga Māori^ He take rauemi me te tikanga Māori

#### Relevant part of One Plan where issue is addressed Te wāhanga o te One Plan ka kōrerotia te take

(i) More riparian retirement and planting is needed to protect river^ banks from erosion. Several iwi\* believe harakeke (flax) would provide the most desirable outcome. Ko te tikanga me whakarite wāhi whakatū rākau, me whakatō rākau hoki, hei whakamarumaru i ngā parenga i te horo whenua. Ko te whakapono o ētahi iwi mā te harakeke e tutuki pai ai tēnei. Manaaki whenua (nurturing the land^) Manaaki whenua Surface water^ quality
Te kounga o te wai mata

Harakeke (common New Zealand flax) would be the ideal choice.

Ko te pīrangi o ngā hapū me ngā iwi kia whakatauria he ritenga mō te whakatō tupu ki ngā parenga o ngā awa huri noa i te rohe hei pare i te horo whenua o ngā

Hapū\* and iwi\* would like to see more measures put in

place to plant river banks throughout the Region to

avoid bank erosion and silt build-up in rivers^.

Chapter 5 - Water Objective 5-2 Policy 5-8

ritenga mō te whakatō tupu ki ngā parenga o ngā awa huri noa i te rohe hei pare i te horo whenua o ngā pārengarenga me te pikinga o te parahua i roto i ngā awa. Ko te harakeke te tupu tino pai rawa atu mō tēnei mahi. Rules, Chapter 14 -Discharges to Land and Water and *Water*<sup>^</sup> Quality Standards in Schedule D

Land<sup>^</sup> management plans give hapū\* and iwi\* more certainty that landowners have an holistic land<sup>^</sup> use management approach.

Wāhanga 5 - Wai Whāinga 5-2 Kaupapa 5-8

Mā ngā mahere whakahaere whenua ngā hapū me ngā iwi e āta mōhio ai kei ngā kaipupuri whenua tētahi tikanga whakahaere e manaakitia ai te whenua.

Ture, Wāhanga 14
Te rukenga parakaingaki ki
te Whenua me te Wai
Taumata Kounga kei roto i te
Pukapuka Āpiti D

Traditional food gathering sites\* and associated native habitats and ecosystems are valued very highly by Māori.

Land<sup>^</sup> use management Te whakahaere i te whakamahi whenua

He mea tino whai wāriu e te Māori ngā wāhi nō mai rānō ka kohikohia he kai, me ngā nohonga taketake, me ngā pūnaha rauropi hoki.

Chapter 4 - Land Objective 4-1 Policy 4-1 Chapter 4 Methods

Rules, Chapter 13 - Land Use Activities and Indigenous Biological Diversity

Wāhanga 4 - Whenua Whāinga 4-1 Kaupapa 4-1 Ngā mahi kei Wāhanga 4

Ture, Wāhanga 13 - Ngohe Whakamahi Whenua me te Kanorau Koiora Taketake

2-17

- (j) Land^ management plans need to be encouraged to ensure consistent land^ management practices Region-wide.

  Me kaha akiaki te whakatakoto mahere whakahaere pāmu kia hua ai ngā tikanga rite mō te whakahaere whenua.
- (k) Adverse effects<sup>^</sup> of land<sup>^</sup> use continue to have a detrimental effect<sup>^</sup> on traditional food gathering areas, native habitats and ecosystems.
  Mā te whakamahi i te whenua me ōna pānga e raru ai tonu ngā wāhi nō mai rānō ka kohikohia he kai, ngā nohonga taketake me ngā pūnaha rauropi.





## Resource issue of significance to hapū\* and iwi\* He take rauemi e hirahira ana ki ngā hapū me ngā iwi

Resource issue in the context of tikanga Māori<sup>^</sup> He take rauemi me te tikanga Māori Relevant part of One Plan where issue is addressed Te wāhanga o te One Plan ka kōrerotia te take

(I) The removal, destruction or alteration of wāhi tapu\* and wāhi tūpuna\* by inappropriate activities continues to have a detrimental effect^ on those sites\* and upon hapū\* and iwi\*.

Ka pāngia kinotia tonu ngā wāhi, me ngā hapū me ngā iwi hoki - i te tango, te wāwāhi, te whakarerekē rānei i ngā wāhi tapu me ngā wāhi tūpuna.

## Wāhi tapu\* and wāhi tūpuna\* Wāhi tapu me ngā wāhi tūpuna

Hapū\* and iwi\* view wāhi tapu\* and wāhi tūpuna\* as western cultures view cemeteries and churches - as locations that are a significant part of history which require protection and preservation. Wāhi tapu\* are sites\* that remain tapu (sacred), given the nature of their location and purpose.

Ki tā te hapū titiro - ki tā te iwi titiro hoki - āhua rite te wāhi tapu ki tā tauiwi titiro e pā ana ki ō rātou urupā, whare karakia hoki, arā, me whakamarumaru, me tiaki hoki ngā wāhi pērā ka tika. Te mutunga iho ka noho tapu tonu aua wāhi tapu i runga i te āhua o aua wāhi me te kaupapa o aua wāhi.

Ancient urupā (burial sites\*) are prominent throughout the Region and their locations more often than not remain the intellectual property of hapū\* or iwi\* members charged with keeping them safe from harm. Maha kē ngā urupā o nehe huri noa i te Rohe. Te nuinga o te wā nō ngā hapū me ngā iwi ake te mōhio kei hea aua wāhi nei, ā, nō rātou hoki te kawenga kia tiaki i aua wāhi tapu kia noho haumaru.

Land^ use management Te whakahaere i te whakamahi whenua

Chapter 4 - Land Objective 4-1 Policy 4-1 Chapter 4 Method

Rules, Chapter 14 -Discharges to Land and Water

Wāhanga 4 - Whenua Whāinga 4-1 Kaupapa 4-1 Ngā mahi kei Wāhanga 4

Ture, Wāhanga 14 Te rukenga parakaingaki ki te Whenua me te Wai

Chapter 6 - Indigenous biological diversity, landscape and historic heritage Objective 6-3 Policies 6-11 and 6-12 Method 6-10

Wāhanga 6 - Kanorau Koiora Taketake, tohu whenua, hītori tuku iho Whāinga 6-3 Kaupapa 6-11 me 6-12 Mahi 6-10

Rules and conditions^
protecting wāhi tapu\*
throughout the Plan.
Ngā ture me ngā tikanga
puta noa i te Mahere hei
whakamarumaru i ngā wāhi
tapu



Resource issue of significance to hapū* and iwi* He take rauemi e hirahira ana ki ngā hapū me ngā iwi		
(m)	The transfer of indigenous plants from <i>rohe*</i> to <i>rohe*</i> is considered culturally unnatural.  Kāore i te tika ki te whakaaro ahurea Māori te	

whakawhiti tupu taketake

rohe.

mai i tētahi rohe ki tētahi atu

# Resource issue in the context of tikanga Māori^ He take rauemi me te tikanga Māori

## Relevant part of One Plan where issue is addressed Te wāhanga o te One Plan ka kōrerotia te take

# Tapu (sacred) Tapu

The transfer of indigenous plants from one *rohe\** to another can result in the cross-pollination of plants native to a particular *rohe\**, affecting elements of tapu. The act of artificially cross-pollinating plants including trees or removing and planting them away from their points of origin is not common practice to *hapū\** and *iwi\**. Ideally they would like the integrity of each *rohe\** preserved in its natural state.

Ka pāngia rawatia ētahi āhuatanga o te tapu e te whakaaiai whitiwhiti i ngā tupu taketake mai i tētahi rohe ki tētahi atu rohe. Ehara i te mahi māori noa ki ngā hapū me ngā iwi te whakaaiai whitiwhiti i ngā tupu, pērā i ngā rākau, te tango i ērā mai i tētahi rohe me te whakatō ki wāhi kē. Ko tō rātou pīrangi ake kia tiakina te rohe kia tūturu tonu te taiao.

Hapū\* and iwi\* are advocating for assistance via policy and funding to protect the integrity of indigenous plants and animals from human activity and pest plants and pest animals.

Kei te tohe tonu ngā hapū me ngā iwi kia tautokona ākaupapa nei, ā-putea nei hoki te whakamarumaru i te ngā tupu taketake me te aitanga kararehe i ngā mahi a te tangata, ngā otaota, me ngā orotā. Chapter 6 - Indigenous biological diversity, landscape and historic heritage Objective 6-1 Policies 6-1 to 6-5 Chapter 6 Methods

Rules, Chapter 13 - Land Use Activities and Indigenous Biological Diversity

Wāhanga 6 - Kanorau koiora taketake, tohu whenua, hītori tuku iho Whāinga 6-1 Kaupapa 6-1 ki 6-5 Ngā mahi kei Wāhanga 6

Ture, Wāhanga 13 - Ngohe Whakamahi Whenua me te Kanorau Koiora Taketake

(n) Indigenous plants and animals continue to be under increased threat by human and pest activity. Kei te whakawetia tonutia ake ngā tupu taketake me te aitanga kararehe taketake e te mahi a te tangata me te orotā.

Indigenous biological diversity^ Te kanorau koiora taketake

Chapter 6 - Indigenous biological diversity, landscape and historic heritage Objective 6-1 Policies 6-1 to 6-5 Chapter 6 Methods

Rules, Chapter 13 - Land Use Activities and Indigenous Biological Diversity

Wāhanga 6 - Kanorau koiora taketake, tohu whenua, hītori tuku iho Whāinga 6-1 Kaupapa 6-1 ki 6-5 Ngā mahi kei Wāhanga 6

Ture, Wāhanga 13 - Ngohe Whakamahi Whenua me te Kanorau Koiora Taketake





to h He	source issue of significance napū* and iwi* take rauemi e hirahira ana ngā hapū me ngā iwi	Resource issue in the context of tikanga Māori^ He take rauemi me te tikanga Māori	Relevant part of One Plan where issue is addressed Te wāhanga o te One Plan ka kōrerotia te take
(o)	Further research on preventing saltwater intrusion into coastal aquifers is a necessity. Ka mate ka rangahaua tonutia te ārai i te urunga waitai ki roto i ngā kahupapa takutai moana.	Manaaki manuhiri (caring for your visitors) Manaaki manuhiri  Saltwater intrusion is a significant issue for hapū* and iwi* as many marae situated close to the coastal environment rely on groundwater bores as their primary water supply. Hapū* and iwi* encourage proactive research to ensure this situation is avoided. He take nui te urunga waitai ki ngā hapū me ngā iwi, nō te mea, he maha ngā marae e noho tata nei ki te taiao takutai moana e tango ana i te waiopapa i ngā poka i te tuatahi hei whāngai i ngā marae. Ka akiaki ngā hapū me ngā iwi i te mahi rangahau kia hua ai ka parea tēnei āhuatanga.	Groundwater quality Te kounga o te waiopapa  Chapter 5 - Water Objective 5-2 Policy 16-7  Rules, Chapter 16 - Takes, Uses and Diversions of Water, and Bores  Wāhanga 5 - Wai Whāinga 5-2 Kaupapa 16-7  Ture, Wāhanga 16 - Te Tango, te Whakamahi, me te Whakataha Wai, Poka hoki
(p)	Biodiversity research needs more funding.  Me whai putea anō te rangahau e pā ana ki te kanorau koiora.	Tiro whakamua  Many Māori landowners are actively involved in restoring and preserving wetlands^ to maintain native habitats for future generations.  Tokomaha ngā kaipupuri whenua Māori e kaha whakahou ana, e tiaki ana hoki i ngā papa waiwai hei pupuri i ngā wāhi noho pēnei mā ngā whakatupuranga e haere mai nei.	Threatened indigenous biological diversity^ Te kanorau koiora ka whakawetia  Chapter 6 - Indigenous biological diversity, landscape and historic heritage Objective 6-1 Policies 6-1 to 6-4 Chapter 6 Methods  Rules, Chapter 13 - Land Use Activities and Indigenous Biological Diversity  Wāhanga 6 - Kanorau Koiora Taketake, tohu whenua, hītori tuku iho Whāinga 6-1 Kaupapa 6-1 ki 6-4 Wāhanga 13 - Ngohe Whakamahi Whenua me te Kanorau Koiora Taketake



Resource issue of significance to hapū* and iwi* He take rauemi e hirahira ana ki ngā hapū me ngā iwi	Resource issue in the context of tikanga Māori^ He take rauemi me te tikanga Māori	Relevant part of One Plan where issue is addressed Te wāhanga o te One Plan ka kōrerotia te take
(q) Monitoring and enforcement of environmental standards, including those contained in regional plans^, district plans^ and resource consents^, are insufficient at times.  I ētahi wā he iti rawa te aroturuki me te ūruhitanga o ngā taumata taiao pērā ki ērā kei roto i ngā mahere rohe, ngā mahere takiwā, me ngā whakaaetanga rauemi.	Te aroturuki me te ūruhitanga (monitoring and enforcement) Te aroturuki me te ūruhitanga  Māori wish to see a greater level of monitoring undertaken for resource use activities. Many Māori also wish to see those who do not comply with resource consent^ or permitted activity^ conditions^ undertake remedial work to remedy their actions.  Ko te pirangi o te Māori kia nui ake te aroturuki ka mahia hei ngohe whakamahi rauemi. Ko tētahi pirangi anō o te Māori kia mahi te hunga kore whai i ngā whakaritenga whakaaetanga rauemi me ngā mahi ka whakaaetia ki te whakatikatika i ā rātou mahi hē.	Monitoring and enforcement Te aroturuki me te ūruhitanga  Chapter 12 Policy 12-8 Wāhanga 12 Kaupapa 12-8



# 2.5 Methods of Implementation

# He Tikanga Whakamahi

These methods outline the approach the Regional Council will take to support and contribute to the delivery of quality outcomes for the Region's  $hap\bar{u}^*$  and  $iwi^*$ .

Ka whakaatu ēnei tikanga i te huarahi e whai ai te Kaunihera ā-Rohe hei tautoko, hei āwhina i te whakaputa hua whai kounga ki ngā hapū me ngā iwi o te Rohe.

Method 2-1 Mahi 2-1	Memoranda of Partnership (MoP) He Manatū Rangapū
Description He Whakamārama	The primary focus of this method is to improve working relationships with hapū* and iwi* of the Region to ensure their relationships with ancestral lands, water, sites*, wāhi tapu* and other taonga* (including wāhi tūpuna*) are recognised and provided for.  Ko te tiro matua o te mahi nei ko te whakakaha ake i ngā hononga mahi me ngā hapū me ngā iwi o te Rohe kia hua ai ka arohia, ka whakaratongia ō rātou hononga ki ō rātou whenua tupuna, wai, papa, wāhi tapu hoki me ētahi taonga.
Who Ko wai mā	Regional Council and the Region's hapū* and iwi*.  Te Kaunihera ā-Rohe me ngā hapū me ngā iwi o te Rohe.
Links to Policy Ngā Hononga Kaupapa	This method links to Policy 2-1(a) to (e).  Ka hono atu tēnei mahi ki ngā Kaupapa 2-1(a) ki (e).
Target Ngā Keonga	To develop and implement at least three MoP by 2010.  Ko te whakarite me te whakatinana kia 3 ngā Manatū Rangapū hei mua mai i te tau 2010.

Method 2-2 Mahi 2-2	Identification of Sites* of Significance Te Tautuhi i ngā Papa Hirahira
Description He Whakamārama	The Regional Council will work with hapū* and iwi* to identify and protect sites* of significance without the need to disclose their location publicly. However, where it is consistent with tikanga Māori to do so, information about such sites* may be made publicly available in an appropriate database. Ka mahi tahi te Kaunihera ā-Rohe me ngā hapū me ngā iwi ki te tautuhi, ki te whakamarumaru i ngā papa hirahira me te kore hiahia kia whākina kei hea aua wāhi. Heoi anō, i ngā wā e hāngai ana ngā tikanga Māori me te whakamōhio tūmatanui, ka taea ki tētahi pātengi raraunga tika e pupuri ana i ngā pārongo mō aua papa.
Who Ko wai mā	Regional Council and the Region's hapū* and iwi*. Te Kaunihera ā-Rohe me ngā hapū me ngā iwi o te Rohe.
Links to Policy Ngā Hononga Kaupapa	This method links to Policies 2-2(b) and (c) Ka hono atu tēnei mahi ki ngā Kaupapa 2-2(b) me (c).
Target Ngā Keonga	To approach <i>iwi</i> * in the Region regarding participation in the method by June 2012.  Kia ahu atu ki ngā iwi o te Rohe e pā ana ki te kuhu ki roto i te mahi hei mua mai i te marama o Pipiri 2012.



Method 2-3 Mahi 2-3	Treaty of Waitangi - Claims Te Tiriti o Waitangi - Ngā Kerēme
Description He Whakamārama	The Regional Council will work cooperatively and in good faith with hapū* and iwi* to implement any Treaty of Waitangi claim settlement matters that are relevant to the functions, powers and duties of the Regional Council.  Ka mahi tahi te Kaunihera ā-Rohe me ngā hapū me ngā iwi i runga i te ngākau pono hei whakakaupapa i ngā take whakatau kerēme i raro i te Tiriti o Waitangi e pā ana ki ngā mahinga, tukunga whai mana, me ngā mahi ā-ngākau o te Kaunihera ā-Rohe.
Who Ko wai mā	Regional Council and the Region's hapū* and iwi*. Te Kaunihera ā-Rohe me ngā hapū me ngā iwi o te Rohe.
Links to Policy Ngā Hononga Kaupapa	This method links to Policies 2-1, 2-2, 2-3 and 2-4.  Ka hono atu tēnei mahi ki ngā Kaupapa 2-1, 2-2, 2-3 me 2.4.
Target Ngā Keonga	As far as reasonably practicable, Treaty settlement measures will be implemented in accordance with hapū* and iwi* timeframe aspirations.  I ngā wā e tika ana ka whakatinanahia ngā ritenga whakatau kerēme i raro i te Tiriti - e hāngai ana ki ngā wawata o ngā hapū me ngā iwi mō te wā tutuki.

Method 2-4 Mahi 2-4	Code of Practice for Wāhi Tapu* and Wāhi Tūpuna* Protection and Discovery He Tikanga Mahi mō te Whakamarumaru me te Hura i ngā Wāhi Tapu me ngā Wāhi Tūpuna
Description He Whakamārama	The aim of this method is to develop a code of practice to ensure all efforts are made to protect <i>wāhi tapu*</i> and <i>wāhi tūpuna*</i> from unnecessary damage, and procedures are in place in the event <i>wāhi tapu*</i> or <i>wāhi tūpuna*</i> are discovered. Ko te whāinga o tēnei mahi ko te whakarite i tētahi Tikanga Mahi kia hua ai kua whakapau kaha ki te whakamarumaru i ngā wāhi tapu me ngā wāhi tūpuna i te tūkino, ā, ka poua he tikanga i ngā wā ka huraina he wāhi tapu, he wāhi tūpuna rānei.
	This code of practice may provide for variation in procedures and practices for different hapū* and iwi* if they identify that this is appropriate.  Ki te tautuhia e tika ana tēnei, mā te tikanga mahi nei tētahi whitinga mō ngā tikanga me ngā mahi mō ia hapū me ia iwi e whakarato.
	This code of practice will enable those parties carrying out activities under resource consents and permitted activity rules to meet conditions for the protection of wāhi tapu* or wāhi tūpuna*.  Mā te tikanga mahi nei e āhei ai te hunga e mahi ana i ngā ngohe i raro i ngā whakaaetanga rauemi me ngā ture mō ngā ngohe kua whakaaetia hei whakaea i ngā ritenga hei whakamarumaru i ngā wāhi tapu, ngā wāhi tūpuna rānei.
Who Ko wai mā	Regional Council and the Region's hapū* and iwi*, in consultation as appropriate with resource users.  Te Kaunihera ā-Rohe me ngā hapū me ngā iwi o te Rohe - me te kōrerorero tahi me ngā kaiwhakamahi rauemi i ngā wā e tika ana.
Links to Policy Ngā Hononga Kaupapa	This method links to Policy 2-2(d).  Ka hono atu tēnei mahi ki ngā Kaupapa 2-2(d).
Target Ngā Keonga	To develop a code of practice by 2011.  Ko te whakahiato i te tikanga mahi hei mua mai i te tau 2011.



Method 2-5 Mahi 2-5	Regional Hapū* and lwi* Projects He Kaupapa Mahi ā-Hapū, Mahi ā-lwi hoki o te Rohe
Description He Whakamārama	This method will allow opportunities for $hap\bar{u}^*$ and $iwi^*$ to work alongside the Regional Council to develop and implement a range of projects initiated by $hap\bar{u}^*$ or $iwi^*$ . These projects could include wetland restoration or enhancement, river bank erosion planting, $w\bar{a}hi$ $tapu^*$ or $w\bar{a}hi$ $t\bar{u}puna^*$ GIS mapping, research projects on Māori land blocks, and $hap\bar{u}^*$ and $iwi^*$ resource monitoring initiatives. $M\bar{a}$ te mahi nei e whakaputa mea angit $\bar{u}$ m $\bar{a}$ ng $\bar{a}$ hap $\bar{u}$ me ng $\bar{a}$ $iwi$ ki te mahi tahi me te Kaunihera $\bar{a}$ -Rohe ki te whakahiato me te whakatinana i ng $\bar{a}$ $t\bar{u}$
Who Ko wai mā	Regional Council and the Region's <i>hapū</i> * and <i>iwi</i> *.  Te Kaunihera ā-Rohe me ngā hapū me ngā iwi o te Rohe.
Links to Policy Ngā Hononga Kaupapa	This method links to Policies 2-1(a) to (e). Ka hono atu tēnei mahi ki ngā Kaupapa 2-1(a) ki (e).
Target Ngā Keonga	To develop and implement at least three projects annually.  Ko te whakarite me te whakatinana kia 3 ngā kaupapa mahi ia tau, ia tau.

Method 2-6 Mahi 2-6	lwi Management Plans* (IMP) He Mahere Whakahaere ā-lwi
Description He Whakamārama	The objective of this method is to encourage hapū* and iwi* to develop iwi management plans*. This will ensure hapū* and iwi* resource management perspectives are articulated in order that they can be incorporated in the Regional Council's planning practices and policy documents. Ko te whāinga o te mahi nei ko te akiaki i ngā hapū me ngā iwi ki te whakarite mahere whakahaere ā-iwi. Mā tēnei e hua ai ka āta whakahuatia ngā tirohanga whakahaere rauemi o ngā hapū me ngā iwi kia whakaurua ai ērā ki roto i ngā mahi whakamahere me ngā kaupapa a te Kaunihera ā-Rohe.
Who Ko wai mā	The Regional Council will assist hapū* and iwi*.  Mā te Kaunihera ā-Rohe ngā hapū me ngā iwi e āwhina.
Links to Policy Ngā Hononga Kaupapa	This method links to Policies 2-1(b), (c) and (g), 2-2, 2-3 and 2-4.  Ka hono atu tēnei mahi ki ngā Kaupapa 2-1(b), (c) me (g), 2-2, 2-3, me 2-4.
Target Ngā Keonga	To work with iwi* to develop at least one iwi management plan* every two years. Kia mahi tahi me ngā iwi ki te whakahiato kia kotahi neke atu te mahere whakahaere ā-iwi ia rua tau.

Method 2-7	Web-Based <i>lwi</i> * Contacts Database
<i>Mahi 2-7</i>	He Pātengi Raraunga ā-lpurangi o Ngā lwi
Description He Whakamārama	This method is intended to provide the Regional Council and resource consent applicants with accurate contact information for hapū* and iwi* with a significant interest in resource management matters.  E meatia nei kia whakarato pārongo tika ki te Kaunihera ā-Rohe me ngā kaitono whakaaetanga rauemi mō te whakapā atu ki ngā hapū me ngā iwi Māori whai pānga ki ngā take whakahaere rauemi.  A web page, on the Regional Council's website, will be designed to capture any information relevant to the Region's iwi* - for example, iwi management plans*, marae and civil defence posts. GIS mapping will be used to show locational information.



Method 2-7 Mahi 2-7	Web-Based <i>lwi</i> * Contacts Database He Pātengi Raraunga ā-Ipurangi o Ngā lwi
	Ka hoahoatia tētahi whārangi ipurangi ki runga i te ipurangi a te Kaunihera ā-Rohe hei kapo i ngā pārongo e pā ana ki ngā iwi o te Rohe - hei tauira, ko ngā mahere whakahaere ā-iwi, ngā marae, me ngā Putānga Ārai Mate Whawhati Tata. Ka whakamahia te whakamahere a GIS hei whakaatu i ngā pārongo takiwā.
Who Ko wai mā	Regional Council, the Region's hapū* and iwi* and Te Puni Kokiri.  Te Kaunihera ā-Rohe me ngā hapū me ngā iwi o te Rohe me Te Puni Kōkiri.
Links to Policy Ngā Hononga Kaupapa	This method links to Policy 2-1(h) and (i).  Ka hono atu tēnei mahi ki ngā Kaupapa 2-1(h) me (i).
Target Ngā Keonga	To complete this project by 2009 and to maintain the web page on an ongoing basis.  Kia oti pai te kaupapa mahi nei hei mua mai i te tau 2007 me te tiaki i te whārangi ipurangi haere ake nei.

Method 2-8 <i>Mahi 2-8</i>	Joint Management Agreements He Whakaaetanga Whakahaere Ngātahi
Description He Whakamārama	The Regional Council and relevant <code>hapū*</code> and <code>iwi*</code> will investigate options for joint management agreements between the Council and iwi authorities, especially those that have settled Waitangi Tribunal claims with the Crown, and where there is an established memorandum of partnership. <code>Mā te Kaunihera ā-Rohe me ngā hapū me ngā iwi whai pānga ngā kōwhiringa e pā ana ki ngā whakaaetanga whakahaere ngātahi e tirotiro, arā, ko ērā kua whakatau kerēme me te Karauna i mua i Te Taraipunara o Waitangi, ā, kei reira kē tētahi manatū rangapū.</code>
Who Ko wai mā	Regional Council and the Region's hapū* and iwi*.  Te Kaunihera ā-Rohe me ngā hapū me ngā iwi o te Rohe.
Links to Policy Ngā Hononga Kaupapa	This method links to Policies 2-1(f), 2-2, 2-3 and 2-4.  Ka hono atu tēnei ki ngā Kaupapa 2-1(f), 2-2, 2-3 me, 2-4.
Target Ngā Keonga	To investigate options where opportunities arise.  Kia tirotiro i ngā kōwhiringa e ngā wā e tika ana.

Method 2-9 Mahi 2-9	Cultural Monitoring Framework He Anga Aroturuki Ahurea
Description He Whakamārama	The Regional Council will work with hapū* and iwi* to develop and implement a cultural monitoring framework for natural and physical resources.  Ka mahi tahi te Kaunihera ā-Rohe me ngā hapū me ngā iwi ki te whakahiato, ki te whakatinana hoki i tētahi anga aroturuki ahurea e pā ana ki ngā rauemi māori me ngā rauemi ōkiko.
Who Ko wai mā	Regional Council and the Region's <i>hapū</i> * and <i>iwi</i> *. Te Kaunihera ā-Rohe me ngā hapū me ngā iwi o te Rohe.
Links to Policy Ngā Hononga Kaupapa	This method links to Policies 2-1(d), 2-2 and 2-3.  Ka hono atu tēnei mahi ki ngā Kaupapa 2-1(d), 2-2 me 2-3.
Target Ngā Keonga	Implementation of a cultural monitoring framework for natural and physical resources by June 2011.  Kia whakatinanahia tētahi anga aroturuki ahurea e pā ana ki ngā rauemi māori me ngā rauemi ōkiko hei mua mai i te marama o Pipiri 2011.



Method 2-10 Mahi 2-10	Resource Consent Processes Ngā Tikanga Whakatau Whakaaetanga Rauemi	
Description He Whakamārama	To develop protocols within the Regional Council's consents team to enable affected hapū* and iwi* to participate in resource consent processes. These include:  • notifying affected hapū* and iwi* of relevant resource consent activities  • appointing Māori hearing commissioners to resource consent hearings  • providing the ability to present evidence to hearings in Māori  • presenting hapū* and iwi* submissions on marae  • imposing cultural monitoring requirements as a condition of resource consents where appropriate.  Ko te whakarite tikanga me te tira whakahaere whakaaetanga o te Kaunihera ā-Rohe kia taea ai e ngā hapū me ngā iwi whai pānga te uru ki roto i ngā tikanga whakatau whakaaetanga, ehara tonu:  • ko te whakamōhio atu i ngā hapū me ngā iwi mō ngā ngohe whakaaetanga rauemi whai pānga  • ko te whakatū kaikomihana Māori mō ngā hui whakatau whakaaetanga rauemi  • kia whakaratongia te āhei ka taea te tuku taunakitanga mā te kōrerotia o te reo Māori  • ko te whakatakoto tāpaetanga ngā hapū me ngā iwi i runga marae  • ko te ūruhi i ngā whakaritenga hei ritenga mō ngā whakaaetanga rauemi i ngā wā tika.	
Who Ko wai mā	Regional Council. Te Kaunihera ā-Rohe.	
Links to Policy Ngā Hononga Kaupapa	This method links to Policies 2-1(h) and (i), 2-2, 2-3 and 2-4.  Ka hono atu tēnei mahi ki ngā Kaupapa 2-1(h) me (i), 2-2, 2-3 me 2-4.	
Target Ngā Keonga	Ongoing. He kaupapa tēnei ka haere tonu.	

# 2.6 Anticipated Environmental Results

# Ngā Hua Ka Tūmanakotia Mā Te Taiao

Anticipated Environmental Result Te Hua Ka Tūmanakotia Mā Te Taiao	Link to Policy Ngā Hononga Kaupapa	Indicator Ngā Tohu	Data Source Ngā Puna Raraunga
Discoveries of wāhi tapu* and wāhi tūpuna* are dealt with appropriately in accordance with tikanga Māori. Ka tika ngā mahi me te hāngai tonu ki ngā tikanga Māori i ngā wā ka huraina ngā wāhi tapu, wāhi tūpuna hoki.	<ul><li>Policy 2.2</li><li>Kaupapa 2.2</li></ul>	<ul> <li>Reduction in the number of wāhi tapu* and wāhi tūpuna* dealt with inappropriately (including when damaged by inappropriate subdivision, use or development)</li> <li>Ka whakaitingia te nama o ngā wāhi tapu, wāhi tūpuna ka mahi kinotia (pērā i te wāwāhi nā te wehewehe hē, whakamahi hē, whakaahu hē rānei i te whenua)</li> </ul>	Accidental wāhi tapu* and wāhi tūpuna* discoveries reported to the Regional Council and Heritage New Zealand  Hapū* and iwi*  Ka whakamōhiotia te Kaunihera ā-Rohe me te Pouhere Taonga i ngā ka huraina kōpeka noa ngā wāhi tapu me ngā wāhi tūpuna  Ngā hapū me ngā iwi
Increased involvement of Māori in achieving environmental	• Policies 2-1, 2-3 and 2-4	Number of environmental projects developed, funded and	Regional Iwi Environmental Projects Fund



Anticipated Environmental Result Te Hua Ka Tūmanakotia Mā Te Taiao	Link to Policy Ngā Hononga Kaupapa	Indicator Ngã Tohu	Data Source Ngā Puna Raraunga
outcomes across the Region. Ko te piki ake o te whakauru a te Māori ki te whakatutuki i ngā putanga taiao huri noa i te Rohe.	• Kaupapa 2-1, 2-3 me 2-4	implemented with hapū*, iwi*, marae committees or other Māori organisations  • Ko te nama o ngā kaupapa mahi taiao ka whakaritea, ka whai putea, ā, ka whakatinanahia me ngā hapū, ngā iwi, ngā kōmiti o ngā marae, ko ētahi rōpū whakahaere Māori rānei  • Number of monitoring programmes developed with hapū* and iwi*  • Ko te nama o ngā kaupapa aroturuki kua whakaritea me ngā hapū me ngā iwi  • Number of seminars or research projects conducted with hapū* or iwi* catchment collectives  • Ko te nama o ngā awheawhe, kaupapa rangahau rānei, ka mahia me ngā hapū, iwi rānei - i roto i ngā takiwā o ngā kohinga iwi/hapū	Ko tētahi putea e kīia nei ko te Regional Iwi Environmental Projects Fund
Improved wetland protection and restoration. Ka pai kē ake te whakamarumaru me te whakahou i ngā papa waiwai.	<ul><li>Policy 2-4</li><li>Kaupapa 2-4</li></ul>	<ul> <li>Number of wetland projects developed with Māori landowners</li> <li>Ko te nama o ngā kaupapa mahi e pā ana ki ngā papa waiwai ka whakaritea me ngā kaipupuri whenua Māori</li> <li>Research projects, seminars undertaken</li> <li>Ko ngā kaupapa rangahau me ngā awheawhe rangahau ka mahia</li> </ul>	He Tini Awa Trust Ko te tarāti o He Tini Awa, arā, ko He Tini Awa Trust Regional Iwi Environmental Projects Fund Ko tētahi putea e kīia nei ko te Regional Iwi Environmental Projects Fund
Improved working relationships with hapū* and iwi* to achieve mutually acceptable environmental outcomes. Ka pai kē ake ngā hononga mahi me ngā hapū me ngā iwi hei whakatutuki i ngā putanga ōrite e pā ana ki te taiao	<ul> <li>Policies 2-1 and 2-4</li> <li>Kaupapa 2-1 me 2-4</li> </ul>	<ul> <li>Number of environmental partnership agreements with hapū* and iwi*</li> <li>Ko te nama o ngā manatū rangapū me ngā hapū me ngā iwi e pā ana ki te taiao</li> <li>Improved localised environmental results</li> <li>Ka pai kē ake ngā hua e pā ana ki te taiao ki ngā takiwā</li> </ul>	Memoranda of partnership Ko ngā manatū rangapū Iwi management plans* Ko ngā mahere whakahaere ā-iwi



2-27

# 2.7 Explanations and Principal Reasons

# Ngā Whakamāramatanga me Ngā Take Matua

Objective 2-1 sets long-term goals for having regard to *mauri\**, and for particular regard to be had to kaitiakitanga, and for recognising and providing for s6(e) RMA relationships. This is consistent with RMA Part 2 provisions.

Ka whakatau te Whāinga 2-1 i ngā whāinga pae tawhiti e pā ana ki te mauri, te whakaaro hoki ki te kaitiakitanga, me te aro atu - te whakarato whakaaro mō te tuāporo 6(e) mō ngā hononga RMA. E hāngai ana tēnei ki Wāhanga 2 o ngā whakaratonga o te RMA.

Policies 2-1(a), (b), (f) and (g) and the methods set out in memoranda of partnership, existing arrangements and agreements, joint management agreements and *iwi management plans*\* address the specific planning and relationship parameters provided for  $hap\bar{u}^*$  and  $iwi^*$  to effect key decision-making on natural resources. The rationale for the Regional Council to provide for relationships with  $hap\bar{u}^*$  and  $iwi^*$  is set out in ss6(e), 7(a) and 8 of the RMA.

Kei roto i Kaupapa 2-1(a), (b), (f) me (g) me ngā tikanga e whakatakotoria ana i roto i ngā manatū rangapū, ngā whakaritenga me ngā whakaaetanga kei te tū tonu hoki, ngā whakaaetanga whakahaere mahi tahi, me ngā mahere whakahaere ā-iwi, ka kōrerotia ngā āhuatanga o te āta whakatakoto mahere me ngā hononga mā ngā hapū me ngā iwi hei whakatau whiriwhiringa matua e pā ana ki ngā rauemi māori. Kei roto i ngā tūāporo 6(e), 7(a), me 8 o te RMA te take me whakatū hononga me ngā hapū me ngā iwi.

Policies 2-1(c)-(e) and (h) provide options for  $hap\bar{u}^*$  and  $iwi^*$  to be actively involved in resource management decision-making via catchment-based forums, research, monitoring, seminars or training, and resource consent and planning processes. This policy is in line with clause 3B of Schedule 1 to the RMA for the Regional Council to consider ways in which to foster  $iwi^*$  capacity.

Kei roto i Kaupapa 2-1(c)-(e) me (h) ngā kōwhiringa kia taea ai e ngā hapū me ngā iwi te kaha uru atu ki roto i te whiriwhiri whakahaere rauemi mā ngā wānanga ātakiwā, te mahi rangahau, te aroturuki, ngā awheawhe - whakangungu rānei, me ngā tukanga whakaaetanga rauemi - tukanga whakamahere hoki. E hāngai ana tēnei kaupapa ki te whiti 3B o Pukapuka Āpiti 1 o te RMA kia whakaaroaro te Kaunihera ā-Rohe mō ētahi huarahi hei whāngai i ngā iwi kia pakari haere.

Policy 2-1(i) provides that the Regional Council must encourage resource consent applicants to consult with  $hap\bar{u}^*$  and  $iwi^*$  in order to adequately identify the relationship that  $hap\bar{u}^*$  and  $iwi^*$  have with their  $sites^*$  of significance, and any potential adverse effects on that relationship.

Kei roto i Kaupapa 2-1(i) ka tukuna te whakaaro ka mate ka akiaki te Kaunihera ā-Rohe i ngā kaitono whakaaetanga rauemi ki te kōrerorero me ngā hapū me ngā iwi ki a pai ai te tautuhi i te hononga o ngā hapū me ngā iwi ki ō rātou papa hirahira me ngā pānga kino pea ki taua hononga.

Policy 2-2 sets out measures to protect *wāhi tapu*\*, *wāhi tūpuna*\* and other *sites*\* of significance (disclosed and undisclosed) from potential damage or disturbance, including that caused by inappropriate subdivision, use or development.

Kei roto i Kaupapa 2-2 ngā ritenga mō te whakamarumaru wāhi tapu, wāhi tūpuna hoki e hirahira ana (ahakoa kua whākina, kāore anō kia whakamōhiotia rānei) i





ngā tukitukinga me te raweketanga pērā ki tērā ka hua mai i te hē o te wehewehe, te whakamahi, te whakaahu rānei i whenua.

Policy 2-3 has regard to the *mauri*\* of water. In some circumstances, a voluntary  $r\bar{a}hui$ \* may be facilitated with the support of  $hap\bar{u}^*$ , iwi\* and resource users.

Ka whakanuia, ka tukuna hoki e Kaupapa 2-3 he wāhi e pā ana ki te mauri o ngā wai. I ētahi wā ka tūāpātia tētahi rāhui tūao e taunakitia ana e ngā hapū me ngā iwi me ngā kaiwhakamahi rauemi.

Policy 2-4 identifies the objectives and policies contained in this and subsequent chapters of the Plan which address the resource management issues of significance to  $hap\bar{u}^*$  and  $iwi^*$  that were listed in Section 2.2.

Ka tautuhi a Kaupapa 2-4 i ngā whāinga me ngā kaupapa kei roto i tēnei wāhanga o te Mahere me ngā wāhanga e whai ana ka kōrerotia ngā take whakahaere rauemi e hirahira ana ki ngā hapū me ngā iwi kua whakarārangitia i Tūāporo 2.2.

The methods of implementation have been developed to provide for the implementation of Policies 2-1 to 2-4. Each method contains a cross-reference to the respective policies that gave rise to the method.

Kua whakahiatongia ngā mahi whakatinana hei tuku whakaaro mō te whakatinanatanga o ngā Kaupapa 2-1 ki 2-4. Kei roto i ia mahi tētahi whakapuakanga whitiwhiti ki ngā kaupapa i ahu mai taua mahi.







# CHAPTER 3: Infrastructure, Energy, Waste, Hazardous Substances and Contaminated Land

Outlines regionally significant issues for infrastructure, energy and waste and sets out the objectives, policies and methods that derive from these issues.

# 3 Infrastructure, Energy, Waste\*, Hazardous Substances\* and Contaminated Land

## 3.1 Scope and Background

This chapter deals with how activities involving infrastructure, renewable energy, waste\*, hazardous substances\*, versatile soils and contaminated land will be addressed. In general, this chapter provides broad policy guidance for managing these activities. Where appropriate, specific policy relating to these activities is integrated into the resource-based chapters of this Plan.

# Infrastructure and other physical resources of regional or national importance

The Regional Council recognises that some infrastructure and other physical resources are regionally or nationally important. The establishment, *operation\**, *maintenance\** and *upgrading\** of infrastructure and infrastructure corridors is critical to the economic wellbeing of the Region and the nation. However, infrastructure can have adverse effects on the environment and other activities can have reverse sensitivity adverse effects on infrastructure.

There can be logistical or technical constraints on where infrastructure must be located to serve communities and operate efficiently. Urban growth should be integrated with infrastructure provision. The Regional Council wants to ensure the benefits of infrastructure are recognised and appropriately weighed along with other matters in decision-making processes.

#### **Energy**

Access to reliable and sustainable energy supplies is essential to the way society functions. People and communities rely on energy for transportation, and electricity for everyday activities at home and at work. A reliable and secure supply of energy, including electricity, is fundamental for economic and social wellbeing. Furthermore, the demand for electricity is increasing.

Government has developed energy strategies and made changes to the RMA to encourage energy efficiency and greater uptake of renewable energy over use of non-renewable resources. Renewable energy means energy produced from solar, wind, hydro, geothermal, biomass, tidal, wave and ocean current sources.

The Government has made a commitment to reduce New Zealand's greenhouse gas emissions and to achieve increasingly sustainable energy use. This commitment is expressed by the inclusion of sections 7(ba), 7(i) and 7(j) in the RMA in 2004 and in national strategy and policy documents dealing with energy, renewable energy, energy efficiency and conservation, and electricity transmission.

The electricity transmission network is recognised by a national policy statement as a matter of national significance.

As at 2009, the Government's target is for 90% of New Zealand's electricity generation to be from renewable energy resources by 2025. Collectively these Government policy instruments seek to achieve economy-wide improvements in the efficiency of energy use and an increase in the supply of energy from renewable energy resources.





Given these national policy instruments and the presence of significant renewable energy resources with potential for development in the Region, the Regional Council recognises that it needs to provide for the development of renewable energy resources and the use of renewable energy.

The Region has potential for the development of renewable energy facilities, given the areas with high wind speeds, the potential to develop hydroelectricity resources, and some potential for the use of wave energy around the coastline.

The development and use of renewable electricity generation facilities face a number of barriers that include the difficulty in securing access to natural resources as well as functional, operational and technical factors that constrain the location, layout, design and generation potential of renewable energy facilities. The adverse environmental effects of renewable electricity generation facilities can also be a barrier, if they are not appropriately avoided, remedied or mitigated.

#### Urban growth and rural residential subdivision on versatile soils

Allowing urban expansion, and the development of rural residential "lifestyle blocks", onto the more versatile soils may result in a reduction of options for their future productive use. This may adversely affect the ability of future generations to meet their reasonably foreseeable needs.

#### Waste\*, hazardous substances\* and contaminated land

The Regional Council recognises the need to focus on the full life cycle of *waste\** from generation to disposal, and that *waste\** is a wasted resource.

The Regional Council and the Region's Territorial Authorities have similar responsibilities for the control of adverse effects from the storage, transport, use and disposal of *hazardous substances\**. These responsibilities need to be clarified to prevent overlaps, gaps and inconsistencies.

The Regional Council also has responsibilities for identifying and monitoring contaminated land and Territorial Authorities are responsible for the "prevention or mitigation of any adverse effects of the development, subdivision, or use of contaminated land" (ss30(1)(ca) and 31(1)(b)(iia) RMA).

The New Zealand Waste Strategy (Ministry for the Environment, 2002) sets voluntary national targets for *waste\** minimisation, organic *wastes\**, special *wastes\**, construction and demolition *wastes\**, hazardous *wastes\**, contaminated land, organochlorines, trade *wastes\** and *waste\** disposal.

#### 3.2 Issues

# Issue 3-1: Infrastructure and other physical resources of regional or national importance

There is potential for concerns about local adverse effects to prevail over recognition of the regional and national benefits of establishing infrastructure and other physical resources of regional or national importance. There is also potential for other activities to constrain the *operation\**, *maintenance\** or *upgrading\** of infrastructure and other physical resources of regional or national importance.

## Issue 3-2: Energy

Energy conservation and energy efficiency are important but on their own will not be sufficient to meet future energy demands. If consumption of non-renewable energy resources is to be reduced or avoided, there will need to be an increase in the use of renewable energy resources. However, there are functional,





operational and technical factors that constrain the location, layout, design and generation potential of renewable energy facilities.

### Issue 3-3: The strategic integration of infrastructure with land use

Urban development that is not strategically planned can result in the piecemeal and inefficient provision of associated infrastructure.

# Issue 3-4: Adverse effects from urban growth and rural residential subdivision on versatile soils

Urban growth and rural residential subdivision ("lifestyle blocks"), on versatile soils may result in those soils no longer being available for use as production land. These development pressures often occur on the fringes of some of the Region's urban areas, most notably Palmerston North.

## Issue 3-5: Waste\*, hazardous substances\* and contaminated land

The increasing production of *waste\** and use of *hazardous substances\** in the Region has resulted in:

- (i) wasted resources and an increasing need for appropriate disposal
- (ii) potential for the unsafe use, storage, disposal and transportation of hazardous substances\*
- (iii) potential for land becoming contaminated to the point it poses a risk to people and the environment.

## 3.3 Objectives

# Objective 3-1: *Infrastructure*<sup>^</sup> and other physical resources of regional or national importance

Have regard to the benefits of *infrastructure*^ and other physical resources of regional or national importance by recognising and providing for their establishment, *operation*\*, *maintenance*\* and *upgrading*\*.

# Whāinga 3-1: Ngā kaupapa o raro me ētahi atu rauemi ōkiko whakahirahira - rohe mai, motu mai rānei

Aro atu ki ngā painga o ngā kaupapa o raro me ētahi atu rauemi ōkiko whakahirahira – rohe mai, motu mai rānei mā te āhukahuka me te whakarato i te whakatū, te whakamahi, te tiaki me te whakapai ake i ērā.

#### Objective 3-2: Energy

An improvement in the efficiency of the end use of energy and an increase in the use of *renewable energy*^ resources within the Region.

## Whāinga 3-2: Pūngao

He whakapai ake i te kaha o te putanga whakamutunga o te pūngao, he whakarahi ake i te whakamahi i ngā rauemi pūngao whakahou i roto i te Rohe.

# Objective 3-3: The strategic integration of *infrastructure*<sup>^</sup> with *land*<sup>^</sup> use

Urban development occurs in a strategically planned manner which allows for the adequate and timely supply of *land*^ and associated *infrastructure*^.





# Whāinga 3-3: Te kōmitimiti rautaki o ngā kaupapa o raro me te whakamahi whenua

Ka mahia te whakaahu tāone mā tētahi huarahi e whakamaheretia ā-rautaki kia nui ai, kia arotau ai hoki te ranea o te whenua me ngā kaupapa o raro whai pānga.

# Objective 3-4: Urban growth and rural residential subdivision on versatile soils

To ensure that territorial authorities consider the benefits of retaining Class I and II<sup>1</sup> versatile soils<sup>2</sup> for use as *production land*<sup>^</sup> when providing for urban growth and rural residential subdivision.

# Whāinga 3-4: Te tupu o ngā tāone me te whakaahu whenua hei nohoanga taiwhenua, I runga oneone whai pūkenga

Kia hua ai ka whakāroarotia ngā painga o te pupuri tonu i ngā oneone whai pūkenga o te Momo I me te Momo II kia whakamahia hei whenua whakaputa hua i ngā wā e whakarato ana mō te tupu tāone me te wawaetanga whenua nohoanga taiwhenua.

# Objective 3-5: Waste\*, hazardous substances\* and contaminated land^

The Regional Council and *Territorial Authorities*<sup>^</sup> must work together in a regionally consistent way to:

- (i) minimise the quantity of *waste*\* generated in the Region and ensure it is disposed of appropriately,
- (ii) manage adverse *effects*<sup>^</sup> from the use, storage, disposal and transportation of *hazardous substances*<sup>\*</sup>, and
- (iii) manage adverse effects<sup>^</sup> from contaminated land<sup>^</sup>.

# Whāinga 3-5: Te para, ngā matū mōrearea, me ngā whenua tāhawahawa

Ka mahi tahi te Kaunihera ā-Rohe me ngā Mana Takiwā i runga i te tikanga rite huri noa i te rohe ki te:

- (i) whakaiti i te rahi o te para ka puta mai huri noa i te Rohe, kia hua ai hoki ka tika te whakawātea
- (ii) whakahaere i ngā pānga kino nā te whakamahi, te putu, te whakawātea, me te kawe i ngā matū mōrearea, me te
- (iii) whakahaere i ngā pānga kino nō te whenua tāhawahawa.

For general information purposes these soils largely comprise the following soil series: Egmont, Kiwitea, Westmere, Manawatu, Karapoti, Dannevirke, Ohakune, Kairanga, Opiki and Te Arakura.



3-4

As identified in the Land Use Capability Classification system.



#### 3.4 **Policies**

#### 3.4.1 Infrastructure<sup>^</sup> and other Physical Resources of Regional or National **Importance**

## Policy 3-1: Benefits of infrastructure<sup>^</sup> and other physical resources of regional or national importance

- The Regional Council and Territorial Authorities<sup>^</sup> must recognise the (a) following infrastructure^ as being physical resources of regional or national importance:
  - (i) facilities for the generation of more than 1 MW of electricity and its supporting infrastructure where the electricity generated is supplied to the electricity distribution and transmission networks
  - the National Grid and electricity distribution and transmission (ii) networks defined as the system of transmission lines, subtransmission and distribution feeders (6.6kV and above) and all associated substations and other works to convey electricity
  - pipelines and gas facilities used for the transmission and (iii) distribution of natural and manufactured gas
  - the road<sup>A</sup> and rail networks as mapped in the Regional Land (iv) Transport Strategy
  - (v) the Palmerston North and Wanganui airports^
  - the RNZAF airport<sup>^</sup> at Ohakea (vi)
  - telecommunications and radiocommunications facilities (vii)
  - public or community sewage treatment plants and associated (viii) reticulation and disposal systems
  - public water supply\* intakes, treatment plants and distribution (ix) systems
  - public or community drainage systems, including stormwater (x) systems
  - the Port of Wanganui. (xi)
- (b) The Regional Council and Territorial Authorities^ must recognise the following facilities and assets as being physical resources of regional or national importance:
  - solid waste\* facilities including landfills\*, transfer stations and (i) resource recovery facilities that deal with municipal waste\*
  - (ii) existing flood protection schemes
  - (iii) New Zealand Defence Force facilities.
- (c) The Regional Council and Territorial Authorities<sup> n</sup> must, in relation to the establishment, operation\*, maintenance\*, or upgrading\* of infrastructure^ and other physical resources of regional or national importance, listed in (a) and (b), have regard to the benefits derived from those activities.
- The Regional Council and Territorial Authorities<sup>^</sup> must achieve as much (d) consistency across local authority boundaries as is reasonably possible with respect to policy and plan provisions and decision-making for existing and future infrastructure^.





# Policy 3-2: Adverse effects<sup>^</sup> of other activities on *infrastructure*<sup>^</sup> and other physical resources of regional or national importance

The Regional Council and *Territorial Authorities*<sup>^</sup> must ensure that adverse *effects*<sup>^</sup> on *infrastructure*<sup>^</sup> and other physical resources of regional or national importance from other activities are avoided as far as reasonably practicable, including by using the following mechanisms:

- (a) ensuring that current infrastructure^, infrastructure^ corridors and other physical resources of regional or national importance, are identified and had regard to in all resource management decision-making, and any development that would adversely affect the operation\*, maintenance\* or upgrading\* of those activities is avoided as far as reasonably practicable,
- (b) ensuring that any new activities that would adversely affect the operation\*, maintenance\* or upgrading\* of infrastructure^ and other physical resources of regional or national importance are not located near existing such resources or such resources allowed by unimplemented resource consents^ or other RMA authorisations,
- (c) ensuring that there is no change to existing activities that increases their incompatibility with existing *infrastructure*^ and other physical resources of regional or national importance, or such resources allowed by unimplemented *resource consents*^ or other RMA authorisations,
- (d) notifying the owners or managers of *infrastructure*^ and other physical resources of regional or national importance of consent applications that may adversely affect the resources that they own or manage,
- (e) ensuring safe separation distances are maintained when establishing rules^ and considering applications for buildings, structures^ and other activities near overhead electric lines and conductors eg., giving effect to the New Zealand Code of Practice for Electrical Safe Distances (NZECP 34:2001), prepared under the Electricity Act 1992, and the Electricity (Hazards from Trees) Regulations 2003 prepared under the Electricity Act 1992,
- (f) ensuring safe separation distances are maintained when establishing *rules*^ and considering applications for buildings, *structures*^ and other activities near transmission gas pipelines eg., giving effect to the Operating Code Standard for Pipelines Gas and Liquid Petroleum (NZS/AS 2885) and the Gas Distribution Networks (NZS 5258:2003), the latter promulgated under the Gas Act 1992,
- (g) ensuring that any planting does not interfere with existing *infrastructure*^, eg., giving effect to the Electricity (Hazards from Trees) Regulations 2003 promulgated under the Electricity Act 1992 and Section 6.4.4 External Interference Prevention of the Operating Code Standard for Pipelines Gas and Liquid Petroleum (NZS/AS 2885), and
- (h) ensuring effective integration of transport and *land*^ use planning and protecting the function of the strategic *road*^ and rail network as mapped in the Regional Land Transport Strategy.





# Policy 3-3: Adverse effects<sup>^</sup> of infrastructure<sup>^</sup> and other physical resources of regional or national importance on the environment

In managing any adverse environmental *effects*^ arising from the establishment, *operation*\*, *maintenance*\* and *upgrading*\* of *infrastructure*^ or other physical resources of regional or national importance, the Regional Council and *Territorial Authorities*^ must:

- (a) recognise and provide for the *operation*\*, *maintenance*\* and *upgrading*\* of all such activities once they have been established,
- (b) allow minor adverse *effects*^ arising from the establishment of new *infrastructure*^ and physical resources of regional or national importance, and
- (c) avoid, remedy or mitigate more than minor adverse *effects*^ arising from the establishment of new *infrastructure*^ and other physical resources of regional or national importance, taking into account:
  - (i) the need for the *infrastructure*^ or other physical resources of regional or national importance,
  - (ii) any functional, operational or technical constraints that require infrastructure^ or other physical resources of regional or national importance to be located or designed in the manner proposed,
  - (iii) whether there are any reasonably practicable alternative locations or designs, and
  - (iv) whether any more than minor adverse *effects*^ that cannot be adequately avoided, remedied or mitigated by services or works can be appropriately offset, including through the use of financial contributions.

# Policy 3-4: The strategic integration of *infrastructure*<sup>^</sup> with *land*<sup>^</sup> use

Territorial Authorities^ must proactively develop and implement appropriate land^ use strategies to manage urban growth, and they should align their infrastructure^ asset management planning with those strategies, to ensure the efficient and effective provision of associated infrastructure^.

# Policy 3-5: Urban growth and rural residential subdivision on versatile soils

In providing for urban growth (including implementing Policy 3-4), and controlling rural residential subdivision ("lifestyle blocks"), *Territorial Authorities*^ must pay particular attention to the benefits of the retention of Class I and II versatile soils for use as *production land*^ in their assessment of how best to achieve sustainable management.

## 3.4.2 Energy

# Policy 3-6: Renewable energy^

- (a) The Regional Council and *Territorial Authorities*<sup>^</sup> must have particular regard to:
  - (i) the benefits of the use and development of *renewable energy*^ resources including:
    - (A) contributing to reduction in greenhouse gases,
    - (B) reduced dependency on imported energy sources,





- (C) reduced exposure to fossil fuel price volatility, and
- (D) security of supply for current and future generations,
- (ii) the Region's potential for the use and development of *renewable* energy^ resources, and
- (iii) the need for *renewable energy*^ activities to locate where the *renewable energy*^ resource is located, and
- (iv) the benefits of enabling the increased generation capacity and efficiency of existing renewable electricity generation facilities, and
- (v) the logistical or technical practicalities associated with developing, upgrading, operating or maintaining an established renewable electricity generation activity.
- (b) The Regional Council and *Territorial Authorities*<sup>^</sup> must generally not restrict the use of small domestic-scale *renewable energy*<sup>^</sup> production for individual domestic use.

## Policy 3-7: Energy efficiency\*

- (a) The Regional Council and *Territorial Authorities*<sup>^</sup> must have particular regard to the efficient end use of energy in consent decision-making processes for large users of energy.
- (b) Territorial Authority^ decisions and controls on subdivision and housing, including layout of the site\* and layout of the lots in relation to other houses/subdivisions, must encourage energy-efficient house design and access to solar energy.
- (c) Territorial Authority<sup>^</sup> decisions and controls on subdivision and land<sup>^</sup> use must ensure that sustainable transport options such as public transport, walking and cycling can be integrated into land<sup>^</sup> use development.

#### 3.4.3 *Waste*\*

## Policy 3-8: Waste\* policy hierarchy

Wastes\*, including solid, liquid, gas and sludge waste\*, must be managed in accordance with the following hierarchy:

- (a) reducing the amount of waste\* produced
- (b) reusing waste\*
- (c) recycling waste\*
- (d) recovering resources from waste\*
- (e) appropriately disposing of residual wastes\*.

# Policy 3-9: Consent information requirements - waste\* policy hierarchy and hazardous substances\*

Where a proposal has the potential to give rise to significant adverse *effects*^ on the receiving *environment*^, an assessment must be required, as part of the consent information requirements for all *discharges*^ to air, *land*^, *water*^ and the *coastal marine area*^, of:

(a) reduction, reuse, recycle and recovery options for the *discharge*^ in accordance with Policy 3-8, and





(b) any hazardous substances\* that may be present in the discharge^, and alternatives to those hazardous substances\*.

# Policy 3-10: Cleanfills\*, composting\* and other waste\* reduction activities

*Waste*\* reduction activities will be encouraged, in particular by generally allowing *cleanfills*\* and *composting*\* activities.

## Policy 3-11: Landfill\* management

Landfills\* must generally be designed, constructed, managed, operated, remediated and monitored in line with appropriate guidelines and national environmental standards^. Taking into account the applicability of these guidelines and standards in relation to the type and scale of activity proposed, the following guidelines may be considered appropriate:

- (a) Centre for Advanced Engineering, Landfill Guidelines, April 2000
- (b) Ministry for the Environment, Module 1: Hazardous Waste Guidelines Identification and Record Keeping, June 2002, ME637
- (c) Ministry for the Environment, Module 2: Hazardous Waste Guidelines. Landfill Waste Acceptance Criteria and Landfill Classification, May 2004, ME510
- (d) Ministry for the Environment, A Guide to the Management of Cleanfills, January 2002, ME418
- (e) Ministry for the Environment, A Guide to the Management of Closing and Closed Landfills in New Zealand, May 2001, ME390
- (f) Ministry for the Environment, Guide to Landfill Conditions, May 2001, ME389
- (g) Ministry for the Environment, Good Practice Guide for Assessing and Managing the Environmental Effects of Dust Emissions, September 2001
- (h) Landfill gas collection and destruction or reuse in accordance with the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins and Other Toxics) Regulations 2004.

## 3.4.4 Hazardous Substances\*

# Policy 3-12: Responsibilities for the management of *hazardous* substances\*

In accordance with s62(1)(i) RMA, *local authority*^ responsibilities for the management of *hazardous substances*\* in the Region are as follows:

- (a) The Regional Council must be responsible for developing objectives, policies and methods to control the use of *land*^ for the purpose of preventing or mitigating the adverse *effects*^ of the disposal of *hazardous substances*\*
- (b) Territorial Authorities^ must be responsible for developing objectives, policies and methods to control the use of land^ for the purpose of preventing or mitigating the adverse effects^ of the storage, use or transportation of hazardous substances\*.





#### Policy 3-13: Regulation of hazardous substances\*

The Regional Council must not grant *resource consents*^ for *discharges*^ that contain or result in the production of environmentally persistent hazardous chemicals or hazardous chemicals that will bioaccumulate to a level that has acute or chronic toxic *effects*^ on humans or other non-target species.

#### 3.4.5 Contaminated Land<sup>^</sup>

#### Policy 3-14: Identification of priority contaminated land^

The Regional Council and *Territorial Authorities*<sup>^</sup> shall jointly identify priority contaminated land<sup>^</sup>.

Priority contaminated land<sup>^</sup> is land<sup>^</sup> that:

- (a) is listed on a register of verified *contaminated land*^ held by the Regional Council or a *Territorial Authority*^, or
- (b) would have been the *site\** of an activity identified on the Hazardous Activities and Industries List (Ministry for the Environment, 2004a), including horticulture and sheep dips, and *site\** investigations have verified that the *land^* is contaminated, and
- is expected to be subject to a change of *land*<sup>^</sup> use within the next 10 years that is likely to increase the risks to human health or the *environment*<sup>^</sup>, including where *land*<sup>^</sup> is identified for future residential zoning or where a specific development is proposed.

## Policy 3-15: Management of priority contaminated land^

Where *land*^ use changes are likely to increase the risks to human health or the *environment*^ from priority *contaminated land*^ (as identified under Policy 3-14) the Regional Council and *Territorial Authorities*^ must ensure that:

- (a) the landowner or *land*<sup>^</sup> developer fully investigates the extent and degree of contamination prior to the granting of consent allowing development (assistance with investigations may be provided by the Regional Council in some cases),
- (b) land^ is made suitable for its intended use through an appropriate level of remediation or management (including engineering) controls, and
- (c) land^ remains suitable for its intended use through appropriate monitoring of residual contaminant^ levels and associated risks and through the use of management controls on the activities undertaken on the land^.

#### 3.5 Methods

Many of the policies in this chapter will be implemented by Territorial Authorities in district plans and in decisions on resource consents and designations. The policies in this chapter will also be implemented by methods in other chapters in this Plan.

Managing the environmental impacts of *waste\**, *hazardous substances\** and contaminated *sites\** is a mix of regulatory and non-regulatory approaches. Part II of this Plan contains regional rules relating to the *waste\** activities described in this chapter. The key non-regulatory methods the Regional Council will pursue are outlined below.





Method 3-1	Regional Territorial Authority Waste Forum		
Description	The aim of this method is to work with the Territorial Authorities to achieve a regionally consistent approach to waste* and to progress Region-wide waste* issues and implement agreed initiatives, including:  • hazardous waste* disposal facilities  • recycling facilities  • resource recovery network waste* exchange  • public information  • waste* education in schools  • consistent waste* data collection and reporting  • development of Region-wide waste* reduction targets in line with the New Zealand Waste Strategy 2002  • cleanfill* management and monitoring  • waste* minimisation and cleaner production in business/trade sectors  • economic instruments including incentives for waste* reduction.		
Who	Regional Council and Territorial Authorities.		
Links to Policy	This method implements Policies 3-8 to 3-12.		
Targets	<ul> <li>Continue Regional Territorial Authority Waste Forum</li> <li>Implement initiatives</li> <li>Report to central Government on New Zealand Waste Strategy targets on a two-yearly basis.</li> </ul>		

Method 3-2	Public Information - Waste*		
Description	Easily accessible information will be developed and provided to increase public awareness on waste* issues generic to the Region, including:  • cleanfill* management and guidelines  • waste* minimisation  • availability of waste* disposal and recovery facilities (including for campervans)  • fly tipping  • hazardous substances*  • burning of waste*  • offal pits and farm dumps  • septic tank discharges  • composting*.		
Who	Regional Council and Territorial Authorities.		
Links to Policy	This method implements Policies 3-8 to 3-13.		
Target	Information provided via website and available in paper form by 2008.		





Method 3-3	Contaminated Land - Information System			
Description	The Regional Council will seek to work with Territorial Authorities to develop and implement a regionally consistent recording and category system and a procedure for the consistent handling of information for registered contaminated land. Appropriate information will be supplied on land information memoranda (LIM).			
	A regional register of contaminated land will be maintained and updated.			
Who	Regional Council, Territorial Authorities and Ministry for the Environment.			
Links to Policy	This method implements Policies 3-14 and 3-15.			
Targets	<ul> <li>Regionally consistent recording and category system implemented by all Territorial Authorities by 2010.</li> <li>Regional selected land use register linking to appropriate information held by Territorial Authorities by 2010.</li> </ul>			

Method 3-4	Contaminated Land - Identification of Priority Sites*
Description	The Regional Council, together with Territorial Authorities, will identify areas of land where pressure for residential development exists and those areas where there is potential for contaminated land issues according to land use activities listed on the Hazardous Activities and Industries List (Ministry for the Environment, 2004a), in particular horticultural sites* and sheep dip sites*.
Who	Regional Council, Territorial Authorities and Ministry for the Environment.
Links to Policy	This method implements Policy 3-14.
Target	Pressure areas identified by 2008.

#### **Anticipated Environmental Results** 3.6

Anticipated Environmental Result	Link to Policy	Indicator	Data Source
Increased efficiency of the end use of energy and increased generation of energy from renewable resources in the Region.	Policies 3-6 and 3-7	<ul> <li>Efficient end use of energy in the Region</li> <li>Amount of energy generated from renewable energy resources in the Region</li> </ul>	Energy Efficiency and Conservation Authority (EECA) and Territorial Authority monitoring of building and resource consent applications to improve energy efficiency     Monitoring of the quantity of installed generation capacity in the Region
Urban growth occurs in a strategically planned manner.	Policy 3-4	Urban growth	District plan variations and changes
Class I and II versatile soils are retained, where appropriate for productive use.	Policy 3-5	Urban growth and rural residential subdivision	District plan variations and changes
By 2017, the amount of residual waste* per capita generated in the Region will be less than prior to this Plan becoming operative.	Policies: 3-8, 3-9 and 3-10	Volume or weight of residual waste* per capita	Territorial Authority monitoring of solid <i>waste*</i> strategies





Anticipated Environmental Result	Link to Policy	Indicator	Data Source
No "clean" sites* prior to this Plan becoming operative will become contaminated by 2017.	Policies: 3-9, 3-10, 3-11, 3-12, 3-13 and 3-14	Number of clean sites becoming contaminated	<ul> <li>Regional register of contaminated land</li> <li>Regional Council's incidents database</li> </ul>
Priority contaminated <i>sites</i> * are remediated appropriately prior to change in land use.	Policies: 3-14 and 3-15	Number of remediated sites	Regional register of contaminated land

# 3.7 Explanations and Principal Reasons

## 3.7.1 Infrastructure and energy

Objectives 3-1 to 3-4 and Policies 3-1 to 3-7 have been adopted to recognise the benefits of infrastructure and having it well integrated with other land uses, and to recognise and provide for renewable energy and energy efficiency measures. The policies on infrastructure aim to give guidance to decision-makers about how to weigh up the local adverse effects of infrastructure against the positive regional and national benefits. They also aim to provide guidance on how to avoid adverse effects on important infrastructure through the inappropriate use of land near or adjoining important infrastructure, and the importance of integrating urban growth with infrastructure provision and the retention of versatile soils for use as production land. The policies regarding energy efficiency and renewable energy seek to recognise the benefits to be derived from the use and development of renewable energy, and the efficient use of energy and resources (both of which are matters to be had in particular regard in Part II of the RMA).

In relation to the application of Policy 3-6(v) "upgrading" has the ordinary meaning of the word, as used in the National Policy Statement on Renewable Electricity Generation 2011.

Parts of Policies 3-1, 3-2, 3-4 and 3-7 are included to give effect to parts of the Regional Land Transport Strategy, which seeks to protect the strategic transport network and create opportunity for the uptake of public transport options in the future.

#### 3.7.2 Urban growth and rural residential subdivision on versatile soils

The RMA requires those with functions under it to have regard to resource costs and benefits of development. For example, directing urban growth and rural residential subdivision onto less versatile soils may increase travel distances, costs of service provision or other economic or environmental costs of land development. However, allowing urban expansion onto versatile soils adjacent to urban areas will result in a reduction of options for their future productive use, which is a cost to future generations. There are a range of factors required to enable land to be used for productive use. Territorial Authorities need to weigh all relevant matters when making land use decisions.

#### 3.7.3 *Waste*\*

Objective 3-5, Policies 3-8, 3-9, 3-10 and 3-11 and associated methods set up an overarching policy framework for reducing *waste\** generation and managing the environmental effects of *waste\** discharges to air, land and water.

The Stocktake on Waste Report (Horizons Regional Council, 2004) was a first regional attempt to assess the amount and type of waste\* generated in the





Region, and the current level of existing *waste\** reduction and reuse opportunities. The report indicated that approximately 22 years of *landfill\** space remained in the Region, based on current disposal rates. Looking ahead, possible scenarios include:

- (a) the establishment of more *landfills*\* for both domestic and industrial *waste*\*, with associated environmental effects
- (b) increased costs associated with limited disposal space or transport and disposal outside the Region
- (c) reducing the amount of *waste\** generated to enable remaining *landfill\** space to last longer.

Policy 3-8 establishes a hierarchy of reducing, reusing, recycling, recovering and finally disposing of *waste\**. Policies 3-8, 3-9 and 3-10 together encourage reduction, reuse and recycling activities by being less restrictive and discouraging *waste\** disposal as a first option. This framework is encouraged at the national level by the New Zealand Waste Strategy (Ministry for the Environment, 2002). Policy 3-11 also sets high standards for *landfills\**, reflecting the significant adverse effects that *waste\** disposal can have on the environment.

Territorial Authorities are required to develop *waste\** management strategies under the Local Government Act 2002 and, along with private operators, to provide and manage *waste\** disposal services. It is appropriate that the Regional Council works with the Territorial Authorities on the Region's generic *waste\** issues, to provide a consistent approach to *waste\** management and *waste\** minimisation where possible.

Public information on the appropriate disposal of *wastes\** and opportunities for reduction, reuse and recycling are key to reducing *waste\** to *landfill\** into the future.

#### 3.7.4 Hazardous Substances\*

Objective 3-5, Policies 3-12 and 3-13 and the associated methods set up the policy framework for managing the effects of the storage, use, transport and disposal of *hazardous substances*\* in the Region as required under s62(1)(i) of the RMA.

The Hazardous Substances and New Organisms Act 1996 provides a definition of hazardous substances\*. These substances pose a significant threat to the environment if not stored, used, transported and disposed of safely and appropriately. The Regional Council considers that it is in an appropriate position to control the effects of the discharge of hazardous substances\* to the environment by means of the resource consenting process. This enables an assessment of the environmental effects of hazardous substance\* discharges to air, land and water on a case-by-case basis. Regional rules are an effective means of controlling the effects of these substances. Territorial Authorities are considered to be in an appropriate position to manage the storage, use and transport of hazardous substances\* through their district planning provisions.

The Stockholm Convention, to which New Zealand is a signatory, aims to rid the world of persistent organic pollutants. Many of these are *hazardous substances*\* previously used in old *agrichemicals*\*. Despite the Regional Council providing a comprehensive old *agrichemical*\* collection in 1996, there is likely to be a risk posed by old *agrichemicals*\* still stored on farms. The Regional Council and the Ministry for the Environment are committed to providing a further collection of old *agrichemicals*\*.





#### 3.7.5 Contaminated Land

Objective 3-5, Policies 3-14 and 3-15, and the associated methods set up the policy framework for managing contaminated land in the Region, including an approach to determining priority contaminated land and a process to establish a consistent information system across the Region.

The consistent management and appropriate remediation of contaminated land is of national concern because of the significant threat these *sites\** pose to the environment.

Contaminated land is any *site\** where past (or present) activities have left a *hazardous substance\** that has, or is reasonably likely to have, significant adverse effects. In order to adequately protect people and the environment, contaminated land needs to be located and remediated as necessary. A number of *sites\** have been located in the Region already - mainly timber treatment yards, gasworks *sites\**, and *landfills\** - and because of this can be managed appropriately as land use changes. However, the increase in residential subdivision in rural areas in recent years means that other contaminated land such as horticulture and sheep dip *sites\**, yet to be identified on the ground, pose a threat to people moving into those areas. These are considered priority *sites\**, along with *sites\** already identified. The Regional Council will work with Territorial Authorities to determine where pressure for residential development is expected in the next 10 years and to identify the risks associated with contaminated land.







# CHAPTER 4: Land

Outlines the regionally significant issues for land management within the Region, and sets out the objectives, policies and methods that derive from these issues.



## 4 Land

# 4.1 Scope and Background

Land management issues stem mainly from the effects of human activities on land. Erosion is a naturally occuring process which can contribute sediment to water bodies^, but can also be exacerbated by human activities. This chapter focuses on the impacts of human activity and accelerated erosion. Potential for adverse environmental effects depends upon two factors: the capability of the land and soil to support particular uses and the effects of a given activity on different land and soil types. Mismanagement of the land resource has major implications for water quality and aquatic biological diversity in terms of sediment and nutrient inputs. These implications stem from the very strong links that exist between the land and water resources.

Agriculture, particularly pasture-based farming, is the foundation of the Region's economy and is one of the key elements that has defined the Region's social and visual landscape. However, in some areas, past and present agricultural practices have damaged the very resource upon which the agricultural sector is based – the land and soil. Future land management practices have the potential to increase the rate of damage if they do not take the natural limitations of the land into account.

#### 4.1.1 Chapter Content

This chapter covers accelerated erosion\*, including the management of vegetation clearance\*, land disturbance\*, forestry\* and cultivation\*.

Activities related to land management which are covered in other chapters include:

- (a) discharges of *agrichemicals*\*, agricultural *wastes*\* and other contaminants onto or into land, addressed in Chapter 5
- (b) activities involving the beds of rivers and lakes, addressed in Chapter 5
- (c) clearance of indigenous vegetation and drainage of significant wetlands, addressed in Chapter 6.

#### 4.1.2 Accelerated Erosion\*

Accelerated erosion\* is often caused by historical and current clearance of woody vegetation\* and earthworks such as tracking, particularly on land use capability classes\* VII and VIII land. The Region has approximately 274,000 ha of hill country land at risk of moderate-severe erosion (Figure 4.1), 116,000 ha of which were affected by the storms of 2004. Approximately 200 million tonnes of soil was eroded during the February 2004 storm, causing approximately 30 million tonnes of sediment to enter the Region's rivers. The sediment discharged by rivers in the Region during this single storm event was likely to be several times the average annual sediment discharge for the Region.

The Region's western coast, particularly the foredune and associated inland soils, is easily eroded when the protective vegetation cover is removed as part of coastal development, and as a consequence of activities such as land recontouring and vehicle movement. *Vegetation clearance\** and *land disturbance\** expose these fragile soils to wind erosion.





The present extent of erosion has occurred despite the work by catchment boards and other individuals and organisations to manage soil erosion since the 1940s. Where these activities brought about meaningful land use change, the results have been successful in decreasing erosion rates. For instance, in steep hill country, tree cover has reduced erosion rates by approximately 75% when compared with grass. However, the size and scale of the erosion issue is such that to date no agency has been able to deal with all erosion-prone land. Further, in some areas, large-scale land use changes are likely to be required, to which there is understandable landowner resistance.

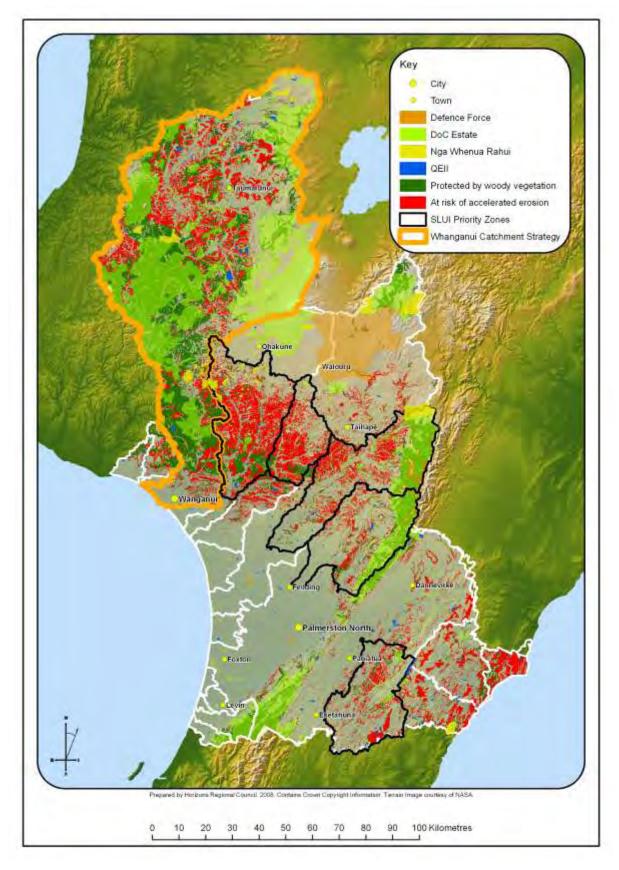
Accelerated erosion\* can cause a number of on-site and off-site impacts:

- (a) to the landowner loss of soil and productive capability, reduced stock-carrying capacity, impacts on property and assets such as *tracks\**, fences and buildings, and the costs of carrying out repairs
- (b) to the environment reduced water quality in terms of nutrient loads (much of the phosphate load in water is the result of sediment run-off), reduced water clarity, and major impacts on instream life
- (c) to others in the Region damage to infrastructure and loss of flood protection to lowland communities as river beds within river and drainage schemes fill up with silt.

Soils that are damaged by slipping take a very long time to recover. Studies have shown it can take in the order of 20 years to regain 80% of pre-erosion productivity levels, and more than 100 years to achieve near-full recovery. Some soil types may never fully recover. Efforts to maintain farm productivity on land that has been affected by slipping generally increase pressure on less damaged parts of the *property\**, thereby increasing the likelihood of further erosion and the loss of nutrients from increased *fertiliser\** use.

Disturbed sandy soils can take many years to revegetate and stabilise naturally. In the interim, large quantities of sand can be eroded by the wind, threatening buildings and property and causing the inundation of productive land.





Distribution of hill country land subject to an elevated risk of accelerated erosion\* Figure 4.1





In addition to the damage that can be caused to the Region's fragile land types and soils discussed above, erosion rates and sediment run-off from other parts of the Region can be increased through activities that involve significant *vegetation clearance\** and *land disturbance\**. Such activities are typically involved with major infrastructure development (for example, road construction and upgrades or energy projects such as windfarm development), land development (such as new residential or industrial subdivisions on the edge of urban centres or recontouring of land associated with dairy conversions or intensification), or aggregate extraction (for example, gravel pits or quarries).

Insufficient attention to batter slopes, stormwater management, fill compaction, overburden containment, debris clearance and revegetation can significantly increase sediment loads in adjoining streams or sediment discharges onto neighbouring properties.

## 4.1.3 Land and Soil Management

This section focuses on reducing accelerated erosion\*.

The Regional Council's focus continues to be largely non-regulatory, with the Council's Sustainable Land Use Initiative and Whanganui Catchment Strategy programmes being critical components of this approach.

The Regional Council's regulatory focus for land centres on protecting the stability of the Region's soil and maintaining or enhancing water quality.

This regulatory focus recognises that under s9(2) of the RMA, the use of land can occur as of right unless a rule in a plan states otherwise. Therefore, the Regional Council does not require rules allowing the use of land unless it wishes to control the way in which that use of land occurs.

Under this Plan, the majority of activities involving the use of land can continue to occur as of right provided they are not within a *rare habitat\**, *threatened habitat\** or *at-risk habitat\**. However, four specific activities can only continue to be undertaken without the need for a resource consent if conditions are met. These activities are:

- (a) Small-scale land disturbance\*, including earthworks,
- (b) forestry\*
- (c) cultivation\*, and
- (d) vegetation clearance\*.

These activities are permitted by Rules 13-1, 13-3, 13-4 and 13-5 respectively.

Vegetation clearance\*, land disturbance\* and cultivation\* require a resource consent if they are undertaken adjacent to water bodies, in *Hill Country Erosion Management Areas*\* or coastal foredune\* areas subject to an elevated risk of accelerated erosion. These specific activities are the subject of Rule 13-6 and 13-7.



# 4.2 Significant Resource Management Issues

#### Issue 4-1: Accelerated erosion\*

#### (a) Farming and other land uses in hill country

Some aspects of current farming and other land use practices in the Region's hill country and adjacent to water bodies are unsustainable. Where *vegetation clearance\**, roading, tracking or other types of *land disturbance\** (including filling) are carried out in hill country or adjacent to water bodies, there is potential to destabilise slopes, causing *accelerated erosion\**. *Accelerated erosion\** is often causing:

- (i) a significant reduction in the productive capability of land
- (ii) increased sediment loads in water bodies which are reducing water quality, smothering aquatic ecosystems, infilling rivers, lakes and estuaries, and increasing flood risk to lowland communities
- (iii) land stability hazards, particularly in steep hill country, which threaten people, buildings and infrastructure.

#### (b) Coastal foredune\*

Vegetation and soil disturbance associated with vehicle movement, tracking, coastal protection works and land recontouring have the potential to destabilise fragile *coastal foredunes*\* if not well managed.

## (c) Large-scale land disturbance\* including earthworks

Most other land use activities are not of a sufficient scale to have significant regional adverse effects. However, large-scale earthworks related to urban expansion and other development can have significant adverse effects on water bodies if sediment from these earthworks is poorly managed. Large-scale land disturbance activities can also destabilise sandy soils in coastal areas which can cause significant adverse effects associated with wind-blown sand.

#### (d) Forestry\*

Forestry\* is considered to be a generally beneficial land use in the Region's hill country due to its ability to facilitate the long-term stabilisation of land subject to an elevated risk of accelerated erosion\*. However, forestry\* needs to be prudently managed, in a manner consistent with industry best practice, to ensure that sustainable land use is realised and off-site adverse effects are minimised.

#### (e) Cultivation\*

Cultivation\* does not generally cause soil erosion problems within the Region. However, the potential for increased sediment loads to water bodies can increase as the slope of the land being cultivated increases and when undertaken adjacent to water bodies. Therefore cultivation\* should be appropriately managed, including by the use of appropriate industry best practice sediment run-off control measures.

# 4.3 Objectives

#### Objective 4-1: Managing accelerated erosion\*

By the year 2017, 50% of farms within hill country *land*^ subject to an elevated risk of *accelerated erosion*\* will have in place, or be in the process of putting in place, farm-wide sustainable *land*^ management practices to minimise *accelerated erosion*\* and to provide for the Surface *Water*^ Management Values set out in Schedule B by reducing sediment loads entering *water bodies*^ as a result of accelerated erosion\*.





#### Whāinga 4-1: Te whakahaere horo whenua tere

Ā te tau 2017 kia 50% o ngā pāmu kei ngā puke teitei ka whai tūponotanga nui ka pāngia pea e te horo whenua tere kua whakarite kē – kei te whakarite rānei – i ētahi tikanga whakauka mō te whakahaere whenua kei te pāmu katoa hei whakaiti i te horo whenua tere, ā, hei taunaki hoki i ngā Uara Whakahaere Wai Mata kua whakatakotoria i roto i te Pukapuka Āpiti B mā te whakaiti i te nui o te parakiwai e uru ana ki ngā wai e hua mai ai i te horo whenua tere.

#### Objective 4-2: Regulating potential causes of accelerated erosion\*

Land<sup>^</sup> is used in a manner that ensures:

- (a) accelerated erosion\* and increased sedimentation in water bodies^ (with resultant adverse effects^ on people, buildings and infrastructure^) caused by vegetation clearance\*, land disturbance\*, forestry\*, or cultivation\* are avoided as far as reasonably practicable, or otherwise remedied or mitigated, and
- (b) sediment loads entering *water bodies*^ as a result of accelerated erosion are reduced to the extent required to be consistent with the *water*^ management objectives and policies for *water*^ quality set out in Chapter 5 of this Plan.

### Whāinga 4-2: Te whakahaere pitomata e takea mai ai horo whenua tere

Ka whakamahia te whenua kia hua ai:

- (a) te horo whenua tere, ā, ka piki haere te parahanga ā-matū i roto i ngā wai (me te hua ko ngā pānga kino ki te tangata, ngā whare, me ngā kaupapa o raro) nā te whakapara tupu, te raweke whenua, te mahi rākau, te mahi māra i ngā wā e tika ana ka parea, ka whakapaingia rānei, ka whakamemehatia rānei ēnei, ā,
- (b) ka whakaitingia te nui o te parakiwai e uru ana ki roto i ngā wai e takea mai ana i te tere horo o te whenua kia taea ai te hāngai ki ngā whāinga, ki ngā kaupapa here mō te kounga o te wai kua whakatakotoria ki Wāhanga 5 o tēnei Mahere.

#### 4.4 Policies

### Policy 4-1: Encouraging and supporting sustainable *land*<sup>^</sup>

The Regional Council will encourage and support the adoption of sustainable land^ management practices by:

- (a) working with relevant owners and occupiers of farms within hill country land<sup>^</sup> subject to an elevated risk of accelerated erosion<sup>\*</sup> to prepare voluntary management plans under the Council's Sustainable Land Use Initiative or Whanganui Catchment Strategy, which identify sustainable land<sup>^</sup> management practices for each farm and work programmes for implementing any agreed changes,
- (b) monitoring the implementation of voluntary management plans and sustainable *land*^ management practices within hill country *land*^ subject to an elevated risk of *accelerated erosion*\* and reporting this information on a two-yearly basis, and reviewing the effectiveness of the sustainable land management practices, and





(c) responding to requests from owners or occupiers of *land*<sup>^</sup> that is not within hill country *land*<sup>^</sup> subject to an elevated risk of *accelerated erosion*<sup>\*</sup> to prepare a management plan, provided this does not impede the achievement of (a).

#### Policy 4-2: Regulation of land^ use activities

- (a) In order to achieve Objective 4-2 the Regional Council must regulate vegetation clearance\*, land disturbance\*, forestry\* and cultivation\* through rules^ in this Plan and decisions on resource consents^, so as to minimise the risk of accelerated erosion, minimise discharges of sediment to water, and maintain the benefits of riparian vegetation for water bodies^.
- (b) Territorial Authorities^ may regulate, through rules^ in district plans^ and decisions on resource consents^, the actual or potential effects^ of the use, development, or protection of land^, in order to achieve Objective 4-2. However, Territorial Authorities^ must not have rules^ that are contradictory to the rules^ in this Plan that control the use of land^.
- (c) The Regional Council will generally allow small scale *vegetation clearance\**, *land disturbance\**, *forestry\** and *cultivation\** to be undertaken without the need for a *resource consent^* if *conditions^* are met. *Vegetation clearance\** and *land disturbance\** require a *resource consent^* if they are undertaken adjacent to some *water bodies^* (including certain *wetlands^*) in *Hill Country Erosion Management Areas\** or in *coastal foredune\** areas. Any other large scale *land disturbance\** will also require a *resource consent^*.

## Policy 4-3 Supporting codes of practice, standards, guidelines, environmental management plans and providing information on best management practices

The Regional Council must, and Territorial Authorities^ may:

- (a) support the development of codes of practice, standards, guidelines and other sector-based initiatives targeted at achieving sustainable *land*^ use,
- (b) recognise appropriately developed and administered codes of practice, standards, guidelines or environmental management plans targeted at achieving sustainable *land*<sup>^</sup> use, and incorporate them within the regulatory framework where applicable, and
- (c) make information describing best management practices for reducing erosion and maintaining *water*<sup>^</sup> quality and soil health available to all relevant landowners, occupiers, asset owners, consultants, developers and contractors.





#### 4.5 Methods

Managing activities on land is a mix of regulatory and non-regulatory approaches. Part II of this Plan contains regional rules relating to the activities described in this chapter.

Method 4-1	Sustainable Land Use Initiative – Hill Country Erosion	
Description	The aim of this method is to reduce hill country accelerated erosion*. While the emphasis will be on hill country, all land at risk of erosion will be eligible for assistance under this programme. Staff from the Regional Council and other agencies will work with landowners and occupiers to develop voluntary management plans. These plans will provide the blueprint for long-term environmental, economic and social sustainability. Research, publicity, education, information, incentives, joint ventures and land purchase will be used to encourage the landowner or occupier to manage their land in a sustainable manner.	
Who	Regional Council, central government, Territorial Authorities, Crown Research Institutes, landowners or occupiers, recognised organisations representing farmers, and farm consultants.	
Links to Policy	This method implements Policy 4-1.	
Targets	50% of properties within hill country land subject to an elevated risk of accelerated erosion* will have a voluntary management plan in place by 2017.	

Method 4-2	Whanganui Catchment Strategy	
Description	The aim of this method is to reduce hill country accelerated erosion* within the Whanganui catchment. Whilst the emphasis will be on hill country land subject to an elevated risk of accelerated erosion*, all land at risk of erosion within the catchment will be eligible for assistance unde this programme. Staff from the Regional Council and consultants will work with landowners and occupiers to develop management plans. These plans will provide the blueprint for long-term environmental, economic and social sustainability. Research, publicity, education, information and incentives will be used to encourage the landowner or occupier to manage their land in a sustainable manner.	
	The Whanganui Catchment method is a pilot for the much larger Sustainable Land Use Initiative – Hill Country Erosion method (Method 4-1). Eventually, the Whanganui Catchment Strategy method will be integrated with this method.	
Who	Regional Council, Ruapehu and Wanganui District Councils, landowners or occupiers, relevant <i>hapū</i> * and <i>iwi</i> *, the Whanganui River Enhancement Trust, Department of Conservation, recognised organisations representing farmers and farm consultants.	
Links to Policy	This method implements Policy 4-1.	
Targets	50% of properties within hill country land subject to an elevated risk of accelerated erosion* in the Whanganui Catchment will have a voluntary management plan in place by 2015.	



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Method 4-3	Soil Health	
Description	The aim of this method is to reduce the impact of horticulture, cropping and intensive farming activities on soil health, and the consequent off-site environmental impacts. Education on best management practices will be made available to landowners through a variety of means to encourage the adoption of sustainable land use practices. Research and monitoring will be used to identify and fine-tune best practice. This method includes the provision of advice and information to owners of land in the fragile sand country along the Region's west coast.	
Who	Regional Council, landowners or occupiers, Landwise, Horticulture New Zealand, Federated Farmers, agricultural contractors, <i>fertiliser*</i> companies and research institutes.	
Links to Policy	This method implements Policy 4-3(c).	
Targets	<ul> <li>All major croppers/horticulturists in the Region are operating under best management practice regimes by 2017.</li> <li>All major agricultural contractors are operating under industry standards regimes by 2010.</li> <li>All pasture-based farms are being managed in accordance with the relevant sector-based best management practice by the agreed target dates.</li> </ul>	

Method 4-4	Sustainable Land Use Codes of Practice and Best Management Practices	
Description	This method will provide support for the development of codes of practice, best management practices and other sector-based initiatives for sustainable land use, construction, production and operating methods on all types of land within the Region – hill country, plains, sand country and along the coast.	
	This method will also recognise, and where appropriate support, initiatives that raise awareness of sustainable land use. Examples include the monitor farm programme, sustainable farming and management funds, and Ballance Farm Environment Awards.	
Who	Participation in this project is very much dependent upon approaches from industry and sector groups.	
Links to Policy	This method implements Policy 4-3.	
Targets	<ul> <li>All approaches for Regional Council assistance will be considered.</li> <li>Where proposals are aligned with Regional Council objectives, assistance will be provided where possible.</li> </ul>	





Method 4-5	Land Research, Monitoring and Reporting Programme
Description	The aim of this method is to develop an integrated research, monitoring and reporting programme that supports delivery and refinement of existing policies and methods, guides implementation planning, and allows implementation effectiveness to be assessed. This will include a five-yearly assessment of the effectiveness of the above methods, particularly the Sustainable Land Use Initiative – Hill Country Erosion Method.
Who	Regional Council, landowners and occupiers, research institutes, universities, and non-government agencies and community groups.
Links to Policy	This method implements Policies 4-1, 4-2 and 4-3.
Target	A research, monitoring and reporting programme that supports delivery and refinement of existing policies and methods, and guides and assesses implementation.

Method 4-6	Infrastructure Protection	
Description	The aim of this method is to reduce the erosion risk to, and caused by, the provision, <i>maintenance</i> * or <i>upgrade</i> * of infrastructure.	
	Advice and information will be provided to infrastructure owners in the planning stages of new works, the carrying out of <i>maintenance*</i> or <i>upgrade*</i> , and protection of existing networks from erosion risks.	
Who	Regional Council, Territorial Authorities and owners of major infrastructure.	
Links to Policy	This method implements Policy 4-3.	
Target	The Regional Council will have formed working partnerships with all major infrastructure owners for the purposes of assessing and identifying options to manage erosion risks.	

Method 4-7	Education in Schools – Land	
Description	The aim of this method is to implement a range of initiatives to raise awareness amongst the youth of the Region of the significance of the land and soil resource, the threats to it, and what they can do to protect/restore it. This will be achieved through various environmental education programmes/initiatives eg., Green RIG, Trees for Survival etc.	
Who	Regional Council, national and local environmental education providers and youth organisations.	
Links to Policy	This method implements Policy 4-3.	
Targets	The Regional Council will develop and implement a land and soil related environmental education programme.	





#### 4.6 Anticipated Environmental Results

Anticipated Environmental Result	Link to Policy	Indicator	Data Source
By 2017, there will be a net reduction in the adverse effects on water quality, people, buildings and infrastructure caused by accelerated erosion*, and hill country and coastal foredune* wind erosion in the Region.  Advice Note: There are linkages from this AER to the AERs within s5.6	Policies 4-1, 4-2, 4-3, 5-1, 5-2, 5-3, 5-4 and 5-8	<ul> <li>Water quality monitoring results, especially for "muddy waterways" in the Whanganui and Rangitikei Rivers</li> <li>Rate of deposition of sediment in coastal river reaches, focusing on the Whanganui, Rangitikei and Manawatu Rivers</li> <li>Costs of storm damage</li> <li>% of Region's land being used in accordance with sustainable use guidelines</li> <li>Level of achievement of deposited sediment, visual clarity and phosphorus water quality targets* specified in Schedule E.</li> <li>Changes to long-term mean sediment discharges of rivers to sea.</li> <li>% of farms within the SLUI priority catchments that have voluntary management plans in place and are being implemented.</li> </ul>	<ul> <li>Regional Council's state of environment water quality monitoring programme</li> <li>Regional Council's and Territorial Authorities' incidents databases</li> <li>Regional Council's river bed level survey results</li> <li>Regional Council's and Territorial Authorities' storm damage reports</li> <li>Land use mapping</li> <li>Regional Council's Sustainable Land Use Initiative monitoring and implementation reports</li> </ul>

#### 4.7 Explanations and Principal Reasons

Objectives for land management are presented in this Plan to encourage sustainable land use and minimise erosion. These focus on responding to the fact that 65% of the Region consists of gullies and hillsides subject to *accelerated erosion\**. A target has been introduced into Objective 4-1 to ensure that the progress toward sustainable hill country land use can be measured. This is particularly important because the policy platform that underpins this objective is largely non-regulatory.

Policy 4-1 recognises that regulation is not the appropriate tool to encourage change toward sustainable land management practices. Instead it uses non-regulatory farm plans that contain a programme of works involving the landowner's active participation. Policy 4-1 and associated methods acknowledge that the achievement of sustainable farming practices on hill country land subject to an elevated risk of accelerated erosion\* is a complex task. There are three reasons for this.

1. Recognition that sustainable land use means changing from unsustainable farming practices. This may mean the introduction of new practices such as employing different stocking rates, introducing *forestry\** or retirement of land and fencing water bodies.





- 2. Commitment to implementing new land management practices will require capital outlay and most importantly require a willingness from the landowner to introduce change.
- 3. Sustainable land management practices need to be tailored to the specific land capability of an individual holding, which means a blanket approach introducing one solution for all hill country farming will probably fail.

Policy 4-2 recognises that *vegetation clearance*\* and *land disturbance*\* are two of the main contributors to *accelerated erosion*\*. It also recognises that *vegetation clearance*\*, *land disturbance*\* and *cultivation*\* within or close to water bodies have a high risk of causing discharges of sediment to water. The policy describes the regulation of land use activities to provide guidance to regional and district plan preparation.

Policy 4-3 states the Regional Council's support for codes of practice, standards, guidelines and environmental management plans as these can assist with reducing *accelerated erosion*\*.





# CHAPTER 5: Water

Outlines the regionally significant issues for water management within the Region, and sets out the objectives, policies and methods that derive from these issues.

#### 5 Water

#### 5.1 Scope and Background

#### 5.1.1 Scope

This chapter addresses the management of fresh water in the Region. It covers:

- Water Management Zones\* and Sub-zones\* and Values the establishment of Water Management Zones\* and Sub-zones\* and associated water management Values for each Sub-zone\*, for the purpose of managing water quality, water quantity and activities in the beds of rivers and lakes.
- Surface water quality the establishment of water quality targets\* for rivers and lakes, in order to give effect to the Values, together with a policy regime of maintaining water quality in those Water Management Sub-zones\* that meet their water quality targets\*, and improving water quality over time in those Water Management Sub-zones\* that do not.
- **Groundwater quality** the maintenance of existing groundwater quality and its improvement where it is degraded.
- Discharges and land use activities affecting water quality the management of discharges into surface water, discharges onto or into land, and diffuse run-off and other land use activities affecting surface water and groundwater quality.
- Surface water quantity and allocation the establishment of minimum flows and allocation regimes for rivers, and the management of water takes and other activities affecting surface water quantity.
- **Groundwater quantity and allocation, and** *bores*\* the establishment of *Groundwater Management Zones*\*, identification of the respective allocable volumes and the active management of groundwater takes.
- **Beds of rivers and lakes** the management of activities that disturb the beds of rivers and lakes, the management of existing and new structures in the beds of rivers and lakes, and the establishment of sustainable gravel extraction limits for rivers.
- Land adjacent to the beds of rivers and lakes the management of some activities in relation to flood control or drainage purposes.

The effects of hill country erosion on water quality are addressed in Chapter 4. The ecological impacts of takes, diversions, discharges and drainage on *rare habitats\**, *threatened habitats\** and *at-risk habitats\** are addressed in Chapter 6.

#### 5.1.2 Overview

Water is critical for life to exist. People living in the Region enjoy a temperate climate, a large number of rivers, streams and lakes and an extensive groundwater system. The Region does not experience the severity of droughts that impact on some other parts of New Zealand and generally there is enough water to meet everyone's needs. People have grown up with an expectation of access to clean, safe water. But ready access means that water has not always been valued highly. The health of the surface water resource has steadily declined in most catchments as a result.



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Despite this decline, there has been a revolution around water in the past few decades. In response to public concerns, significant improvements have been made to the quality of discharges from towns and industrial *sites\**. For example, untreated sewage is no longer discharged directly into water bodies, and rivers no longer receive blood discharged from freezing works. Many former discharges to water, particularly discharges of dairy shed effluent, are now discharged to land. New large water takes, such as those associated with hydroelectric development, are carefully managed to ensure that the downstream needs of people and ecosystems are catered for. Although there have been substantial improvements in the quality of point source discharges to water, improvement is still possible and is necessary.

There has been a substantial intensification within the agricultural sector in recent years. This has contributed to a vibrant and booming regional economy but has also increased pressure on the Region's water resources. There has been a significant increase in irrigation demand and the amount of nutrients leaching to surface water and groundwater. Although the impacts of agricultural intensification are less obvious than those caused by the major point source discharges and abstractions mentioned above, they have increased progressively over time.

As the Region has grown, we have significantly altered the physical nature of many of its water bodies and their beds with structures, drainage and flood protection works, particularly in the Manawatu Plains. These changes have led to a poor and declining state of physical health in the Region's water bodies and their beds.

The impact of discharges and run-off on water quality and the increasing demand for water abstraction are two of the four most critical issues addressed in this Plan.

#### 5.1.3 Water Quantity

The demand on surface water and groundwater resources is one of the most critical issues addressed in this Plan.

Water from the two main fresh water sources within the Region - surface water (rivers and lakes) and groundwater - is abstracted for a variety of uses, including drinking water supply, stock water supply, irrigation, electricity generation and industrial use.

The single largest user of water in the Region is the energy sector. Hydroelectric power generation takes are concentrated around Mount Ruapehu and on the Mangahao River. The amount of water used for power generation has not changed significantly in the past decade, although there is potential for more hydroelectricity generation in the future.

In contrast, with the exception of consented water supply abstraction from surface water, other uses have steadily increased over the past few decades in response to stock numbers increasing and the establishment of industrial plants. In recent years there has been a dramatic increase in water demand. From 1997 to 2009, consented groundwater takes almost doubled and consented surface water takes more than doubled (Table 5.1).

**Table 5.1** Change in Consented Water Abstraction Volumes from 1997 to 2009 (excluding hydroelectric power generation)

		1997 to 2009 Percentage Change in Consented Water Takes		
Source	Sector	1997 (m³/d)	2009 (m³/d)	Increase (%)
Groundwater	All Sectors	287,000	537,179	+85%





		1997 to 2009 Percentage Change in Consented Water		
Source	Sector	1997 (m³/d)	2009 (m³/d)	Increase (%)
Surface water	Agriculture	70,668	385,579	+446%
	Industry	38,835	97,782	+152%
	Water supply	162,024	133,259	-18%
	All Sectors	271,527	616,620	+127%

The greater the amount of water taken from a water body, the greater the potential impact on instream life, recreational activities (including fishing, swimming and boating), cultural/spiritual values and the ability of the water body and its bed to assimilate *waste\**. As important as the volume of water abstracted is the timing of abstraction. Rivers in the Region experience natural low flows during summer, which coincides with the period of greatest demand. The taking of water during higher flows generally has little impact, but even small takes during summer low flow conditions can have adverse effects. Measures which avoid those effects during the more critical summer low flow conditions should be encouraged. Maintaining natural flow variability is important for the habitat requirements of fish species, natural character and water quality. The ever-increasing demand on the Region's surface water resource means that it must be used efficiently, so that the amount of water allocated for abstraction is available to as many users as possible.

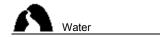
Groundwater monitoring indicates that groundwater levels are stable and research indicates that there is sufficient water for all users at a regional scale. A recent increase in large groundwater takes along the west coast has raised the potential for saltwater intrusion. This occurs when enough water is removed from an aquifer to allow seawater to migrate inland. Groundwater contaminated with saltwater is no longer suitable for irrigation or as stock water. Saltwater-contaminated groundwater will clear with time, but the timescale is measured in centuries.

The high density of *bores*\* in some areas has caused localised problems. These include:

- (a) impacts on other groundwater users. Allowing too many new users to access the groundwater resource will impact on the amount that is available to existing users and can affect the ability of existing bores\* to draw water.
- (b) impacts on groundwater-fed streams, lakes and wetlands. Many of the streams, lakes and wetlands along the west coast of the Region (eg., Lakes Papaitonga and Horowhenua) are dependent upon groundwater. Groundwater is particularly important during summer, as it may be the only source of inflow.

Bores\* are the main means of accessing groundwater resources. They provide the principal way of studying the subsurface environment by enabling sampling of subsurface geology, allowing direct measurement of groundwater levels and quality and allowing testing of aquifer yields. This Plan adopts the NZS 4411:2001 Environmental Standard for Drilling of Soil and Rock in its entirety for the management of bores\* (design, drilling, completion, development, testing, maintenance\*, cleaning/disinfection, record keeping and decommissioning).





#### 5.1.4 Water Quality

There is significant variation in water quality across the Region. Rivers (including streams) emerging from the mountains or areas that have retained their original vegetation cover tend to have very good water quality. The one exception to this is the Whangaehu River, which flows from the crater lake on Mt Ruapehu. It is naturally acidic and contains high levels of sulphur and heavy metals.

As rivers flow towards the sea, they pick up sediment and nutrients from the surrounding land. As would be expected, water quality in the lower reaches of rivers and streams is poorer than in the headwaters.

In the past, the biggest threats to water quality were municipal (eg., sewage), industrial (eg., meat works and fellmongers) and agricultural (eg., dairy shed effluent) discharges. Although considerable improvements have been made to discharges to water, further improvement is still possible and necessary.

The intensification in agriculture during the past 10 to 15 years has been especially marked in the dairy sector. Raising stock numbers increases the quantity of dairy shed effluent requiring disposal, the quantity of stock urine produced (a concentrated source of nutrients), and the opportunities for stock to access water bodies and their beds. The agricultural sector is recognising the impact it is having on the nation's water bodies and has started to act. The dairy sector was the first to respond, with the Dairying and Clean Streams Accord (an agreement between Fonterra, the Ministry for the Environment, Regional Councils and others on an approach to enhance water quality). Such voluntary approaches are one way of lowering nutrient and faecal levels in the Region's water bodies and the Regional Council supports them, although further improvements are needed. Further improvements will require a mix of regulatory and non-regulatory approaches that may alter over time.

Groundwater quality within the Region varies according to both depth and location. Generally, deeper groundwater is of higher quality. For example, shallow groundwater within the Horowhenua District near Levin has high concentrations of nitrates, which are believed to be the result of septic tank discharges and *fertiliser\** use on market gardens. There have been no significant changes in groundwater quality over the length of the Regional Council's monitoring record (more than 15 years). There is no evidence that groundwater quality is deteriorating.

The overall state of fresh water quality in the Region is as follows:

- (a) The middle reaches of many rivers are unsafe to swim in because of bacterial contamination, or are unpleasant to swim in because of slime (periphyton) growth (Figure 5.1). Elevated nitrate and phosphate levels promote slime growth. The slime also impacts on fish and instream invertebrate communities.
- (b) The lower reaches of many rivers have high concentrations of bacteria, nitrates, phosphates and sediments, and these levels are increasing.
- (c) There is minimal contamination of surface water from heavy metals, hydrocarbons and other toxic substances.
- (d) The quality of groundwater in the Region is generally suitable for stock needs and irrigation, with a low sodium hazard and a low-medium salinity hazard.
- (e) Nitrate levels are high in shallow groundwater in parts of the Region, but the levels have not changed during the period of monitoring.
- (f) Groundwater is free of herbicides and pesticides.





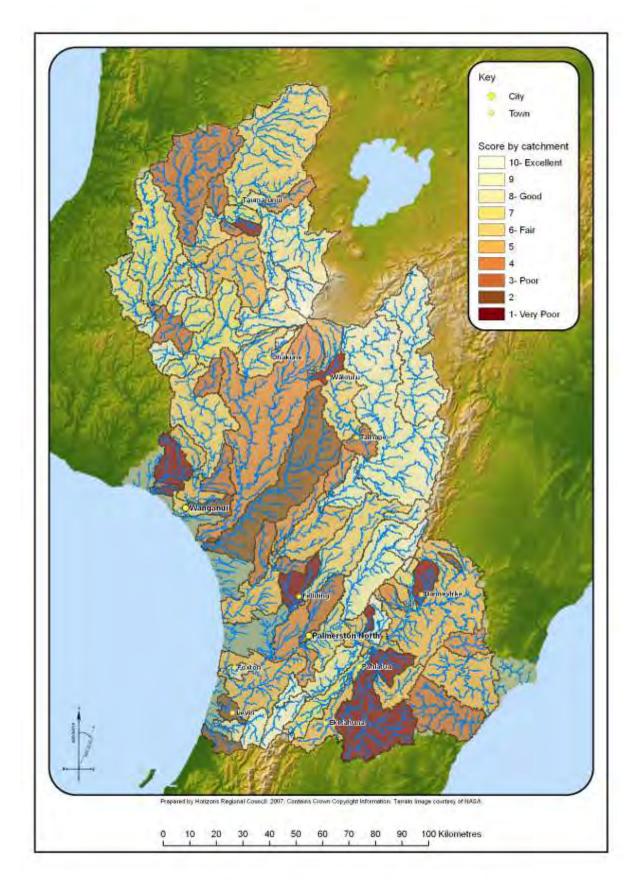


Figure 5.1 Suitability of water quality for contact recreation within the Region



#### 5.1.5 Beds of Rivers and Lakes

People have always been attracted to rivers and lakes to live, work and play. Despite the economic, cultural, social and environmental importance of rivers and lakes, many of the rivers and lakes in the Region have been highly modified over the years. Works to control flooding and erosion, dams, and diversions for hydroelectricity generation can be large scale and have significant effects on the physical nature of the Region's rivers and lakes. Smaller-scale changes like river crossings and small dams can have negative cumulative impacts. Urban expansion often alters rivers. Utilisation of the Region's gravel resource provides an economic benefit and there may be flood protection benefits from having it removed from rivers. However, gravel extraction, when not managed well, can lead to increased flooding and erosion risk.

This modification has contributed to the economic growth and wellbeing of the Region, but it has also negatively altered the character and ecology of most rivers and lakes in the Region, impacting on cultural values attributed to them and leading to the loss or fragmentation of indigenous plant and animal populations.

#### 5.2 Significant Resource Management Issues

#### Issue 5-1: Water quality

The quality of many rivers and lakes in the Region has declined to the point that ecological values are compromised and contact recreation such as swimming is considered unsafe. The principal causes of this degradation are:

- (a) nutrient enrichment caused by run-off and leaching from agricultural land, discharges of treated wastewater, and septic tanks
- (b) high turbidity and sediment loads caused by land erosion, river channel erosion, run-off from agricultural land and discharges of stormwater
- (c) pathogens from agricultural run-off, urban run-off, discharges of sewage, direct stock access to water bodies and their beds and discharges of agricultural and industrial *waste\**.

Shallow groundwater in areas of intensive land use in the Horowhenua and Tararua Districts has elevated nitrate levels in excess of the New Zealand drinking water standard. However, the quality of groundwater in the Region is generally suitable for stock needs and irrigation, and there has been no evidence of deteriorating groundwater quality during the past 15 years.

#### Issue 5-2: Water quantity and allocation

The use of both surface water and groundwater has increased dramatically during the last decade. The demand for surface water in the Ohau, Oroua and parts of the upper Manawatu catchments already exceeds supply, and other catchments are experiencing marked increases. This increased demand has the potential to adversely affect both instream values and the natural character of rivers, wetlands and lakes, if not managed. The amount of groundwater is generally capable of meeting demand within the Region, although there is a need to actively manage effects between *bores*\* at a local level, the effects of groundwater takes on surface water, and to be vigilant about the risk of saltwater intrusion along the west coast.

#### Issue 5-3: Beds of rivers and lakes

The demand for flood and erosion control to protect many types of land use has led to significant modification of the Region's rivers and lakes and their margins. Structures required to be located within the beds of rivers and lakes, including



bridges, culverts, water intake and discharge pipes and hydroelectricity structures, also affect the natural character of rivers and lakes and their margins. These types of uses and developments, in conjunction with gravel extraction, have modified, and continue to modify the physical characteristics and ecology of many of the Region's rivers and lakes.

#### 5.3 Objectives

#### Objective 5-1: Water^ management Values

Surface *water bodies*<sup>^</sup> and their *beds*<sup>^</sup> are managed in a manner which safe guards their life supporting capacity and recognises and provides for the Values in Schedule B<sup>1</sup>.

#### Whāinga 5-1: He ūara whakahaere wai

Ka āta whakahaeretia ngā mata wai me ngā papa o ērā kia whakamaru ai i te āheinga toko ora o ērā, ā, ka mōhiotia, ka pukumaharatia hoki ngā Uara kei roto i Pukapuka Āpiti B.

#### Objective 5-2: Water^ quality

- (a) Surface water<sup>^</sup> quality is managed to ensure that:
  - (i) water^ quality is maintained in those rivers^ and lakes^ where the existing water^ quality is at a level sufficient to support the Values in Schedule B
  - (ii) water^ quality is enhanced in those rivers^ and lakes^ where the existing water^ quality is not at a level sufficient to support the Values in Schedule B
  - (iii) accelerated eutrophication and sedimentation of *lakes*^ in the Region is prevented or minimised
  - (iv) the special values of *rivers*^ protected by water conservation orders^ are maintained.
- (b) Groundwater quality is managed to ensure that existing groundwater quality is maintained or where it is degraded/over allocated as a result of human activity, groundwater quality is enhanced.

#### Whāinga 5-2: Te kounga o te wai

- (a) Ka whakahaeretia te kounga o te mata wai kia hua ai:
  - (i) ka tiakina te kounga o te wai kei roto i ngā awa me ngā roto he kaha tonu te kounga o te wai hei hāpai i ngā Uara kei roto i Pukapuka Āpiti B
  - (ii) ka whakapaingia te kounga o te wai kei roto i ngā awa me ngā roto kāore i te kaha te kounga o te wai hei hāpai i ngā Uara kei roto i Pukapuka Āpiti B
  - (iii) ka āraia, ka whakaitingia rānei te tere parahanga ā-matū whakamōmona, te parakiwai hoki o ngā roto o te Rohe, ā,
  - (iv) ka tiakina ngā uara motuhake o ngā awa e whakamarumarutia e ngā whakahau whakauka wai, arā, ko ngā water conservation orders.
- (b) Ka whakahaeretia te kounga o te waiopapa kia hua ai ka tiakina tonutia te kounga o te waiopapa kei reira kē; ka whakarākaitia rānei te kounga o te

Schedule B is not a component of Part I - the Regional Policy Statement. It is a component of Part II - the Regional Plan.



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waiopapa, ka whakaparungia rānei, ka tuhenetia te tuaritanga rānei nā te mahi a te tangata.

#### Objective 5-3: Water<sup>^</sup> quantity and allocation

*Water*<sup>^</sup> quantity is managed to enable people, industry and agriculture to take and use *water*<sup>^</sup> to meet their reasonable needs while ensuring that:

- (a) For surface water^:
  - (i) minimum flows and allocation regimes are set for the purpose of maintaining or enhancing (where degraded) the existing life-supporting capacity of *rivers*^ and their *beds*^ and providing for the other Values in Schedule B as appropriate
  - (ii) takes and flow regimes for existing hydroelectricity are provided for before setting minimum flow and allocation regimes for other uses
  - (iii) in times of *water*^ shortage, takes are restricted to those that are essential to the health or safety of people and communities, or drinking *water*^ for animals, and other takes are ceased
  - (iv) the amount of *water*<sup>^</sup> taken from *lakes*<sup>^</sup> does not compromise their existing life-supporting capacity
  - (v) the requirements of water conservation orders^ are upheld
  - (vi) the instream geomorphological components of natural character are provided for.

For the avoidance of doubt this list is not hierarchical.

- (b) For groundwater:
  - (i) takes do not cause a significant adverse *effect*^ on the long-term groundwater yield
  - (ii) groundwater takes that are hydrologically connected to *rivers*^, are managed within the minimum flow and allocation regimes established for *rivers*^
  - (iii) groundwater takes that are hydrologically connected to lakes<sup>^</sup> or wetlands<sup>^</sup> are managed to protect the life-supporting capacity of the lakes<sup>^</sup> or wetlands<sup>^</sup>
  - (iv) the significant adverse *effects*<sup>^</sup> of a groundwater take on other groundwater and surface *water*<sup>^</sup> takes are avoided
  - (v) saltwater intrusion into coastal aquifers, induced by groundwater takes, is avoided.
- (c) In all cases, water is used efficiently.

#### Whāinga 5-3: Te nui o te wai me tōna tūaritanga

Ka whakahaeretia te wai kia āhei ai te tangata, ngā ahumahi, me te hunga ahuwhenua te tango me te whakamahi i te wai hei whakatutuki i ō rātou hiahia, kia hua ai hoki:

- (a) Mō te mata wai:
  - (i) ka whakatauria ngā rerenga iti me ngā tikanga whakahaere tuaritanga hei tiaki rānei, hei whakarākai ake rānei i te oranga tonutanga o ngā awa me ngā papa o ērā (mehemea kua paru) hei taunaki hoki i ngā Uara e tika ana kei roto i Pukapuka Āpiti B
  - (ii) ko ngā tikanga tango, tikanga rere hoki mō te hikowai kua pukumaharatia i mua i te whakatau i ngā rerenga iti me ngā tikanga whakahaere tuaritanga mō whakamahinga kē atu anō





- (iii) i ngā wā kōpaka wai, ka whakatīkina te tango wai hāunga rā hei tiaki i te hauora, te haumaru rānei o te tangata, ngā hapori, hei wai inu mō ētahi kararehe rānei, ā, ka katia rawatia te tango mō take kē atu
- (iv) e kore e waimeha te oranga tonutanga mā te tango wai i ngā roto
- (v) ka hāpaitia ngā whakaritenga o ngā tauākī whakauka wai me ngā pānui ā-takiwā mō te whakauka wai, arā, ko ngā Water Conservation Orders
- (vi) ko ngā wāhanga tinipapa roto-wai o te āhua māori ka pukumaharatia.

Hei papare i te rangirua, ehara tēnei i te rārangi aroākapa.

- (b) Mō te waiopapa:
  - (i) e kore te tango wai e pā kaha atu ki te huanga roa o te waiopapa
  - (ii) ka whakahaeretia te tango waiopapa e pā ana ki ngā awa i runga i ngā tikanga whakahaere rerenga wai iti, tūaritanga hoki kua whakaritea
  - (iii) ka whakahaeretia te tango waiopapa e pā ana ki ngā roto, ngā papa waiwai rānei hei whakamarumaru i te oranga tonutanga o ngā roto, ngā papa waiwai rānei
  - (iv) ka parea ngā pānga kino o te tango waiopapa ki te mahi tango i waiopapa kē, tango mata wai rānei
  - (v) ka parea te urunga o te waitai, nā te tango waiopapa, ki roto i ngā kahupapa takutai moana, ā.
- (c) I ngā wā katoa ka whakamahia te wai i runga i te tikanga whakamau.

#### Objective 5-4: Beds<sup>^</sup> of rivers<sup>^</sup> and lakes<sup>^</sup>

The beds^ of rivers^ and lakes^ will be managed in a manner which:

- (a) sustains their life supporting capacity
- (b) provides for the instream morphological components of natural character
- (c) recognises and provides for the Schedule B Values
- (d) provides for *infrastructure*^ and flood mitigation purposes.

The *land*^ adjacent to the *bed*^ of reaches with a Schedule B Value of Flood Control and Drainage will be managed in a manner which provides for flood mitigation purposes.

#### Whāinga 5-4: Ngā papa awa me ngā papa roto

Ka whakahaeretia ngā papa awa me ngā papa roto ka:

- (a) whakauka tonu i te oranga tonutanga o ērā
- (b) pukumahara mō ngā wāhanga tinipapa roto-wai ka whai āhuatanga māori
- (c) āhukahuka, ka pukumahara hoki mō ngā Ūaratanga o Pukapuka Āpiti B
- (d) pukumahara mō te kaupapa kei raro me ngā koronga whakamāmā waipuke.

Ko te whenua ka āpiti atu ki te papa o ngā toronga me te Ūaratanga Whakahaere Waipuke, Rerenga hoki o te Pukapuka Āpiti B ka whakahaeretia kia pukumahara ai mō ngā koronga whakamāmā waipuke.



#### 5.4 Policies

#### 5.4.1 Water Management Framework

#### Policy 5-1: Water Management Zones\* and Values

For the purposes of managing *water*^ quality, *water*^ quantity, and activities in the *beds*^ of *rivers*^ and *lakes*^, the catchments in the Region have been divided into *Water Management Zones*\* and *Water Management Sub-zones*\* in Schedule A.<sup>2</sup> Groundwater has been divided into *Groundwater Management Zones*\* in Schedule D.<sup>3</sup>

The *rivers*^ and *lakes*^ and their *beds*^ must be managed in a manner which safeguards their life supporting capacity and recognises and provides for the Schedule B Values when decisions are made on avoiding, remedying or mitigating the adverse *effects*^ of activities or in relation to any other function under the Resource Management Act 1991 exercised by the Regional Council or Territorial Authorities. The individual Values and their associated management objectives are set out in the Schedule B Surface *Water*^ Management Values Key and repeated in Table 5.2.

**Table 5.2** Surface *Water*<sup>^</sup> Management Values and Management Objectives

Value Group	Individual Values		Management Objective
	NS	Natural State	The river^ and its bed^ are maintained in their natural state
	LSC	Life-supporting Capacity	The water body^ and its bed^ support healthy aquatic life / ecosystems
	SOS-A	Sites of Significance – Aquatic	Sites of significance for indigenous aquatic biodiversity are maintained or enhanced
Ecosystem Values	SOS-R	Sites of Significance – Riparian	Sites of significance for indigenous riparian biodiversity are maintained or enhanced
	IS	Inanga Spawning	The water body^ and its bed^ sustain healthy inanga spawning and egg development
	WM	Whitebait* Migration	The water body^ and its bed^ are maintained or enhanced to provide safe passage of inwardly migrating juvenile native fish known collectively as whitebait*
	CR	Contact Recreation	The water body <sup>^</sup> and its bed <sup>^</sup> are suitable for contact recreation
Recreational and Cultural Values	AM	Amenity	The amenity values of the <i>water body</i> <sup>^</sup> and its <i>bed</i> <sup>^</sup> (and its margins where in public ownership) are maintained or enhanced
	MAU	Mauri*	The mauri* of the water body^ and its bed^ is maintained or enhanced
	SOS-C	Sites of Significance - Cultural	Sites of significance for cultural values are maintained

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Schedule A is not a component of Part I - the Regional Policy Statement. It is a component of Part II - the Regional Plan.
 Schedule D is not a component of Part I - the Regional Policy Statement. It is a component of Part II - the Regional Plan.



Value Group	Individual Values		Management Objective	
	TF	Trout Fishery	The water body^ and its bed^ sustain healthy rainbow or brown trout fisheries	
	TS	Trout Spawning	The water body <sup>^</sup> and its bed <sup>^</sup> meet the requirements of rainbow and brown trout spawning and larval and fry development	
	AE	Aesthetics	The aesthetic values of the <i>water body</i> <sup>^</sup> and its <i>bed</i> <sup>^</sup> are maintained or enhanced	
	WS	Water^ Supply	The water^ is suitable, after treatment, as a drinking water^ source for human consumption	
	IA	Industrial Abstraction	The water^ is suitable as a water^ source for industrial abstraction or use, including for hydroelectricity generation+	
Water^ Use	I	Irrigation	The water^ is suitable as a water^ source for irrigation	
	SW	Stockwater	The water^ is suitable as a supply of drinking water^ for livestock	
	DFS	Domestic Food Supply*	The water^ is suitable for domestic food production	
	CAP	Capacity to Assimilate Pollution	The capacity of a water body^ and its bed^ to assimilate pollution is not exceeded	
Social/ Economic Values	FC/D	Flood Control and Drainage	The integrity of existing flood and <i>river</i> ^ bank erosion protection <i>structures</i> ^ and existing drainage <i>structures</i> ^ is not compromised and the risks associated with flooding and erosion are managed sustainably	
	El	Existing Infrastructure^	The integrity of existing infrastructure^ is not compromised	

<sup>\*</sup> Water Management Zones\* and Water Management Sub-zones\* throughout the Region (and particularly those with good head and flow available) may have potential for hydroelectricity generation. Further site\*-specific assessment will be needed to establish the locations where such potential may be realised while having regard to the Schedule B Values of the relevant water bodies^ and their beds^.

#### 5.4.2 Water Quality

#### 5.4.2.1 Surface Water Quality

#### Policy 5-2: Water quality targets\*

In Schedule E<sup>4</sup>, *water quality targets\** relating to the Schedule B Values (repeated in Table 5.2) are identified for each *Water Management Sub-Zone\**. Other than where they are incorporated into *permitted activity*^ rules as *conditions*^ to be met, the *water quality targets\** in Schedule E must be used to inform the management of surface *water*^ quality in the manner set out in Policies 5-3, 5-4 and 5-5.

Schedule E is not a component of Part I - the Regional Policy Statement. It is a component of Part II - the Regional Plan.



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#### Policy 5-3: Ongoing compliance where water quality targets\* are met

- (a) Where the existing water^ quality meets the relevant Schedule E water quality targets\* within a Water Management Sub-zone\*, water^ quality must be managed in a manner which ensures that the water quality targets\* continue to be met beyond the zone of reasonable mixing (where mixing is applicable).
- (b) For the avoidance of doubt:
  - (i) in circumstances where the existing water^ quality of a Water Management Sub-zone\* meets all of the water quality targets\* for the Sub-zone\* (a) applies to every water quality target\* for the Sub-zone\*
  - (ii) in circumstances where the existing water^ quality of a Water Management Sub-zone\* meets some of the water quality targets\* for the Sub-zone\* (a) applies only to those water quality targets\* that are met
  - (iii) for the purpose of (a) reasonable mixing is only applicable to a *discharge*^ from an identifiable location.

#### Policy 5-4: Enhancement where water quality targets\* are not met

- (a) Where the existing *water*^ quality does not meet the relevant Schedule E *water quality targets\** within a *Water Management Sub-zone\**, *water*^ quality within that sub-zone must be managed in a manner that enhances existing *water*^ quality in order to meet:
  - (i) the water quality target\* for the Water Management Zone\* in Schedule E. and/or
  - (ii) the relevant Schedule B Values and management objectives that the *water quality target\** is designed to safeguard.
- (b) For the avoidance of doubt:
  - (i) in circumstances where the existing water^ quality of a Water Management Sub-zone\* does not meet all of the water quality targets\* for the Sub-zone\*, (a) applies to every water quality target\* for the Sub-zone
  - (ii) in circumstances where the existing water^ quality of a Water Management Sub-zone\* does not meet some of the water quality targets\* for the Sub-zone\*, (a) applies only to those water quality targets\* not met.

### Policy 5-5: Management of *water*<sup>^</sup> quality in areas where existing *water*<sup>^</sup> quality is unknown

- (a) Where there is insufficient data to enable a comparison of the existing water^ quality with the relevant Schedule E water quality targets\*, water^ quality within the Water Management Sub-Zone^ must be managed in a manner which, beyond the zone of reasonable mixing (where reasonable mixing is applicable):
  - (i) maintains or enhances the existing water quality
  - (ii) has regard to the likely effect of the activity on the relevant Schedule B Values that the *water quality target\** is designed to safeguard
  - (iii) has regard to relevant information about the existing water<sup>^</sup> quality in upstream or downstream Water Management Subzones\*, where such information exists.





- (b) For the avoidance of doubt:
  - (i) in circumstances where there is insufficient data to enable a comparison of the existing water^ quality with all of the water quality targets\* for a Water Management Sub-zone\* (a) applies to every water quality target\* for the Sub-zone\*
  - (ii) in circumstances where there is insufficient data to enable a comparison of the existing water^ quality with some of the water quality targets\* for a Water Management Sub-zone\* (a) applies only to those water quality targets\* with insufficient data
  - (iii) for the purpose of (a) reasonable mixing is only applicable to a discharge^ from an identifiable location.

#### 5.4.2.2 Groundwater Quality

#### Policy 5-6: Maintenance of groundwater quality

- (a) Discharges^ and land^ use activities must be managed in a manner which maintains the existing groundwater quality, or where groundwater quality is degraded/over allocated as a result of human activity, it is enhanced.
- (b) An exception may be made under (a) where a *discharge*^ onto or into *land*^ better meets the purpose of the RMA than a *discharge*^ to *water*^, provided that the best practicable *option*^ is adopted for the treatment and *discharge*^ system.
- (c) Groundwater takes in the vicinity of the coast must be managed in a manner which avoids saltwater intrusion.

#### 5.4.2.3 Discharges<sup>^</sup> and Land<sup>^</sup> use Activities Affecting Water<sup>^</sup> Quality

### Policy 5-7: Land<sup>^</sup> use activities affecting groundwater and surface water<sup>^</sup> quality

The management of *land*<sup>^</sup> use activities affecting groundwater and surface *water*<sup>^</sup> must give effect to the strategy for surface *water*<sup>^</sup> quality set out in Policies 5-2, 5-3, 5-4 and 5-5, and the strategy for groundwater quality in Policy 5-6, by managing diffuse *discharges*<sup>^</sup> of contaminants in the following manner:

- (a) identifying in the regional plan targeted *Water Management Sub-zones\**. Targeted *Water Management Sub-zones\** are those subzones where, collectively, *land*^ use activities are significant contributors to elevated contaminant levels in groundwater or surface *water*^
- (b) identifying in the regional plan intensive farming <code>land^</code> use activities. Intensive farming <code>land^</code> use activities are rural <code>land^</code> use activities that (either individually or collectively) make a significant contribution to elevated contaminant levels in the targeted <code>Water Management Subzones\*</code> identified in (a) above
- (c) actively managing the intensive farming *land*^ use activities identified in (b) including through regulation in the regional plan, in the manner specified in Policy 5-8



(d) the Regional Council must continue to monitor ground and surface water^\
quality in Water Management Sub-zones\* not identified in (a) and rural land^\u00e4 uses not identified in (b). Where monitoring shows the thresholds in (a) and (b) are met then the regional plan must be amended so that those further Water Management Sub-zones\* and rural land^\u00e4 uses are included in the management regime set out in (c).

### Policy 5-8: Regulation of intensive farming *land*<sup>^</sup> use activities affecting groundwater and surface *water*<sup>^</sup> quality

#### (a) Nutrients

- (i) Nitrogen leaching maximums must be established in the regional plan which:
  - (A) take into account all the non-point sources of nitrogen in the catchment
  - (B) will achieve the strategies for surface *water*^ quality set out in Policies 5-2, 5-3, 5-4 and 5-5, and the strategy for groundwater quality in Policy 5-6
  - (C) recognise the productive capability of *land*^ in the *Water Management Sub-zone*\*
  - (D) are achievable on most farms using good management practices
  - (E) provide for appropriate timeframes for achievement where large changes to management practices or high levels of investment are required to achieve the nitrogen leaching maximums.
- (ii) Existing intensive farming *land*<sup>^</sup> use activities must be regulated in targeted Water Management Sub-zones\* to achieve the nitrogen leaching maximums specified in (i).
- (iii) New intensive farming *land*^ use activities must be regulated throughout the Region to achieve the nitrogen leaching maximums specified in (i).

#### (b) Faecal contamination

- (i) Those persons carrying out existing intensive farming *land*^ use activities in the targeted *Water Management Sub-zones\** listed in Table 14.1 or new conversions to intensive farming *land*^ use activities anywhere in the Region must be required, amongst other things, to:
  - (A) prevent cattle access to some surface water bodies<sup>^</sup> and their beds<sup>^</sup>
  - (B) mitigate faecal contamination of surface *water*<sup>^</sup> from other entry points (eg., race run-off)
  - (C) establish programmes for implementing any required changes.

#### (c) Sediment

(i) In those Water Management Sub-zones\* where agricultural land^ use activities are the predominant cause of elevated sediment levels in surface water^, the Regional Council will promote the preparation of voluntary management plans under the Council's Sustainable Land Use Initiative or Whanganui Catchment Strategy for the purpose of reducing the risk of accelerated erosion\*, as described in Chapter 4.





#### Policy 5-9: Point source discharges<sup>^</sup> to water<sup>^</sup>

The management of point source *discharges*^ into surface *water*^ must have regard to the strategies for surface *water*^ quality management set out in Policies 5-3, 5-4 and 5-5, while having regard to:

- (a) the degree to which the activity will adversely affect the Schedule B Values for the relevant *Water Management Sub-zone*\*
- (b) whether the *discharge*^, in combination with other *discharges*^, including non-point source *discharges*^ will cause the Schedule E *water quality targets*\* to be breached
- (c) the extent to which the activity is consistent with *contaminant*^ treatment and *discharge*^ best management practices
- (d) the need to allow reasonable time to achieve any required improvements to the quality of the *discharge*^
- (e) whether the *discharge*^ is of a temporary nature or is associated with necessary *maintenance*^ or *upgrade*\* work and the *discharge*^ cannot practicably be avoided
- (f) whether adverse *effects*<sup>^</sup> resulting from the *discharge*<sup>^</sup> can be offset by way of a financial contribution set in accordance with Chapter 19
- (g) whether it is appropriate to adopt the best practicable option^.

#### Policy 5-10: Point source discharges<sup>^</sup> to land<sup>^</sup>

Discharges<sup>^</sup> of contaminants<sup>^</sup> onto or into land<sup>^</sup> must be managed in a manner which:

- (a) does not result in pathogens or other toxic substances accumulating in soil or pasture to levels that would render the soil unsafe for agricultural, domestic or recreational use
- (b) has regard to the strategies for surface *water*^ quality management set out in Policies 5-3, 5-4 and 5-5, and the strategy for groundwater management set out in Policy 5-6
- (c) maximises the reuse of nutrients and *water*^ contained in the *discharge*^ to the extent reasonably practicable
- (d) results in any *discharge*^ of liquid to *land*^ generally not exceeding the available *water*^ storage capacity of the soil (deferred irrigation)
- (e) ensures that adverse *effects*<sup>^</sup> on *rare habitats*<sup>\*</sup>, *threatened habitats*<sup>\*</sup> and *at-risk habitats*<sup>\*</sup> are avoided, remedied or mitigated.

#### Policy 5-11: Human sewage discharges^

Notwithstanding other policies in this chapter:

- (a) before entering a surface *water body*^ all new *discharges*^ of treated human sewage must:
  - (i) be applied onto or into land^, or
  - (ii) flow overland, or
  - (iii) pass through an alternative system that mitigates the adverse effects<sup>^</sup> on the mauri\* of the receiving water body<sup>^</sup>, and
- (b) all existing direct *discharges*<sup>^</sup> of treated human sewage into a surface *water body*<sup>^</sup> must change to a treatment system described under (a) by





the year 2020 or on renewal of an existing consent, whichever is the earlier date.

#### 5.4.3 Water Quantity and Allocation

#### 5.4.3.1 Policies applying to both Surface Water and Groundwater

#### Policy 5-12: Reasonable and justifiable need for water^

Subject to Policy 5-18, the amount of *water*<sup>^</sup> taken by resource users must be reasonable and justifiable for the intended use. In addition, the following specific measures for ensuring reasonable and justifiable use of *water*<sup>^</sup> must be taken into account when considering consent applications to take *water*<sup>^</sup> for irrigation, *public water supply*<sup>\*</sup>, animal drinking *water*<sup>^</sup>, dairy shed washdown or industrial use, and during reviews of consent *conditions*<sup>^</sup> for these activities.

- (a) For irrigation, resource consent^ applications must be required to meet a reasonable use test in relation to the maximum daily rate of abstraction, the irrigation return period and the seasonal or annual volume of the proposed take. When making decisions on the reasonableness of the rate and volume of take sought, the Regional Council must:
  - (i) consider *land*<sup>^</sup> use, crop *water*<sup>^</sup> use requirements, on-site physical factors such as soil *water*<sup>^</sup>-holding capacity, and climatic factors such as rainfall variability and potential evapo-transpiration
  - (ii) assess applications either on the basis of an irrigation application efficiency of 80% (even if the actual system being used has a lower application efficiency), or on the basis of a higher efficiency where an application is for an irrigation system with a higher efficiency
  - (iii) link actual irrigation use to soil moisture measurements or daily soil moisture budgets in consent *conditions*^.
- (b) For domestic use, animal drinking *water*<sup>^</sup> and dairy shed washdown *water*<sup>^</sup>, reasonable needs must be calculated as:
  - (i) up to 300 litres per person per day for domestic needs
  - (ii) up to 70 litres per animal per day for drinking water^
  - (iii) up to 70 litres per animal per day for dairy shed washdown.
- (c) For industrial uses, *water*^ allocation must be calculated where possible in accordance with best management practices for *water*^ efficiency for that particular industry.
- (d) For *public water supplies\**, the following must generally be considered to be reasonable:
  - (i) an allocation of 300 litres per person per day for domestic needs, plus
  - (ii) an allocation for commercial use equal to 20% of the total allocation for domestic needs, plus
  - (iii) an allocation for industrial use calculated, where possible, in accordance with best management practices for *water*^ efficiency for that particular industry, plus
  - (iv) an allocation necessary for hospitals, other facilities providing medical treatment, marae, schools or other education facilities, New Zealand Defence Force facilities or correction facilities, plus
  - (v) an allocation necessary for public amenity and recreational facilities such as gardens, parks, sports fields and swimming pools, plus





- (vi) an allocation necessary to cater for the reasonable needs of animals or agricultural uses that are supplied by the *public water* supply\* system, plus
- (vii) an allocation necessary to cater for growth, where urban growth of the municipality is provided for in an operative *district plan*^ for the area and is reasonably forecast, plus
- (viii) an allocation for leakage equal to 15% of the total of (i) to (vii) above.
- (e) When making decisions on consent applications where the existing allocation for a *public water supply*\* exceeds the allocation determined in accordance with (d)(i) to (d)(vi) above:
  - (i) consideration must be given to imposing a timeframe within which it is reasonably practicable for the existing allocation to be reduced to the determined amount, or
  - (ii) if (i) is not imposed, an alternative allocation must be determined based on the particular social and economic circumstances of the community serviced by the *public water supply\** and the actual and potential *effects\** of the abstraction on the relevant Schedule B Values for the reach of *river\** or its *bed\** affected by the take.

#### Policy 5-13: Efficient use of water^

*Water*^ must be used efficiently, including by the following measures:

- (a) requiring *water*<sup>^</sup> audits and *water*<sup>^</sup> budgets to check for leakages and *water*<sup>^</sup>-use efficiency as appropriate
- (b) requiring the use of, or progressive *upgrade*\* to, *infrastructure*^ for *water*^ distribution that minimises the loss of *water*^ and restricts the use of *water*^ to the amounts determined in accordance with Policy 5-12
- (c) enabling the transfer of water permits^
- (d) promoting water^ storage
- (e) raising awareness about *water*<sup>^</sup> efficiency issues and techniques
- (f) requiring monitoring of *water*<sup>^</sup> takes, including by installing *water*<sup>^</sup> metering and telemetry.

#### 5.4.3.2 Policies for Surface Water

#### Policy 5-14: Overall approach for surface water^ allocation

- (a) The requirements of *water conservation orders*<sup>^</sup> must be given effect under this Plan.
- (b) Takes and flow regimes lawfully established for hydroelectricity generation as at 31 May 2007 must be provided for prior to implementing (c) and (d) below
- (c) Core allocations of surface water<sup>^</sup> from rivers<sup>^</sup> must be determined in accordance with Policies 5-15 and 5-16. Takes that comply with the relevant core allocation, when assessed in combination with all other takes, must be allowed.
- (d) Supplementary allocations of surface *water*<sup>^</sup> from *rivers*<sup>^</sup> must be determined in accordance with Policy 5-17.





- (e) Takes from *rivers*^ must be apportioned, restricted or suspended when *river*^ flows are at or below their minimum flows in accordance with the provisions of Policy 5-18.
- (f) Takes of water<sup>^</sup> from lakes<sup>^</sup> must comply with Policy 5-19.

#### Policy 5-15: Core allocations and minimum flows

- (a) The taking of *water*<sup>^</sup> from *rivers*<sup>^</sup> must be managed in accordance with the minimum flows and cumulative core allocations set out in Schedule C.
- (b) The minimum flows and cumulative core allocations set out in Schedule C must be set after providing for any takes and flow regimes lawfully established for hydroelectricity generation as at 31 May 2007.

#### Policy 5-16: Approach to setting minimum flows and core allocations

- (a) Where good hydrological information, such as a specific *water*^ resource study or a long-term flow record, is available it must be used to set minimum flows and core allocations in Schedule C.
- (b) Where information described in (a) above is not available, the minimum flows and core allocations set out in Schedule C must generally be a minimum flow equal to the estimated or calculated one-day mean annual low flow, and a core allocation equal to a percentage of the minimum as specified in Schedule C.
- (c) The setting of a revised minimum flow or core allocation that is an alternative to that set in Schedule C must occur through a plan change process.

#### Policy 5-17: Supplementary water^ allocation

In addition to the core allocations set out in Policy 5-15, a supplementary allocation from  $rivers^{\Lambda}$  may be provided:

- in circumstances where *water*^ is only taken when the *river*^ flow is greater than the median flow, and the total amount of *water*^ taken by way of a supplementary allocation does not exceed 10% of the actual flow in the *river*^ at the time of abstraction, and
- (b) in circumstances where it can be shown that the supplementary allocation will not:
  - (i) increase the frequency or duration of minimum flows
  - (ii) lead to a significant departure from the natural flow regime, including the magnitude of the median flow and the frequency of flushing flows
  - (iii) cause any adverse *effects*<sup>^</sup> that are more than minor on the Schedule B Values of the *water body*<sup>^</sup> or its *bed*<sup>^</sup>
  - (iv) limit the ability of anyone to take *water*^ under a core allocation
  - (v) derogate from *water*<sup>^</sup> allocated to hydroelectricity generation.

### Policy 5-18: Apportioning, restricting and suspending takes in times of minimum flow

When a *river*^ is at or below its minimum flow, takes from it must be managed in the following manner:

(a) **Permitted takes** - Takes that are permitted by this Plan (surface *water*^ and groundwater takes) or are for fire-fighting purposes must be allowed to continue regardless of *river*^ flow.





- (b) Existing hydroelectricity generation takes must be allowed to continue subject only to any minimum flow restrictions specified in their consent conditions^.
- (c) **Supplementary takes** must cease at a flow specified in their consent *conditions*^ and that cessation flow must be higher than the Schedule C minimum flow such that the requirements of Policy 5-17(b)(i) are met.
- (d) **Essential takes** The following core *water*^ allocation takes are deemed essential and must be managed in the manner described:
  - (i) takes greater than permitted by this Plan (and therefore subject to resource consent^) that are required for reasonable domestic needs, reasonable needs of animals for drinking water^, and reasonable dairy shed washdown water^ must be allowed to continue regardless of river^ flow, but must not exceed:
    - (A) up to 250 litres per person per day for domestic needs
    - (B) up to 70 litres per animal per day for drinking water^
    - (C) up to 70 litres per animal per day for dairy shed washdown
  - (ii) takes required to meet the reasonable needs of hospitals, other facilities providing medical treatment, marae, schools or other education facilities, New Zealand Defence Force facilities or correction facilities must be allowed to continue regardless of river^ flow, but must be required to minimise the amount of water^ taken to the extent reasonably practicable
  - (iii) takes which were lawfully established at the time of Plan notification (31 May 2007) required for industries which, if their take were to cease, would significantly compromise a community's ability to provide for its social, economic or cultural wellbeing or for its health or safety (including the hygienic production and processing of perishable food), must be allowed to continue regardless of *river*<sup>^</sup> flow, but must be required to minimise the amount of *water*<sup>^</sup> taken to the extent reasonably practicable
  - (iv) *public water supply*\* takes must be restricted to a total public *water*^ consumption calculated as follows:
    - (A) an allocation of 250 litres per person per day for domestic needs, plus
    - (B) an allocation for commercial use equal to 20% of the total allocation for domestic needs, plus
    - (C) an allocation which meets the reasonable needs of those facilities and industries listed under (d)(ii) and (d)(iii) where such facilities and industries are connected to the *public water* supply\* system, plus
    - (D) any allocation necessary to cater for the reasonable needs of animals that are supplied by the public water supply\* system, plus
    - (E) an allocation for leakage equal to 15% of the total of (A) to (D) above.
- (e) **Non-essential takes** Other core *water*^ allocation takes, including irrigation takes but excluding the essential takes described under (d), must be managed in the following manner:
  - (i) water^ takes must be required to cease when the river^ is at or below its minimum flow, as set out in Policy 5-15
  - (ii) water^ takes must be allowed to recommence once the river^ flow has risen above its minimum flow.





(f) **Meaning of "core** *water* **^ allocation take"** - For the purposes of this policy, a core *water* allocation take means a take that has been granted consent in accordance with a core allocation made under Policy 5-15, or in accordance with a previous core allocation regime.

#### Policy 5-19: Surface water^ allocation - lakes^

Decisions on resource consent<sup>^</sup> applications to take water<sup>^</sup> from a lake<sup>^</sup> must ensure that there are no significant adverse effects<sup>^</sup> on the Schedule B Values of the lake<sup>^</sup> and have regard to the policies for indigenous biological diversity<sup>^</sup> in Chapter 13.

#### 5.4.3.3 Policies for Bores\* and Groundwater

### Policy 5-20: Overall approach for *bore*\* management and groundwater allocation

- (a) New *bores*\* must be constructed and managed in accordance with Policy 16-4.
- (b) Groundwater Management Zones\* are mapped in Schedule D.
- (c) Total groundwater allocations must comply with the annual allocable volumes for *Groundwater Management Zones*\* set out in Policy 5-21.
- (d) The measured or modelled *effects*<sup>^</sup> of a proposed groundwater take on other groundwater users, surface *water bodies*<sup>^</sup> and saltwater intrusion must be managed in accordance with Policies 16-1, 16-5, 16-6 and 16-7.

#### Policy 5-21: Groundwater Management Zones

The total amount of consented groundwater allocated from each *Groundwater Management Zone*\* mapped in Schedule D must not exceed the annual allocable volume for the *GWMZ*\* specified in Schedule D.

#### 5.4.4 Beds of Rivers and Lakes

#### Policy 5-22: General management of the beds<sup>^</sup> of rivers<sup>^</sup> and lakes<sup>^</sup>

Activities in, on, under or over the *beds*^ of *rivers*^ and *lakes*^ must generally be managed in a manner which:

- (a) recognises and provides for the Schedule B Values for the *Water Management Sub-zone(s)\** in which the activity takes place, in the manner described in Policies 5-23, 5-24 and 5-25
- (b) avoids any significant reduction in the ability of a *river*^ and its *bed*^ to convey flood flows, or significant impedance to the passage of floating debris
- (c) avoids, remedies or mitigates any significant adverse *effects*^ on the stability and function of the *beds*^ of *rivers*^ and *lakes*^, and existing *structures*^ including flood and erosion control *structures*^
- (d) avoids, remedies or mitigates any significant reduction in the habitat diversity, including the morphological diversity, of the *river*<sup>^</sup> or *lake*<sup>^</sup> or its hed<sup>^</sup>
- (e) manages *effects*<sup>^</sup> on natural character and public access in accordance with the relevant policies in Chapter 6. Natural character can include the





natural style and dynamic processes of the *river*^, such as *bed*^ style and width and the quality and quantity of *bed*^ habitat

- (f) provides for the safe passage of fish both upstream and downstream
- (g) ensures that the existing nature and extent of navigation of the river^ or lake^ are not obstructed
- (h) ensures that access required for the *operation*\*, *maintenance*\*, and *upgrade*\* of *infrastructure*^ and other physical resources of regional or national importance is not obstructed
- (i) provides for continued public access in accordance with Policy 6-10.

### Policy 5-23: Activities in *sites*\* with a Value of Natural State, Sites of Significance - Cultural, or Sites of Significance - Aquatic

In *sites*\* with a Schedule B Value of Natural State, Sites of Significance - Cultural or Sites of Significance - Aquatic, activities in, on, under or over the *beds*^ of *rivers*^ and *lakes*^ must be managed in a manner which:

- (a) avoids adverse effects^ on these Values in the first instance, or
- (b) for *infrastructure*^ and other resources of regional and national importance, or activities that result in an environmental benefit, remedies or mitigates those *effects*^ where it is not practicable to avoid them, and
- (c) maintains the habitat and spawning requirements of the species identified.

### Policy 5-24: Activities in *rivers*<sup>^</sup> or *lakes*<sup>^</sup> and their *beds*<sup>^</sup> with a Value of Flood Control and Drainage

In reaches of *rivers*^ or *lakes*^ and their *beds*^ with a Schedule B Value of Flood Control and Drainage, activities in, on, under or over the *beds*^ of *rivers*^ and *lakes*^ and on *land*^ adjacent to the *bed*^ where the Value is located must be managed in a manner which:

- (a) enables the degree of flood hazard and erosion protection existing at the time of Plan notification (31 May 2007) to be maintained or enhanced
- (b) addresses adverse effects by:
  - (i) in the first instance, avoiding, remedying or mitigating adverse effects^ on the instream morphological components of natural character and other Schedule B Values
  - (ii) providing consent applicants with the option of making an offset
  - (iii) allowing compensation by way of a financial contribution in accordance with the policies in Chapter 19.

### Policy 5-25: Activities in *rivers*<sup>^</sup> or *lakes*<sup>^</sup> and their *beds*<sup>^</sup> with other Schedule B Values

In *sites\** with Schedule B Values other than Natural State, Sites of Significance - Cultural, Sites of Significance - Aquatic, or Flood Control and Drainage, activities in, on, under or over the *beds^* of *rivers^* and *lakes^* must be managed in a manner which:

- (a) in the first instance avoids, remedies or mitigates significant adverse effects^ on the instream morphological components of natural character and Schedule B Values
- (b) provides consent applicants with the option of making an offset



(c) allows compensation by way of a financial contribution in accordance with the policies in Chapter 19.

#### Policy 5-26: Essential and beneficial activities

Activities in, on, under or over the *beds*^ of *rivers*^ and *lakes*^ that are essential or result in an environmental benefit must generally be allowed, including:

- (a) the use, *maintenance*\* and *upgrading*\* of existing *infrastructure*^ and other existing physical resources of regional or national importance
- (b) works designed to maintain or improve the stability and functionality of existing *structures*^
- (c) the removal of derelict, unlawful or non-functional structures^
- (d) the restoration or enhancement of natural habitats.

#### Policy 5-27: Gravel extraction

Subject to Policies 5-22 to 5-26 and the need to ensure that gravel extraction volumes are sustainable, the benefit the gravel resource provides for use and development and the flood protection benefit of having it managed will be recognised.

#### 5.5 Methods

The taking of surface water and groundwater, discharging contaminants to surface water and to land, and the undertaking of activities that disturb the beds of rivers or lakes, are largely regulated activities. Part II: Regional Plan contains rules relating to the activities described in this chapter. The key non-regulatory methods the Regional Council will pursue are outlined below.

Method 5-1	Large Water Abstractors
Description	The aim of this method is to provide assistance to large water abstractors to identify options for improving the water abstraction, distribution and use components of their activities. It is expected this method will reduce the abstraction pressure on the groundwater and surface water resources, while providing abstractors with financial benefits and their business/customers with greater certainty of supply.
	The emphasis will be on working with large abstractors to identify and implement opportunities for increasing water use efficiency, reducing distribution network leakages, agreeing priority of use within distribution networks, and consideration of alternative water supply and storage options.
Who	The Regional Council, Territorial Authorities, industry (including hydroelectricity generators) and large irrigators will work together to develop, fund and implement this programme.
Links to Policy	This method implements Policies 5-12 and 5-13.
Target	All major abstractors in the Region have been contacted and assistance provided where requested by 2016.



5-22



Method 5-2	Sewage Treatment Plant Upgrades
Description	The aim of this method is to assist Territorial Authorities to seek central Government funding for sewage treatment plant upgrades, given that the plants make a significant contribution to contaminants to water bodies during low flows. The Regional Council will work with Territorial Authorities to analyse their treatment and disposal options and to develop a package to present to Government with the aim of securing capital works funding to reduce the environmental impact of these discharges.
Who	Regional Council, Territorial Authorities, Ministry of Health, local health agencies (eg., MidCentral Health) and iwi authorities.
Links to Policy	This method implements Policies 5-2, 5-6, 5-9 and 5-11.
Targets	Central Government funding applications completed for upgrade of sewage treatment plants as required.

Method 5-3	On-site Wastewater System Forum
Description	The aim of this method is to facilitate implementation of the Regional Council's Manual for On-Site Wastewater Systems Design and Management.
	The Regional Council will establish a forum to aid understanding and implementation of the manual and will undertake regular reviews of new types of on-site treatment and disposal systems.
Who	The forum will comprise, as a minimum, representatives from the Regional Council, Territorial Authorities, consulting engineers and system installers.
Links to Policy	This method implements Policies 5-2, 5-6 and 5-10.
Target	Two meetings per year.

Method 5-4	Human Sewage Discharges to Water
Description	The Regional Council will provide assistance to Territorial Authorities to upgrade existing sewage treatment systems that directly discharge treated human sewage to the Region's water bodies.
	The Regional Council to work with Territorial Authorities to reduce water volume, explore land application options and assist with funding opportunities.
Who	Regional Council, Territorial Authorities and iwi authorities.
Links to Policy	This method implements Policies 5-2 and 5-11.
Target	To stop direct human sewage discharges to water by 2020.



Method 5-5	Stormwater System Discharge Upgrades
Description	The Regional Council will provide assistance to Territorial Authorities wanting to upgrade the treatment of their existing urban stormwater system discharges, where these are into water bodies.
	The Regional Council to work with Territorial Authorities to reduce water volume, explore land disposal options and assist with funding opportunities.
Who	Regional Council, Territorial Authorities and iwi authorities.
Links to Policy	This method implements Policies 5-2, 5-6, 5-9 and 5-10.
Target	To reduce the number, and improve the quality, of urban stormwater discharges by 2016.

Method 5-6	Lake Horowhenua and Other Coastal Lakes
Description	The Regional Council and other agencies will work with all agencies to protect and enhance Lake Horowhenua and other coastal lakes.
	Landowners and other agencies will be provided with advice and project management assistance to carry out enhancement and protection measures including fencing, planting, sediment control, wastewater/stormwater management and fertiliser application management. The Regional Council will seek funding from third parties to assist with this method.
	The effectiveness of the protection and enhancement works in achieving improved water quality within Lake Horowhenua and other Coastal Lakes will be monitored.
	The method will include publicity to increase public awareness about the importance of the lakes. The method will include utilising industry codes of practice as a means of enhancing and protecting water quality eg., the Code of Practice for Commercial Vegetable Growing in the Horizons Region.
Who	Regional Council, Territorial Authorities, Fish & Game New Zealand, Department of Conservation, iwi, Horticulture NZ, landowners and other agencies.
Links to Policy	This method implements Policy 5-7.
Target	The Lake is actively managed, including protection and enhancement measures, within 5 years of this Plan becoming operative.

Method 5-7	Lake Quality Research, Monitoring and Reporting
Description	The aim of this method is to develop an integrated research, monitoring and reporting programme. The focus will be to define the current state of the quality of the Region's lakes, particularly the Region's coastal lakes. The method will seek to assess the state and quality of the lakes to better understand the influences on water





Method 5-7	Lake Quality Research, Monitoring and Reporting
	quality in those lakes. The outcomes will link into work to refine existing policies, objectives and methods in terms of the need to add rural land uses and <i>Water Management Sub-zones*</i> in managing nutrient management and effects on water quality. The outcomes will also guide implementation planning and allow implementation effectiveness is to be assessed.
Who	Regional Council, Department of Conservation, Fish & Game New Zealand, Horticulture New Zealand, DairyLink, research institutes, universities, non-Government agencies, community groups and iwi authorities as required.
Links to Policy	This method implements Policies 5-3, 5-4, 5-7 and 5-8.
Targets	A research, monitoring and reporting programme that defines the current state of water quality of the Region's lakes (particularly coastal lakes) and measure changes in water quality.

Method 5-8	Trout and Native Fish Spawning Habitat
Description	The Regional Council and other agencies will work with landowners to protect and enhance water bodies and their beds that serve as spawning sites* for brown and rainbow trout and native fish.  Resources will be directed towards the most significant sites*.
	Landowners will be provided with advice and financial/project management assistance to carry out enhancement and protection measures including fencing, planting, providing fish passage and pest plant and pest animal control. The Regional Council will seek funding from third parties to assist with this method.
	The effectiveness of the protection and enhancement works will be monitored.
	The method will include publicity to increase public awareness about the importance of trout and native fish.
Who	Regional Council, Territorial Authorities, Fish & Game New Zealand, Department of Conservation, landowners and funding agencies including He Tini Awa Trust.
Links to Policy	This method implements Policies 5-2, 5-22 and 5-25.
Target	30 of the top trout spawning habitat <i>sites*</i> and native fish habitat spawning <i>sites*</i> are actively managed, including protection and enhancement measures, within 10 years of this Plan becoming operative.



Method 5-9	Water Quality Improvement
Description	The Regional Council and other agencies will work with landowners to protect and enhance the water quality of the Region's water bodies. Landowners in those <i>Water Management Sub-zones*</i> where the nutrient management (non-point source discharge) control rules are to be introduced will receive the highest priority for assistance. This method represents an expansion of the Regional Council's existing water quality improvement programme, which focuses almost entirely on dairy farmers as part of the Dairying and Clean Streams Regional Action Plan for Manawatu-Wanganui Region.
	Landowners will be provided with advice and financial/project management assistance to carry out enhancement and protection measures including fencing and planting of riparian margins. The Regional Council will seek funding from third parties to assist with this method.
	The effectiveness of the protection and enhancement works will be monitored.
Who	Regional Council, Dairy NZ, Fonterra, Horticulture NZ, Territorial Authorities and funding agencies including the He Tini Awa Trust and Nga Whenua Rahui.
Links to Policy	This method implements Policies 5-2, 5-4 and 5-8.
Targets	<ul> <li>The targets of the Dairying and Clean Streams Regional Action Plan for Manawatu-Wanganui Region are achieved by the due dates.</li> <li>Advice and assistance is offered to all landowners affected by the nutrient management rules.</li> <li>All landowner requests for advice and assistance regarding water quality improvement are responded to promptly.</li> </ul>

Method 5-10	Education in Schools - Water
Description	The aim of this method is to raise awareness amongst the youth of the Region of the significance of the water (quantity and quality) resource, the threats to it, and what they can do to protect/restore it. This will be achieved through various environmental education programmes/initiatives - for example, Green RIG, Enviroschools and Trees for Survival.
Who	Regional Council, various national and local environmental education providers and the Youth Environment Forum.
Links to Policy	This method implements Policy 5-2.
Targets	The Regional Council develops and delivers a water-related environmental education programme.





Method 5-11	Water (Fluvial Resources, Quality and Quantity) Research, Monitoring and Reporting
Description	The aim of this method is to develop an integrated research, monitoring and reporting programme. The focus will be to define the current state of the natural character of the Region's rivers by analysing their habitat and morphological diversity through assessments of historical and current data. This may include: planform/ channel morphology classification; fairway width; sinuosity; barforms; percentage of pool, riffle, run, habitat; gravel resources, level of entrenchment, and location and extent of riparian and wetland areas. The method will also seek to measure changes in natural character, including habitat and morphological diversity. The outcomes will link into monitoring undertaken by the River Works Environmental Code of Practice and support delivery and refinement of existing policies, objectives and methods. The outcomes will be reported in the Council State of the Environment Report and also guide implementation planning and allow implementation effectiveness to be assessed.
Who	Regional Council, Department of Conservation, Fish & Game New Zealand, research institutes, universities, non-Government agencies, community groups and iwi authorities as required.
Links to Policy	This method implements Policies 5-2, 5-14, 5-16, 5-22, 5-23, 5-24, 5-25, 5-26 and 6-8.
Targets	A research, monitoring and reporting programme that defines the current state of the natural character of the Region's rivers and measure changes in natural character, including habitat and morphological diversity.

### 5.6 Anticipated Environmental Results

Anticipated Environmental Result	Link to Policy	Indicator	Data Source
During the life of this Plan, water quality and quantity maintain the Values set in this Plan.  In Water Management Sub-zones*:  • where water quality targets* are met prior to this Plan becoming operative, they continue to be met  • where water quality targets* are not met prior to this Plan becoming operative, they are either met or improved from the current state where targeted for action or, where not targeted for action, they are no worse than prior to this Plan becoming operative.	Water Policies: 5-1, 5-2, 5-3, 5-4, 5-5, 5-8, 5-9, 5-10, 5-11, 5-12, 5-13, 5-14, 5-15, 5-17, 5-19, 5-22, 5-23, 5-24, 5-25 and 5-26  Land Policies: 4-1, 4-2 and 4-3  Living Heritage Policies: 6-1, 6-2, 6-3, 6-4 and 6-8	Measured water quality compared to water quality targets*, especially measures for "muddy waterways", "safe swimming", "safe food gathering", and "aquatic ecosystem health" in priority catchments     Incidents where surface water quality is confirmed as unfit for use     Measured flows of surface water compared to the allocation and minimum flow regime outlined in this Plan	The Regional Council's State of Environment water quality and quantity monitoring programme The Regional Council's incidents database Ministry of Health raw water monitoring
By 2017, the natural, physical and cultural qualities of the beds of rivers are suitable for specified <i>Water</i>	Water Policies: 5-1, 5-22, 5-23, 5-24, 5-25 and	<ul><li>Confirmed incidents of damage to the beds of rivers</li><li>Consents granted for activities</li></ul>	The Regional     Council's     incidents     database





Anticipated Environmental Result	Link to Policy	Indicator	Data Source
Management Sub-zone* Values.	5-26	in beds of rivers and lakes	The Regional Council's consents database
The amount of groundwater used does not exceed replenishment rates and its quality is the same as or better than that measured prior to this Plan becoming operative, other than where discharges to land are a permitted activity or are allowed by resource consent.	Water Policies: 5-6, 5-10, 5-12, 5-13, 5-20 and 5-21	Groundwater levels Regionwide, but with a focus on Opiki and Himatangi areas     Groundwater quality Regionwide, but with a focus on nitrates in Horowhenua and Tararua districts and conductivity along the Foxton-Tangimoana coast     Confirmed incidents where groundwater sources become unavailable (ie., dry up) or water quality is unfit for use	The Regional Council's State of Environment groundwater monitoring programme The Regional Council's compliance monitoring programme The Regional Council's incidents database Ministry of Health raw water monitoring

#### 5.7 Explanations and Principal Reasons

The Region has been divided into *Water Management Sub-zones*\* for the purpose of managing water quality and quantity. Water bodies and their beds within these *Water Management Sub-zones*\* have been assigned Values which represent the ecosystem, recreational, cultural and social and economic attributes of the water body and its bed (Objective 5-1, Policy 5-1). *Water quality targets*\* have been assigned to protect these Values (Policies 5-2 to 5-5).

#### Discharges to water and land

The water chapter deals with discharges to land and water holistically. This is because discharges to land have the potential to adversely affect groundwater and surface water quality if not managed well. Three types of discharges of concern have been identified: point source discharges to land (including *domestic wastewater\**), point source discharges to water (including industrial discharges and treated sewage) and non-point source discharges to land (from agricultural land uses). All these types of discharges will be managed to meet the objectives and policies for water quality (Objective 5-1, 5-2, Policies 5-2 - 5-5), including discharges to land (Policy 5-10).

Agricultural land uses contribute to water bodies not meeting the Region's *water quality targets\** for nutrients, faecal contamination and sediment levels. These need to be targeted for control in problem catchments and through the Regional Council's Sustainable Land Use Initiative (SLUI) and Whanganui Catchment Strategy and the regulation of intensive farming (Policy 5-8).

Point source discharges to water need to be managed to achieve water quality targets\* (Policy 5-9). This may mean that it is appropriate to consider alternatives to discharging to water. This may include considering alternative treatment options for all or part of the year, to achieve or move closer to water quality targets\* at critical times of the year. In all cases, point source discharges to water of untreated human sewage are culturally unacceptable, and direct discharges of





treated human sewage should be changed to involve land application before discharge (Policy 5-11).

#### **Surface Water Quantity**

Water will be used and allocated in a way which enables water to be used for the wellbeing of people and the community, while providing for other Values (Objective 5-3, Policy 5-14). Water allocation limits are set for each *Water Management Subzone\** and water will be managed to maintain these limits (Policies 5-15 and 5-16). When water use needs to be restricted, life sustaining and essential water takes have first priority (Policy 5-18). Water harvesting and alternative sources of water to surface water are also encouraged and provided for (Policy 5-17). Efficiency of use is an important consideration, and will ensure that water is available to the maximum number of users and is not wasted (Policies 5-12 and 5-13).

#### Groundwater

Groundwater quality and quantity is connected to that of surface water and this is recognised in this chapter, while providing for its management separately. *Bores\** will be managed to ensure that they are properly constructed, efficient and fully functioning and do not lead to contamination of groundwater, wastage of water or unnecessary effects on other *bores\** or surface water bodies (Policy 5-20). *Groundwater Management Zones\** have been established and sustainable allocations set; groundwater takes will be managed within these allocations (Policy 5-21). Groundwater quality within the Region is generally good and is not declining, but maintaining this good quality will be a consideration when managing discharges (Policy 5-10).

#### **Beds of Rivers and Lakes**

The physical nature of the Region's rivers and lakes and their beds is important to maintaining the Values assigned to them. Management of activities in the beds of rivers and lakes will be undertaken in order to maintain these Values, and other important physical attributes (Objective 5-4, Policies 5-22 and 5-26). Some Values are treated differently. Important aquatic biodiversity *sites\**, cultural *sites\** and natural state areas would be negatively and potentially permanently harmed by some activities and consequently are given a high level of protection (Policy 5-23). Flood control and drainage schemes have damaged water Values in some areas, but also provide valuable protection services to the community. Maintaining this level of service is important, while ensuring that other Values are not further compromised (Policy 5-24). While recognising the Values, acknowledgement is also needed that some activities, such as river restoration, are beneficial and should be allowed to occur (Policy 5-26).

Gravel extraction is an important activity in river beds, both for the benefit the gravel resource provides and the flood protection benefit of having it removed from the river. However, if not well managed, too much extraction or extraction in an inappropriate manner can damage river Values. Gravel extraction needs to be managed to ensure that extraction volumes are sustainable (Policy 5-27).











# CHAPTER 6: Indigenous Biological Diversity, Landscape and Historic Heritage

Outlines the regionally significant issues for the management of living heritage within the Region, and sets out the objectives, policies and methods that derive from these issues.



# 6 Indigenous biological diversity, landscape and historic heritage

#### 6.1 Scope and Background

#### 6.1.1 Scope

This chapter addresses three matters:

- (1) Indigenous biological diversity The maintenance of indigenous biological diversity, the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna, and the division of responsibilities between the Regional Council and Territorial Authorities for managing indigenous biological diversity
- (2) Natural features, landscapes and natural character The preservation of the natural character of the coastal environment, wetlands, rivers, lakes and their margins and the protection of them and outstanding natural features and landscapes from inappropriate use and development
- (3) **Historic heritage** The protection of historic heritage.

Chapter 2 - Te Ao Māori - also contributes to the management of historic heritage, in particular *sites*\* of significance to Māori, including *wāhi tapu*\*.

#### 6.1.2 Indigenous Biological Diversity

As discussed in Chapter 1, the decline of indigenous biological diversity ("indigenous biodiversity") is one of the four most critical issues addressed in this Plan.

#### Indigenous Biodiversity in the Region

The Region now has only 23% of its original forest cover and 3% of its wetland habitat. The majority of the forest is found in the hill country and the ranges, with fragments scattered throughout the lower-lying and coastal areas of the Region, where typically less than 10% of original habitat remains. Remaining natural habitat is small, fragmented and under pressure from pests and disturbance. Aquatic indigenous biodiversity is in a similar state of degradation with native fish populations greatly reduced, poor habitat (loss of riparian margins in most areas and introduction of exotic fish and pest plants) and many barriers between coastal wetlands, streams and headwaters.

Much of the remaining indigenous biodiversity is in poor condition and health. Ecosystem processes are more often than not interrupted. The long-term viability of natural areas is further compromised by continued pressure from invasive species and surrounding land use. If such habitats and linkages between them are to survive they will require protection and ongoing management.

#### **Future Approach**

This Plan's approach to indigenous biodiversity management focuses primarily on habitats, rather than on individual species or genetic diversity. The Regional Council believes that by managing habitats it will most effectively sustain regional indigenous biodiversity into the future.

The Regional Council proposes to take a more active role around the coordination of indigenous biodiversity management within the Region. The Regional Council's overall indigenous biodiversity strategy is two-tiered, involving:



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- (a) Halting the decline Those habitats that are rare habitats\*, threatened habitats\* or at-risk habitats\* (as determined in accordance with Schedule F of this Plan) and that are recognised as being an area of significant indigenous vegetation or a significant habitat of indigenous fauna will be given a high level of protection, through rules, from activities likely to cause any further loss or modification.
- (b) **Active Management** In addition, *rare habitats\**, *threatened habitats\** and *at-risk habitats\** will be proactively managed through collaboration with landowners for work such as pest control and fencing, and provision of economic incentives such as grants and rates relief.

The protection and active management of *sites\** on private land is crucial to maintaining indigenous biological diversity in the Region. Success in halting the indigenous biodiversity decline depends largely on the involvement and commitment of private landowners. This is a tall order for individuals, and the Regional Council recognises that the public good arising from maintaining indigenous biological diversity should not be solely at the expense of landowners. The Regional Council is therefore committed to seeking arrangements that adequately assist landowners and fairly apportion the costs of indigenous biodiversity management.

#### 6.1.3 Natural features, Landscapes and Natural Character

The protection of outstanding natural features and landscapes from inappropriate subdivision, use and development is a matter of national importance. Outstanding natural features and landscapes are memorable, affording aesthetic pleasure and experiences that are shared and valued by a wider community. Outstanding natural features and landscapes have natural and cultural dimensions that are central to a community's identity and sense of belonging. They are places that reveal a community's history and a coherence and connectedness of people's lives through time and space.

A number of outstanding natural features and landscapes and their associated values are identified in Schedule G¹. These outstanding natural features and landscapes exist on both public and private land and were originally identified by the Regional Council, in consultation with the Territorial Authorities and the Department of Conservation, and included in the Regional Policy Statement for the Manawatu-Wanganui Region (August 1998). In determining these natural features and landscapes as being "outstanding and regionally significant" specific matters were considered, including geographical and geological features and their contribution to the Region's character, ecological significance, the cultural significance of the *site*\* or area, amenity, intrinsic, scientific and recreational values, and any recognised (national or regional) level of protection.

Territorial Authorities have the responsibility of managing the effects of land use, through district plan provisions and land use resource consents. Consequently, the management of competing pressures for the subdivision, use and development of land that may affect outstanding natural features and landscapes is most appropriately dealt with at a territorial level. However, to aid local decision-making, regional policies provide guidance for managing the effects of subdivision, use and development of land that may affect outstanding natural features and landscapes. In addition, a revised set of factors to be considered when assessing landscapes and natural features is provided, to aid decision making, and includes natural science factors, aesthetic values, expressiveness (legibility), transient values, shared and recognised values, cultural and spiritual values for *tangata whenua*^ and historic heritage values.



Schedule G is a component of Part I - the Regional Policy Statement.



Preservation of the natural character of the coastal environment, wetlands, rivers, lakes and their margins is also a matter of national importance. Natural character is generally accepted as being an expression of:

- natural landform,
- natural water bodies (lakes and rivers) and the sea,
- vegetation cover (type and pattern),
- natural processes associated with the weather and the ecology,
- wildness, exposure, and the natural sculpturing of landforms and vegetation, and
- the wider landscape context and the site's\* relationship to this.

Natural character is a sliding scale and varies from a low degree of natural character, such as urban environments, to a high degree of natural character (for example, Tongariro National Park).

The approach of the One Plan is to at least maintain, and enhance where appropriate, the current degree of natural character of the coastal environment, wetlands, rivers, lakes and their margins by:

- continuing to provide a regional policy on natural character to guide decisionmaking,
- protecting and managing indigenous biological diversity, important wetlands, rivers and lakes as described elsewhere in this Plan, and
- restoring and rehabilitating natural character where appropriate.

The natural character of rivers, lakes and their margins can be adversely affected by activities, in particular structures and flood mitigation measures such as stopbanks. It is important that preservation of the natural character of rivers, lakes and their margins, where this is reasonable, is considered when making decisions on relevant activities. The natural character of wetlands can best be provided for by proactively managing the top 100 wetlands in the Region (as provided for in the sections of this chapter dealing with indigenous biological diversity).

Chapter 8 addresses the management of activities in the coastal marine area (CMA), including policy guidance on the management of the elements of landscapes and seascapes that contribute to the natural character of the CMA. Chapter 6 deals with outstanding natural features and landscapes and the natural character of the non-CMA portion of the coastal environment landward of mean high water springs and wetlands, rivers, lakes and their margins.

The coastal environment has seen some change in the last 10 years. There has been an increase in residential subdivision on both the western and eastern coastlines. Within a 1 km inland coastal strip, however, this development accounts for only 4% of the area. Although residential development is expected to continue, it is unlikely to affect the natural character of the coast at a regional scale for some time beyond the life of this Plan. Nevertheless, it is important and appropriate for local decision-making on land use, particularly residential subdivision, to continue to take into account the natural character of a particular area.

#### 6.1.4 Historic Heritage

The protection of historic heritage from inappropriate subdivision, use and development is a matter of national importance. Historic heritage is defined in the RMA. It means those natural and physical resources that contribute to an understanding and appreciation of New Zealand's history and cultures, deriving from archaeological, architectural, cultural, historic, scientific or technological qualities. Historic heritage includes historic sites, structures, places and areas, archaeological sites, sites of significance to Māori, including wāhi tapu, and



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surroundings associated with the natural and physical resources. Some activities that are controlled by the Regional Council can have an adverse impact on historic heritage qualities. For example, the discharge of sewage to land or water could have an adverse impact on the historic heritage qualities of a particular *site\** or structure. The Regional Council can control these activities to avoid, remedy or mitigate adverse effects.

The Region has a long and recognised history and culture, and contains special places such as the Tongariro National Park, Whanganui River, Lake Papaitonga, the wreck of the Hydrabad, historic towns such as Whanganui, Marton, Taihape, Bulls and Raetihi, and many important archaeological sites such as Willis Redoubt, Waiū Pā and Te Āputa Pā. The accurate identification of historic heritage *sites\** or structures, including the identification of currently "unknown" *sites\**, is an issue in the Region, as is their protection from potential threats including demolition, "demolition by neglect", fire, flood and earthworks.

Subdivision and land development can also have a negative effect on historic heritage qualities. This is particularly an issue in coastal areas which are rich in historic heritage, including *wāhi tapu\** and archaeological sites. Subdivision and land development are controlled by Territorial Authorities.

Along with the Regional Council and Territorial Authorities, a number of other agencies have responsibilities for the identification and management of historic heritage. These agencies include the Heritage New Zealand, the New Zealand Archaeological Association (NZAA) and the Department of Conservation. In particular, the modification of archaeological sites as defined in the Historic Places Act is controlled by the Heritage New Zealand, and a person carrying out any activities that may damage, destroy or modify these sites must have authority from the Heritage New Zealand to do so. The NZAA owns and manages the national database of archaeological records, the Site Recording Scheme.

Decision-makers may refer to the Heritage New Zealand document dated 3 August 2007, Sustainable Management of Historic Heritage Guide No. 1 Regional Policy Statements (pp 12-13), which provides an example of the matters to be considered by local authorities.

#### 6.2 Significant Resource Management Issues

#### Issue 6-1: Indigenous biological diversity

Indigenous biological diversity is not being maintained in the Region. As a result of historical land development practices, only a small proportion of the original extent of indigenous habitats remains. The diversity within remaining areas is declining owing to their isolation or as a consequence of a range of activities, most notably:

- (a) pest plants and pest animals
- (b) stock access
- (c) land drainage, which impacts upon wetlands
- (d) perched culverts and other barriers to fish migration
- (e) run-off and discharges causing poor water quality
- (f) vegetation clearance\*.





#### Issue 6-2: Outstanding natural features, landscapes and natural character

- The Region's outstanding natural features and landscapes can be (a) adversely affected by land use activities and development. Adverse effects of development on outstanding natural features and landscapes include the potential for significant adverse cumulative effects. Developments with the potential for greatest impact include wind farms, residential subdivision and other major structures.
- (b) The natural character of the coastal environment, wetlands, rivers, lakes and their margins can be adversely affected by land use activities and development, particularly new river works, drainage and subdivision.

#### Issue 6-3: Historic heritage

Development and land use can damage and destroy historic heritage of significance in the Region. In the context of the Regional Council's role, this includes activities in the coastal marine area and discharges to land and water. Outside of the coastal marine area, Territorial Authorities are responsible for managing the effects of land use activities on historic heritage, including under s9(2) RMA for activities in the beds of rivers and lakes.

#### 6.3 **Objectives**

#### Objective 6-1: Indigenous biological diversity^

Protect areas of significant indigenous vegetation and significant habitats of indigenous fauna and maintain indigenous biological diversity^, including enhancement where appropriate.

#### Whāinga 6-1: Te kanorau koiora taketake

Ka whakamarumaru i ngā wāhi kei reira ētahi tipu taketake tino motuhake, ngā nohonga motuhake kei reira a ngai kīrehe taketake hoki, me te tiaki tonu i te kanorau koiora taketake, ka whai wāhi hoki ngā whakarākaitanga i ngā wā e tika ana.

#### **Objective 6-2:** Outstanding natural features and landscapes, and natural character

- (a) The characteristics and values of:
  - (i) the Region's outstanding natural features and landscapes, including those identified in Schedule G, and
  - the natural character of the coastal environment, wetlands^, (ii) rivers^ and lakes^ and their margins

are protected from inappropriate subdivision, use and development.

- Adverse effects^, including cumulative adverse effects^, on the natural (b) character of the coastal environment, wetlands, rivers, and lakes, and their margins, are:
  - (i) avoided in areas with outstanding natural character, and
  - (ii) avoided where they would significantly diminish the attributes and qualities of areas that have high natural character, and
  - (iii) avoided, remedied or mitigated in other areas.
- Promote the rehabilitation or restoration of the natural character of the (c) coastal environment, wetlands^, rivers^ and lakes^ and their margins.



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# Whāinga 6-2: Ngā tohu kōhure, ngā mata whenua motuhake me te āhuatanga māori

- (a) Ko ngā āhuatanga me ngā ūara o:
  - (i) ngā tohu kōhure me ngā mata whenua motuhake o te Rohe ehara tonu ko ērā ka tautuhia i roto i Pukapuka Āpiti G, me
  - (ii) te āhuatanga māori o te taiao takutai moana, ngā papa waiwai, ngā awa, me ngā roto me ngā tapa o ērā

ka whakamarumarutia i te wehewehe whenua, te whakamahi me te whakaahu whenua kāore i te tika.

- (b) Ko ngā pānga kino, ehara tonu ko ngā pānga kino katoa, ki te āhua māori o te taiao takutai moana, ngā papa waiwai, ngā awa, ngā roto hoki, me ngā tapa o ērā:
  - (i) ka parea i roto i ngā wāhi tino rawe te āhua māori,
  - (ii) ka parea i ngā wāhi ka kaha te whakamemeha i ngā āhuatanga me ngā kounga o ngā wāhi nui te āhua māori, ā,
  - (iii) ka parea, ka whakatikaina, ka whakaitingia rānei i wāhi kē atu.
- (c) Ka whakatairanga i te whakaora ake, te whakahou ake rānei i te āhua māori o te taiao takutai moana, ngā papa waiwai, ngā awa, ngā roto me ngā tapa o ērā.

#### Objective 6-3: Historic heritage^

Protect *historic heritage*^ from activities that would significantly reduce heritage qualities.

#### Whāinga 6-3: Ngā taonga tuku iho o mua

Ka whakamarumaru i ngā taonga tuku iho o mua i ngā ngohe whakaiti i ngā kairangi taonga tuku iho.

#### 6.4 Policies

#### 6.4.1 Indigenous Biological Diversity^

# Policy 6-1: Responsibilities for maintaining indigenous biological diversity^

In accordance with s62(1)(i) RMA, local authority responsibilities for controlling land use activities for the purpose of managing indigenous biological diversity in the Region are apportioned as follows:

- (a) The Regional Council must be responsible for:
  - (i) developing objectives, policies and methods for the purpose of establishing a Region-wide approach for maintaining indigenous biological diversity\*, including enhancement where appropriate
  - (ii) developing rules^ controlling the use of land^ to protect areas of significant indigenous vegetation and significant habitats of indigenous fauna and to maintain indigenous biological diversity^, including enhancement where appropriate.
- (b) Territorial Authorities^ must be responsible for:





(i) retaining schedules of notable trees and amenity trees in their district plans^ or such other measures as they see fit for the purpose of recognising amenity, intrinsic and cultural values associated with indigenous biological diversity^, but not for the purpose of protecting significant indigenous vegetation and significant habitats of indigenous fauna as described in (a)(ii) above.

#### Both the Regional Council and Territorial Authorities^ must be (c) responsible for:

recognising and providing for matters described in s6(c) RMA and having particular regard to matters identified in s7(d) RMA when exercising functions and powers under the RMA, outside the specific responsibilities allocated above, including when making decisions on resource consent^ applications.

#### Policy 6-2: Regulation of activities affecting indigenous biological diversity^

For the purpose of managing indigenous *biological diversity*^ in the Region:

- Habitats determined to be rare habitats\* and threatened habitats\* under (a) Schedule F must be recognised as areas of significant indigenous vegetation or significant habitats of indigenous fauna.
- At-risk habitats\* that are assessed to be significant under Policy 13-5 must (b) be recognised as significant indigenous vegetation or significant habitats of indigenous fauna.
- The Regional Council must protect rare habitats\*, threatened habitats\* and (c) at-risk habitats\* identified in (a) and (b), and maintain and enhance other at-risk habitats\* by regulating activities through its regional plan and through decisions on resource consents^.
- (d) Potential adverse effects\(^\) on any rare habitat\(^\), threatened habitat\(^\) or atrisk habitat\* located within or adjacent to an area of forestry\* must be minimised.
- When regulating the activities described in (c) and (d), the Regional (e) Council must, and when exercising functions and powers described in Policy 6-1, Territorial Authorities^ must:
  - allow activities undertaken for the purpose of pest plant and pest (i) animal control or habitat maintenance or enhancement.
  - consider indigenous biological diversity^ offsets in appropriate (ii) circumstances as defined in Policy 13-4,
  - allow the maintenance\*, operation\* and upgrade\* of existing (iii) structures^, including infrastructure^ and other physical resources of regional or national importance as identified in Policy 3-1, and
  - not unreasonably restrict the existing use of production land^ (iv) where the effects of such land use on rare habitat, threatened habitat\* or at-risk habitat\* remain the same or similar in character, intensity and scale.

#### Policy 6-3: Proactive management of indigenous biological diversity^

(a) The Regional Council will aim to maintain or enhance indigenous biological diversity^ by working in partnership with relevant landowners, other parties with a legal interest in the land^, and relevant consent



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holders to establish a management plan and incentive programme for the voluntary proactive management of identified *sites*\* by 2016.

- (b) For the purposes of (a), separate programmes will be established for wetlands^, bush remnants, native fish communities and coastal ecosystems.
- (c) The management plans under (a) will generally address the following matters as a minimum:
  - (i) fencing and prevention of stock access
  - (ii) pest plant and pest animal control
  - (iii) planting
  - (iv) agreed land uses
  - (v) work and materials to be provided by the Regional Council or a third party
  - (vi) financial assistance to be provided by the Regional Council or a third party
  - (vii) monitoring
  - (viii) legal options for ensuring longevity of the measures implemented.

#### Policy 6-4: Fostering an ethic of stewardship

The Regional Council will equip landowners and others with the information they need to act as good stewards for indigenous biodiversity, and to act responsibly and proactively. These initiatives will be additional to the Council-led programmes under Policy 6-3.

#### Policy 6-5: Pest plants and pest animals

- (a) To the extent that they relate to the maintenance of indigenous biodiversity, the pest plant and pest animal management functions of the Regional Council will primarily target pests threatening *rare habitats\**, threatened habitats\* and at-risk habitats\*.
- (b) When exercising functions and powers as set out in Policy 6-1, *Territorial Authorities*^ must take into account the risks of introducing pest plants or pest animals into *rare habitats*\*, *threatened habitats*\*, *at-risk habitats*\* and nearby areas.

#### 6.4.2 Landscapes and Natural Character

#### Policy 6-6: Regionally outstanding natural features and landscapes

The natural features and landscapes listed in Schedule G Table G.1 must be recognised as regionally outstanding and must be spatially defined in the review and development of district plans. All subdivision, use and development directly affecting these areas must be managed in a manner which:

- (a) avoids significant adverse cumulative *effects*^ on the characteristics and values of those outstanding natural features and landscapes, and
- (b) except as required under (a), avoids adverse *effects*^ as far as reasonably practicable and, where avoidance is not reasonably practicable, remedies or mitigates adverse *effects*^ on the characteristics and values of those outstanding natural features and landscapes.





#### Policy 6-7: Assessing outstanding natural features and landscapes

The Regional Council and Territorial Authorities^ must take into account but not be limited to the criteria in Table 6.1 when:

- (a) identifying outstanding natural features and landscapes, and consider whether the natural feature or landscape is conspicuous, eminent, remarkable or otherwise outstanding, and
- considering adding to, deleting from, or otherwise altering, redefining or (b) modifying the list of outstanding natural features or landscapes listed in Table G.1 of Schedule G, or
- (c) considering the inclusion of outstanding natural features or landscapes into any district plan^, or
- (d) establishing the relevant values to be considered when assessing effects^ of an activity on:
  - (i) outstanding natural features and landscapes listed in Table G.1 of Schedule G, or
  - (ii) any other outstanding natural feature or landscape.

Table 6.1 Natural Feature and Landscape Assessment Factors

Assessment factor	Scope
(a) Natural science factors	These factors relate to the geological, ecological, topographical and natural process components of the natural feature or landscape:
	Representative: the combination of natural components that form the feature or landscape strongly typifies the character of an area.
	Research and education: all or parts of the feature or landscape are important for natural science research and education.
	(iii) Rarity: the feature or landscape is unique or rare within the district or Region, and few comparable examples exist.
	(iv) Ecosystem functioning: the presence of healthy ecosystems is clearly evident in the feature or landscape.
(b) Aesthetic values	The aesthetic values of a feature or landscape may be associated with:
	(i) Coherence: the patterns of <i>land</i> ^ cover and <i>land</i> ^ use are largely in harmony with the underlying natural pattern of landform and there are no, or few, discordant elements of <i>land</i> ^ cover or <i>land</i> ^ use.
	(ii) Vividness: the feature or landscape is visually striking, widely recognised within the local and wider community, and may be regarded as iconic.
	(iii) Naturalness: the feature or landscape appears largely unmodified by human activity and the patterns of landform and land^ cover are an expression of natural processes and intact healthy ecosystems.
	(iv) Memorability: the natural feature or landscape makes such an impact on the senses that it becomes unforgettable.
(c) Expressiveness (legibility)	The feature or landscape clearly shows the formative natural processes or historic influences that led to its existing character.



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(d)	Transient values	The consistent and noticeable occurrence of transient natural events, such as daily or seasonal changes in weather, vegetation or wildlife movement, contributes to the character of the feature or landscape.
(e)	Shared and recognised values	The feature or landscape is widely known and is highly valued for its contribution to local identity within its immediate and wider community.
(f)	Cultural and spiritual values for tangata whenua^	Māori values inherent in the feature or landscape add to the feature or landscape being recognised as a special place.
(g)	Historic Heritage values	Knowledge of historic events that occurred in and around the feature or landscape is widely held and substantially influences and adds to the value the community attaches to the natural feature or landscape. Heritage features, <i>sites*</i> or structures that are present and add to the enjoyment and understanding of the feature or landscape.

#### Policy 6-8: Natural character

- (a) The natural character of the coastal environment, *wetlands*^, *rivers*^ and *lakes*^ and their margins must be preserved and these areas must be protected from inappropriate subdivision, use and development.
- (b) The natural character of these areas must be restored and rehabilitated where this is appropriate and practicable.
- (c) Natural character of these areas may include such attributes and characteristics as:
  - (i) Natural elements, processes and patterns,
  - (ii) Biophysical, ecological, geological, geomorphological and morphological aspects,
  - (iii) Natural landforms such as headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs and surf breaks,
  - (iv) The natural movement of water and sediment including hydrological and fluvial processes,
  - (v) The natural darkness of the night sky,
  - (vi) Places or areas that are wild and scenic,
  - (vii) A range of natural character from pristine to modified, and
  - (viii) Experiential attributes, including the sounds and smell of the sea; and their content or setting.

#### Policy 6-9: Managing natural character

In relation to the natural character of:

- (a) the component of the coastal environment which is not coastal marine area^ (CMA), and
- (b) wetlands^, rivers^ and lakes^ and their margins

subdivision, use or development must generally (but without limitation) be considered appropriate if it:

- (c) is compatible with the existing level of modification to the environment,
- (d) has a functional necessity to be located in or near the component of the coastal environment which is not *coastal marine area*^ (CMA), *wetland*^, *river*^ or *lake*^ and no reasonably practicable alternative locations exist,



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- (e) is of an appropriate form, scale and design to be compatible with the existing landforms, geological features and vegetation,
- (f) will not, by itself or in combination with *effects*^ of other activities, significantly disrupt natural processes or existing ecosystems, and
- (g) will provide for the restoration and rehabilitation of natural character where that is appropriate and practicable.

# Policy 6-10: Public access to and along *rivers*<sup>^</sup> and *lakes*<sup>^</sup> and their margins

- (a) Activities within or near rivers<sup>^</sup> and lakes<sup>^</sup> must be established and operated in a manner which readily provides for public access. Public access may be restricted only where necessary for safety, cultural or conservation purposes, or to ensure a level of security appropriate for activities authorised by a resource consent<sup>^</sup>.
- (b) Public access for recreational purposes must recognise the need to protect *rare habitats\**, *threatened habitats\** and *at-risk habitats\**.
- (c) Public access must recognise existing private *property\** rights.

#### 6.4.3 Historic Heritage^

#### Policy 6-11: Historic heritage^

The Regional Coastal Plan^ and district plans^ must, without limiting the responsibilities of local authorities to address historic heritage^ under the RMA, include provisions to protect from inappropriate subdivision, use and development historic heritage^ of national significance, which may include places of special or outstanding heritage value registered as Category 1 historic places, wāhi tapu, and wāhi tapu areas under the Historic Places Act 1993 and give due consideration to the implementation of a management framework for other places of historic heritage.

#### Policy 6-12: Historic heritage<sup>^</sup> identification

- (a) Territorial Authorities^ must develop and maintain a schedule of known historic heritage^ for their district to be included in their district plan^.
- (b) The Regional Council must develop and maintain a schedule of known historic heritage^ for the coastal marine area^ to be included in the Regional Coastal Plan^.
- (c) Historic heritage^ schedules must include a statement of the qualities that contribute to each site\*.

#### 6.5 Methods

The main non-regulatory methods the Regional Council will pursue are outlined below as action plan summaries.

Method 6-1	Wetlands - Biodiversity
Description	The Regional Council and other agencies will work with landowners to protect and enhance priority wetlands throughout the Region. Resources will be directed towards the most significant sites*.
	Wetland owners will be provided advice and financial/project management assistance to carry out enhancement and protection measures including fencing, planting, and pest (plant and animal) control. The Regional Council



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Method 6-1	Wetlands - Biodiversity
	will seek funding from third parties to assist with this method, and encourage the establishment of covenants.
	Monitoring of the effectiveness of the protection and enhancement works will be undertaken.
	This method will include publicity to increase public awareness about the importance of wetlands and indigenous biological diversity.
Who	Regional Council, landowners, foresters, relevant consent holders, Federated Farmers, Territorial Authorities, Department of Conservation, hapū* and iwi*, non-government agencies including NZ Fish and Game, QEII Trust, NZ Wetland Trust, NZ Landcare Trust and relevant funding agencies including the He Tini Awa Trust, Biodiversity Condition Fund, Nga Whenua Rahui and Ducks Unlimited.
Links to Policy	This method implements Policy 6-3.
Targets	The top 100 wetlands in the Region are actively managed, including protection or enhancement measures, within 10 years of this Plan becoming operative.

Method 6-2	Bush Remnants - Biodiversity
Description	The Regional Council and other agencies will work with landowners to protect and enhance priority bush remnants throughout the Region. Resources will be directed towards the most significant <i>sites</i> *.
	Bush remnant owners will be provided with advice and financial/project management assistance to carry out enhancement and protection measures including fencing, planting, and pest (plant and animal) control. The Regional Council will seek funding from third parties to assist with this method, and encourage the establishment of covenants.
	Monitoring of the effectiveness of the protection and enhancement works will be undertaken.
	This method will include publicity to increase public awareness about the importance of bush remnants and indigenous biological diversity.
Who	Regional Council, landowners, foresters, relevant consent holders, Federated Farmers, Territorial Authorities, Department of Conservation, $hap\bar{u}^*$ and $iwi^*$ , non-government agencies including QEII Trust and NZ Landcare Trust, and relevant funding agencies including the He Tini Awa Trust, Biodiversity Condition Fund and Nga Whenua Rahui.
Links to Policy	This method implements Policy 6-3.
Targets	The top 200 bush remnants in the Region are being actively managed, including protection or enhancement measures, within 10 years of this Plan becoming operative.

Method 6-3	Sites of Significance - Aquatic
Description	The Regional Council and other agencies will work with landowners to protect and enhance water bodies and parts of water bodies that serve an important role in the lifecycle of the Region's rare and threatened native fish. Resources will be directed towards the most significant <i>sites*</i> .
	Owners of land adjacent to water bodies will be provided advice and financial/project management assistance to carry out enhancement and protection measures including fencing, planting, replacement of perched culverts and pest (plant and animal) control. The Regional Council will seek





Method 6-3	Sites of Significance - Aquatic
	funding from third parties to assist with this method.
	Monitoring of the effectiveness of the protection and enhancement works will be undertaken.
	This method will include publicity to increase public awareness about the importance of native fish and indigenous biological diversity.
Who	Regional Council, landowners, foresters, relevant consent holders, Federated Farmers, Territorial Authorities, Department of Conservation, <i>hapū*</i> and <i>iwi*</i> and funding agencies including the He Tini Awa Trust, Biodiversity Condition Fund and Nga Whenua Rahui.
Links to Policy	This method implements Policy 6-3.
Targets	The top 100 Sites of Significance - Aquatic are actively managed, including protection or enhancement measures, within 10 years of this Plan becoming operative.

Method 6-4	Inanga Spawning and Native Fishery Sites - Biodiversity
Description	The Regional Council and other agencies will work with landowners to protect and enhance water bodies and parts of water bodies (wetlands and streams) that serve an important role in the lifecycle of the inanga and <i>whitebait*</i> species. Resources will be directed towards the most significant <i>sites*</i> .
	Owners of land adjacent to water bodies will be provided advice and financial/project management assistance to carry out enhancement and protection measures including fencing, planting, replacement of perched culverts and pest (plant and animal) control. The Regional Council will seek funding from third parties to assist with this method.
	Monitoring of the effectiveness of the protection and enhancement works will be undertaken.
	This method will include publicity to increase public awareness about the importance of native fish and indigenous biological diversity.
Who	Regional Council, landowners, foresters, relevant consent holders, Federated Farmers, Territorial Authorities, Department of Conservation, <i>hapū</i> * and <i>iwi</i> * and funding agencies including the He Tini Awa Trust, Biodiversity Condition Fund and Nga Whenua Rahui.
Links to Policy	This method implements Policy 6-3.
Targets	The top 30 inanga spawning and native fishery <i>sites*</i> are actively managed, including protection or enhancement measures, within 10 years of this Plan becoming operative.

Method 6-5	Biodiversity (Terrestrial and Aquatic) Research, Monitoring and Reporting
Description	The aim of this method is to develop an integrated research, monitoring and reporting programme that supports delivery and refinement of existing policies and methods, guides implementation planning, and allows implementation effectiveness to be assessed.
Who	Predominantly the Regional Council, with assistance from research institutes, universities, non-government agencies and community groups as required.
Links to Policy	This method implements Policy 6-3.
Targets	A research, monitoring and reporting programme that supports delivery and



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Method 6-5	Biodiversity (Terrestrial and Aquatic) Research, Monitoring and Reporting
	refinement of existing policies and methods, and guides and assesses implementation.

Method 6-6	Education in Schools – Biodiversity
Description	The aim of this method is to raise awareness amongst the youth of the Region of the significance of indigenous biological diversity, the threats to it, and what they can do to protect/restore it. This will be achieved through various environmental education programmes/initiatives eg., Green RIG, Enviroschools, Trees for Survival and Youth Environment Forum.
Who	Regional Council, Department of Conservation and various national and local environmental education providers.
Links to Policy	This method implements Policy 6-4.
Targets	The Regional Council develops and delivers a biodiversity-related environmental education programme.

Method 6-7	District Planning – Natural Features, Landscapes, Historic Heritage and Indigenous Biological Diversity
Description	The Regional Council will formally submit on resource consent applications received by Territorial Authorities for land use activities where there is potential for effects on outstanding natural features, landscapes or indigenous biological diversity.
	The Regional Council will formally seek changes to district plans if necessary to ensure provisions are in place to provide an appropriate level of protection to natural features, landscapes, historic heritage and indigenous biological diversity.
	The Regional Council will formally seek changes to district plans if necessary to ensure district plan rules requiring protection of significant indigenous vegetation and the significant habitats of indigenous fauna do not contradict rules on indigenous biodiversity in this Plan.
Who	Regional Council and Territorial Authorities.
Links to Policy	This method implements Policies 6-1, 6-3, 6-4, 6-6, 6-8 and 6-9.
Targets	<ul> <li>Submissions completed on consent applications.</li> <li>District plan changes sought if necessary after this Plan becomes operative.</li> </ul>

Method 6-8	Consistent Landscape Assessment
Description	The aims of this method are:
	<ul> <li>(a) to develop a consistent and robust characterisation of the landscape within the Region and consistent identification of outstanding natural features and landscapes, and</li> </ul>
	(b) to include specified areas in any future landscape assessments.
	The Regional Council will collaborate with Territorial Authorities to develop and adopt consistent methodology for undertaking any assessment of landscape including for the purposes of identifying the outstanding natural features and landscapes within the Region. The methodology will include consideration of



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	Policy 6-7 and the factors detailed in Table 6.1.	
	The Regional Council will make available relevant resource data including	
	maps suitable for the study area description.	
	A number of areas have been identified by the Regional Council that should be included during landscape assessments undertaken by the Regional Council and Territorial Authorities and include:	
	(i) Central North Island tussocklands	
	(ii) Eastern Desert Road landscape	
	(iii) Moawhango Ecological Region including the Moawhango Gorge, Makirikiri Tarns and Reporoa Bog, and the Kutaroa and Otahupitara Swamps (Irirangi Swamp)	
	(iv) Waimarino - Erua - National Park fault scarp	
	(v) Western Edge of the Volcanic Plateau	
	(vi) Landguard Bluff	
	(vii) Lake Horowhenua and its margins	
	(viii) Lake Papatonga and its adjacent scenic reserve.	
	The Regional Council will assist territorial authorities undertaking landscape assessments to define more specifically areas of high natural character and outstanding natural features and landscapes within the coastal environment of the Region.	
Who	Regional Council and Territorial Authorities.	
Links to Policy	This method implements Policy 6-7.	
Targets	Methodology for assessment of natural features and landscapes agreed between the Regional Council and Territorial Authorities within one year of this Plan becoming operative.	

Method 6-9	Indigenous Biodiversity Advice and Information
Description	The aim of this method is to provide landowners and other parties with an interest in biodiversity with advice and information about the state of biodiversity in the Region, information about the rules and methods contained within this Plan to manage indigenous biodiversity, and advice about how these methods and rules will be implemented. This includes providing guidance on the rules contained within this Plan so that they can be easily understood and used by landowners.
Who	Regional Council, with assistance from landowners and community groups as required.
Links to Policy	This method implements Policies 6-3 and 6-4.
Targets	An education and advice programme that is freely available and allows those interested to understand and use the methods and rules provided for in this Plan.

Method 6-10	Proactive Identification of Historic Heritage
Description	The aim of this method is to determine an approach to provide for the proactive identification of historic heritage resources within the Region and should be read in conjunction with Method 8-4.
	The approach may include the development of a Region-wide database or list of areas with a high potential for containing unidentified historic heritage <i>sites</i> * and structures, amendments or variations to existing regional or Territorial Authority plans, or agreed partnerships for funding and carrying out surveys.



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Method 6-10	Proactive Identification of Historic Heritage
Who	Regional Council, Territorial Authorities, Heritage New Zealand, New Zealand Archaeological Association, <i>hāpu</i> * and <i>iwi</i> * and landowners.
Links to Policy/Method	This method implements Policies 6-11 and 6-12 and Method 8-4.
Targets	An approach is agreed upon within two years of this Plan becoming operative.

#### **Anticipated Environmental Results** 6.6

Anticipated Environmental Result	Link to Policy	Indicator	Data Source
Except for change because of natural processes, or change authorised by a resource consent, by 2017, the extent of rare habitat*, threatened habitat* or at-risk habitat* is the same as (or better than) that estimated prior to this Plan becoming operative, and the number of at-risk habitats* has not increased.	Indigenous biological diversity, landscape and historic heritage Policies: 6-1, 6-2, 6-3, 6-4, 6-5 and 6-8  Administration Policies: 12-4, 12-5, 12-6 and 12-8  Water Policies: 5-1, 5-2, 5-3, 5-4, 5-5, 5-8, 5-16,	<ul> <li>Extent of each habitat type compared to former extent</li> <li>Number of rare habitats*, threatened habitats* and at-risk habitats* damaged by unauthorised activities</li> </ul>	Landcare Research:     Land Environments NZ     Tool, EcoSat tool and     Land Cover     Database 2 tool     Regional Council's     incidents database
By 2017, the Region's top 100 wetlands and top 200 bush remnants will be in better condition than that measured prior to this Plan becoming operative.	5-17, 5-18 and 5-23 Indigenous biological diversity, landscape and historic heritage Policies: 6-1, 6-2, 6-3, 6-4, 6-5 and 6-8  Administration Policies: 12-4, 12-5, 12-6 and 12-8  Water Policies: 5-1, 5-2, 5-3, 5-4, 5-5, 5-8, 5-16, 5-17, 5-18 and 5-23	Number of top 100     wetlands and top 200     bush remnants under     proactive management     Habitat condition     measure(s) which,     where possible, will be     consistent with those     used by the     Department of     Conservation	Regional Council's identification and assessment of significant indigenous aquatic, coastal and terrestrial habitat types     Regional Council's progress reports on results of proactive management of top wetland and bush remnant habitats
By 2017, the Region's known historic heritage will be recorded in district plans and the Regional Coastal Plan for protection from inappropriate subdivision, use and development.	Indigenous biological diversity, landscape and historic heritage Policies: 6-11 and 6-12 and Policy 2-2	Level of protection from inappropriate subdivision, use and development afforded to scheduled historic heritage in territorial authority District Plans and the Regional Council Coastal Plan.      Portion of Regional Council submissions accepted versus total Regional Council submissions made on historic heritage to Territorial Authority consent planning processes	District plans     Regional Coastal Plan
Except for change because of natural processes, or change authorised by a	Indigenous biological diversity, landscape and	Number of Schedule G outstanding	Outstanding landscapes and natural



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Anticipated Environmental Result	Link to Policy	Indicator	Data Source
resource consent, at 2017 the characteristics and values of all outstanding landscapes and natural features identified in the Region (Schedule G Table G.1) will be in the same or a better state as assessed prior to this Plan becoming operative.	historic heritage Policies: 6-6 and 6-7	landscapes and natural features where identified characteristics and values have been damaged  Level of protection afforded to Schedule G outstanding landscapes and natural features in Territorial Authority district plans  Ratio of successful Regional Council submissions versus total Regional Council submissions made on outstanding landscapes and natural features to Territorial Authority consent planning processes	features characteristics and values assessment survey  Regional Council's incidents database  Regional Council's Subdivision Enquiry Database (SED)  Territorial Authority district plans  Territorial Authority consent decisions

#### 6.7 Explanations and Principal Reasons

#### Indigenous biological diversity

Rare habitats\* and threatened habitats\* are made up of habitats that are either naturally rare in the Region (that is, there was never a large number of that type of habitat) or have been reduced to a level of 20% or less of their original extent in the Region. At this level they cannot sustain themselves without intervention. Even a small loss of, or small amount of damage to, these habitats may lead to the total loss of this habitat type in the Region.

At-risk habitats\* are made up of habitats that have been reduced to a level of less than 50% of their original extent in the Region. These habitats are at risk of falling into the threatened category (described above) in the lifetime of this Plan if something is not done to prevent that habitat loss. At-risk habitats\* also include those areas which provide a habitat for a rare or threatened species.

The objectives, policies and methods adopted aim to prevent the further loss of rare habitats\* and threatened habitats\* and to control activities which may have an adverse effect on the unique characteristics of at-risk habitats\*. Also included are objectives, policies and methods to actively manage, improve and protect identified habitats.

#### Natural features and landscapes

The protection of outstanding natural features and landscapes from inappropriate subdivision, use and development is a matter of national importance. While the regulation of land use with regard to competing pressures for the subdivision, use and development of land that may affect natural features and landscapes is most appropriately dealt with at a Territorial Authority level, it is considered important that this document should continue to provide a list of regionally outstanding natural features and landscapes and their associated characteristics and values. The objectives, policies and methods provide guidance and direction for the protection of these values. For example, the policies require avoidance of significant adverse cumulative effects (ie., cumulative effects that are so adverse



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that they have the potential to significantly alter or damage the essential characteristics and values of the natural feature or landscape).

In the application of Policy 6-6(a) to the repowering of existing wind farms within their consented site or footprint, the assessment of cumulative landscape and visual effects and their significance should not be limited to the consideration of one factor, such as changes in height. Instead the changes to the existing environment should be considered in their entire context including any benefits from reduced density and a more visually coherent pattern of development with respect to the characteristics and values of the Outstanding Natural Features and Landscapes (ONFL). In this context, 'repowering' means the replacement of turbines that have reached the end of their economic life with updated turbine technology to continue to make the best use of the available energy resource.

#### **Natural character**

The preservation of the natural character of the coastal environment, wetlands, rivers and lakes and their margins is a matter of national importance. The natural character of the CMA is dealt with in Chapter 8. The approach of the One Plan is to maintain the current degree of natural character of the coastal environment, wetlands, rivers and lakes and their margins and to restore and rehabilitate natural character where appropriate. The objectives, policies and methods adopted in this document aim to achieve this by:

- (a) providing policy guidance on matters to be taken into account when exercising functions and powers under the RMA and when making decisions on applications which may affect natural character,
- (b) the restoration and rehabilitation of natural character where appropriate,
- (c) actively protecting and managing indigenous biodiversity, wetlands, and rivers and lakes as described in other parts of this document.

#### **Historic Heritage**

The protection of historic heritage from inappropriate subdivision, use and development is a matter of national importance. It is considered important to provide a regional framework for the protection of historic heritage by:

- (a) requiring Territorial Authorities and the Regional Council to identify historic heritage *sites\** and structures, and to include them in district plans and the Regional Coastal Plan for protection from inappropriate subdivision, use and development, and
- (b) requiring the Regional Council to manage the effects on historic heritage for those resource use activities for which it has jurisdiction.

Objective 6-3 and Policies 6-11 and 6-12 and Policy 2-2 provide the regional framework, guidance and direction required to manage historic heritage.





# CHAPTER 7: Air

Outlines the regionally significant issues for air quality management within the Region, and sets out the objectives, policies and methods that derive from these issues.

#### **7.** Air

## 7.1 Scope and Background

This chapter addresses the management of air quality. Most people living in the Region enjoy air that is clean and clear. The high standard of air quality exists not only because of the exposed nature of the Region's landscape to the prevailing winds but also because the Region is mainly rural, with a low population density compared to large urban centres, and a comparatively small number of industrial emissions.

Discharges to air can include odour, products of combustion, *agrichemical\* spray drift\**, particulate matter, solvents, nitrogen oxides, and other gases. They can be complex in nature and have the potential to cause adverse effects on ambient air quality and human health. Certain discharges must be assessed individually and regulated appropriately.

Odours, smoke and dust have dominated complaints received by the Regional Council for some time, making up more than half of the complaints received between 2000 and 2004. Some of these emissions can also be harmful to human, animal and plant health. Setting clear regional standards for *ambient air\** quality, a 24-hour pollution hotline service and provision of public information are intended to help reduce the potential for adverse health and noxious, dangerous, offensive and objectionable effects.

In 2004 14 national environmental standards relating to air quality were introduced. These national regulations place a requirement on Regional Councils to monitor air quality and to report *ambient air\** quality exceedances to the public. The primary purpose of the national *ambient air\** quality standards is to set minimum requirements for outdoor air quality in order to provide a guaranteed level of protection for the health of all New Zealanders. The Regional Council has established airsheds for Taihape and Taumarunui (see Schedule H¹) for the purpose of managing *ambient air\** quality.

The ambient standards have been adopted in this Plan. However, in most cases they have minimal impacts on industrial emissions, which will largely continue to be regulated in the same manner as in the past. As degraded air quality can impact on human health, the Health Act 1956 also gives Territorial Authorities and health boards some responsibilities for dust, smoke and odour. Because of this overlap, some adverse effects are not dealt with as efficiently as they could be. The Regional Council is committed to establishing protocols with Territorial Authorities and health boards to establish clear relationships for response.

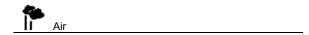
#### 7.1.1 Fine Particle ( $PM_{10}^*$ ) Levels

The Ministry for the Environment released the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004 to help reduce or manage fine particle ( $PM_{10}^*$ ) levels.  $PM_{10}^*$  are of concern as they can be drawn into the lungs causing or aggravating health problems, particularly respiratory problems. The main cause of the  $PM_{10}^*$  problem is emissions from domestic woodburners, although vehicle emissions, backyard burning and, to a lesser extent, industry, may also contribute.

Schedule H is not a component of Part I – the Regional Policy Statement. It is a component of Part II – the Regional Plan.



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As  $PM_{10}^*$  can adversely affect people's health, the national standard has been included in the airshed monitoring programmes. Direct monitoring results for wintertime  $PM_{10}^*$ , between 2001 and 2003 in 11 population centres in the Region showed that Taumarunui and Taihape exceeded the  $PM_{10}^*$  standard and Ohakune, Feilding, Dannevirke and Pahiatua had the potential to exceed it. Wintertime  $PM_{10}^*$  levels in the other five centres – Wanganui, Palmerston North, Levin, Marton and Ashhurst – were under the  $PM_{10}^*$  standard.  $PM_{10}^*$  levels will continue to be monitored and programmes will be established to reduce them to the standards set in the regulation.

## 7.2 Significant Resource Management Issues

#### Issue 7-1: Ambient air\* quality

Aside from fine particle levels in some towns, as described in Issue 7-2, air quality in the Region is high. Nevertheless localised adverse effects on amenity values, human health, property or the environment can arise where:

- (a) odour, dust, smoke, *agrichemicals*\* or the discharge of contaminants is not adequately managed, or
- (b) incompatible land uses are located near each other.

#### Issue 7-2: Fine particle $(PM_{10}^*)$ levels

The use of home heating appliances is likely to be causing fine particle levels to exceed the national *ambient air\** quality standard for  $PM_{10}^*$  in Taumarunui and Taihape, and to risk exceeding this standard in Ohakune, Feilding, Dannevirke and Pahiatua.

#### 7.3 Objectives

## Objective 7-1: Ambient air\* quality

A standard of *ambient air*\* quality is maintained which is not detrimental to *amenity values*^, human health, property or the life-supporting capacity of air and meets the national *ambient air*\* quality standards.

#### Whāinga 7-1: Te kounga hau o-waho

Ka tiakina tētahi paenga kounga hau o-waho kāore he whakawhara ki ngā ūara Taonga\* whakaahuru, te hauora tangata, ngā rawa, te oranga tonutanga rānei o te hau – ka eke hoki ki ngā paenga kounga hau o-waho o te motu.

#### Objective 7-2: Fine particle $(PM_{10}^*)$ levels

- (a) Fine particle levels in Taihape and Taumarunui are reduced to comply with the national *ambient air*\* quality standard for  $PM_{10}$ \* by 1 September 2013<sup>2</sup>.
- (b) Fine particle levels in other areas are managed in a manner which ensures ongoing compliance with the national *ambient air\** quality standard for  $PM_{10}^*$ .

7-2



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The date of 1 September 2013 for achieving compliance with the national *ambient air\** quality standard for *PM*<sub>10</sub>\*, is set in the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004.

7-3

#### Whāinga 7-2: Ngā taumata ira meroiti (PM<sub>10</sub>\*)

- (a) Hei mua mai i te 1 o Hepetema 2013 ka whakahekea iho ngā ira meroiti i Taihape me Taumarunui kia hāngai tonu ki te paenga kounga hau o-waho  $(PM_{10}^*)$  o te motu.
- (b) Ka whakahaeretia ngā taunga ira meroiti i wāhi kē kia hua ai ka hāngai tonu ki te paenga kounga hau o-waho  $(PM_{10}^*)$  o te motu.

#### 7.4 Policies

#### 7.4.1 Ambient Air\* Quality

## Policy 7-1: National Environmental Standards^

The *National Environmental Standards*^ set out in Table 7.1 must be adopted as *ambient air*\* quality standards for the Region and *ambient air*\* quality must be:

- (a) maintained or enhanced in those areas which meet the standards, and
- (b) enhanced in those airsheds which do not meet the standards in accordance with the air quality categories and designated responses in Table 7.2.

Table 7.1 National Environmental Standards<sup>^</sup> for Ambient Air\* Quality<sup>3</sup>

Contaminant <sup>^</sup>	Threshold Concentration	Permissible Excess
Carbon monoxide	10 mg/m <sup>3</sup> (running 8-hour mean)	One 8-hour period in any 12-month period
Nitrogen dioxide	200 µg/m³ (1-hour mean)	Nine 1-hour periods in any 12-month period
Ozone	150 µg/m³ (1-hour mean)	Not to be exceeded at any time
Fine particles (PM <sub>10</sub> *)	50 µg/m³ (24-hour mean)	One 24-hour period in any 12-month period
Sulphur dioxide	350 μg/m³ (1-hour mean)	Nine 1-hour periods in any 12-month period
	570 μg/m³ (1-hour mean)	Not to be exceeded at any time

Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004



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Table 7.2 Air Quality Categories and Designated Response

Category	Measured Value	Designated Response
Unacceptable	Greater than the threshold concentration in the <i>National Environmental Standards</i> ^ for Air Quality, and exceeds the permissible excess in Table 7.1	<ul><li>Enhance</li><li>Establish long-term strategy</li><li>Monitor</li><li>Publicly notify exceedances</li></ul>
Degraded	66% to 100% of the threshold concentration in the <i>National Environmental Standards</i> ^ for Air Quality in Table 7.1, with one exceedance	<ul> <li>Maintain, and enhance where practicable</li> <li>Establish awareness programmes</li> <li>Monitor where practicable</li> </ul>
Acceptable	Up to 66% of the threshold concentration in the <i>National Environmental Standards</i> ^ for Air Quality in Table 7.1, with one exceedance	Maintain

#### Policy 7-2: Regional standards for ambient air\* quality

In addition to the *National Environmental Standards*^ set out in Policy 7-1, *ambient air\** quality must be managed in accordance with the regional standards set out in Table 7.3.

**Table 7.3** Regional Standards for *Ambient Air\** Quality

Contaminant <sup>^</sup>	Regional Standard
Odour	A discharge^ must not cause any offensive or objectionable odour beyond the property* boundary.
Dust	A discharge^ must not cause any noxious, offensive or objectionable dust beyond the property* boundary.
Smoke and water^ vapour	A discharge^ must not result in any objectionable or offensive smoke or water^ vapour beyond the property* boundary.
Agrichemicals*	A discharge^ must not give rise to noxious or dangerous levels of agrichemicals* in terms of human health, non-target plants or animals, or property*.
Gases and other airborne contaminants^	A discharge^ must not result in noxious or dangerous levels of gases or other airborne contaminants^ beyond the property* boundary.

**Note:** There are guidelines contained within Chapter 15, Section 15.2 that assist in defining the terms noxious, dangerous, offensive and objectionable.

#### Policy 7-3: Regulation of discharges<sup>^</sup> to air

Discharges<sup>^</sup> of contaminants<sup>^</sup> into air will be generally allowed, provided:

- (a) the effects^ of the discharge^ are consistent with the approach set out in Policy 7-1 for implementing the National Environmental Standards^ for ambient air\* quality, and
- (b) the *discharge*^ is consistent with the regional standards for *ambient air*\* quality set out in Policy 7-2.

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## Policy 7-4: Incompatible land^ uses

Air quality problems arising from incompatible *land*<sup>^</sup> uses establishing near each other must be avoided, remedied or mitigated primarily through *district plans*<sup>^</sup> and *Territorial Authority*<sup>^</sup> consent decisions which:

- (a) prevent the future establishment of potentially incompatible *land*<sup>^</sup> use activities near each other, or
- (b) allow the establishment of potentially incompatible *land*^ use activities near each other provided no existing lawful activity, operated in a manner that adopts the *best practicable option*^ or which is otherwise environmentally sound, is restricted or compromised.

## 7.4.2 Fine Particle ( $PM_{10}^*$ ) Levels

## Policy 7-5: Fine particles in Taihape, Taumarunui and other unacceptable airsheds

- (a) The Regional Council has established airsheds for Taihape and Taumarunui, as shown in Schedule H, on the basis that the fine particle  $(PM_{10}^*)$  levels at these centres breach the *National Environmental Standards*^ under Policy 7-1. The Regional Council must establish additional airsheds where monitoring shows fine particle levels that are in breach of the *National Environmental Standards*^4.
- (b) Strategies to reduce fine particle  $(PM_{10}^*)$  levels must be established by 2011 for Taumarunui and Taihape, and after this date for any other airsheds with concentrations of fine particles that breach the *National Environmental Standards*^. The strategies will primarily focus on existing *woodburners*\* and other home heating appliances, and will identify ways of facilitating and supporting the changes necessary to comply with the fine particle standard.
- (c) Applications to *discharge*^ fine particles  $(PM_{10}^*)$  in the Taihape and Taumarunui airsheds (and within any other airsheds with concentrations of fine particles that breach the *National Environmental Standards*^ and which are gazetted by the Regional Council) that are likely to increase significantly the concentration of fine particles  $(PM_{10}^*)$  in those airsheds, must be managed in accordance with regulations 17A and 17C of the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004.

# Policy 7-6: Fine particles in Ohakune, Feilding, Dannevirke and Pahiatua and other degraded areas

The Regional Council will generally only grant *resource consents* $^{^{\wedge}}$  to *discharge* $^{^{\wedge}}$  fine particles ( $PM_{10}^{^{*}}$ ) into the air in Ohakune, Feilding, Dannevirke and Pahiatua and other areas classified as degraded under Policy 7-1:

- (a) if the applicant has shown that the *discharge*^ is the *best practicable* option^, and the consent is for a duration of five years or less, or

Under the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004 airsheds must be established for areas failing to meet the National Environmental Standards for ambient air\* quality, for the purpose of monitoring and managing air quality.



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## Policy 7-7: Fine particles in airsheds within the Region

- (a) All applications to *discharge*^ fine particles (*PM*<sub>10</sub>\*) into airsheds within the Region lodged before 1 September 2013 must be managed in accordance with regulation 18 of the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004.
- (b) All applications to discharge^ fine particles  $(PM_{10}^*)$  within the Region lodged after 1 September 2013 must be managed in accordance with regulation 19 of the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004.

#### 7.5 Methods

Managing discharges to air is a mix of regulatory and non-regulatory approaches. Part II of this Plan contains regional rules relating to the activities described in this chapter. The key non-regulatory methods the Regional Council will pursue are outlined below.

Method 7-1	Improving Air Quality ( <i>PM₁₀</i> *) – Long-term Strategies: Taumarunui and Taihape and Other Unacceptable Airsheds	
Description	Long-term strategies will be developed to improve air quality in Taumarunui and Taihape, and other unacceptable airsheds, to meet the national <i>ambient air*</i> quality standard for fine particles $(PM_{10}^*)$ .	
	The primary focus of the long-term strategies will be to reduce <i>PM</i> <sub>10</sub> * emissions from home heating appliances (woodburners). Strategies will include:  • consultation with the community  • participation in the Ministry for the Environment "home heating programme"  • investigation of funding options for upgrading domestic heating appliances  • emissions inventory assessments and education  • monitoring of <i>PM</i> <sub>10</sub> *	
	<ul> <li>encouraging practices that will reduce PM<sub>10</sub>* emissions, including reduction of backyard burning.</li> </ul>	
Who	Regional Council, Ministry for the Environment, Ministry of Social Development, Energy Efficiency Conservation Authority, district health boards, Territorial Authorities, industry and the community.	
Links to Policy	This method implements Policy 7-5.	
Target	Taumarunui and Taihape airsheds will meet the national ambient air* quality standard for fine particles ( $PM_{10}$ *) by September 2013.	

Method 7-2	Improving Air Quality ( $PM_{10}^*$ ) – Awareness Programme: Ohakune, Feilding, Dannevirke, Pahiatua and Other Degraded Areas		
Description	The aim of this method is to increase awareness of air quality issues in Ohakune, Feilding, Dannevirke and Pahiatua, and other degraded areas, and to encourage practices that may improve air quality such as:  use of more efficient woodburners  upgrading of woodburners to reduce $PM_{10}^*$ emissions  reducing backyard burning  monitoring of $PM_{10}^*$ where practicable.		
Who	Regional Council, Ministry for the Environment, Ministry of Social Development, Energy Efficiency Conservation Authority, district health boards, Territorial		





Method 7-2	Improving Air Quality ( $PM_{10}^*$ ) – Awareness Programme: Ohakune, Feilding, Dannevirke, Pahiatua and Other Degraded Areas		
	Authorities, industry and the community.		
Links to Policy	This method implements Policy 7-6.		
Target	$PM_{10}^*$ levels in Ohakune, Feilding, Dannevirke and Pahiatua will be maintained or improved to ensure ongoing compliance with the national <i>ambient air*</i> quality standard for fine particles ( $PM_{10}^*$ ).		

Method 7-3	Monitoring by the Regional Council		
Description	Air quality will be monitored for particulate matter ( $PM_{10}^*$ ) in Taumarunui and Taihape in accordance with National Environmental Standards requirements and in Dannevirke, Ohakune, Feilding and Pahiatua as practicable. Air quality will also be monitored for particulate matter ( $PM_{10}^*$ ) in Palmerston North and possibly Wanganui, because of the increased potential for population exposure.		
	This method will also provide for the revision of the status of airsheds, including the gazettal of new airsheds in relation to National Environmental Standards for ambient air* quality.		
Who	Regional Council, Ministry for the Environment, National Institute of Water and Atmospheric Research and Territorial Authorities.		
Links to Policy	This method implements Policies 7-1, 7-2, 7-3, 7-5 and 7-6.		
Targets	To monitor air quality to the standard required in the National Environmental Standards for <i>ambient air*</i> quality.		
	To revise airshed status every two years after this Plan becomes operative and gazette new airsheds as necessary.		

Method 7-4	Protocols with Territorial Authorities and District Health Boards		
Description	This method includes the development of protocols or memoranda of understanding with Territorial Authorities and district health boards for air quality issues to agree on respective responsibilities, in particular:  • smoky fires and incinerators  • fire permits and outdoor burning*  • dust complaints  • odour complaints  • complaints about airborne contaminants, gases and fumes, and dangerous or noxious discharges.		
Who	Regional Council, Territorial Authorities and district health boards.		
Links to Policy	This method implements Policies 7-2 and 7-4.		
Target	Protocols agreed and signed off by 2009.		

Method 7-5	Public Information – Air Quality
Description	Easily accessible information will be developed and provided on the following air quality issues for the general public:  • smoky fires and incinerators  • fire permits and outdoor burning*  • dust  • odours  • airborne contaminants, gases and fumes  • burning of wastes*





Method 7-5	Public Information – Air Quality		
	<ul> <li>PM<sub>10</sub>* and home heating</li> <li>agrichemical* spray drift*.</li> </ul>		
Who	Regional Council, Territorial Authorities, district health boards and other relevant organisations.		
Links to Policy	This method implements Policies 7-1 to 7-6.		
Target	Information provided via website and available in paper form by 2009.		

Method 7-6	24 Hour Pollution Hotline	
Description	This service relates to the ongoing provision of a 24 hour Pollution Hotline to record and respond to air quality complaints.	
Who	Regional Council.	
Links to Policy	This method implements Policies 7-1 to 7-6.	
Targets	24 hour Pollution Hotline continues and is widely publicised.	

## 7.6 Anticipated Environmental Results

Anticipated Environmental Result	Link to Policy	Indicator	Data Source
By 2013 fine particle ( <i>PM10*</i> ) levels in the Region meet the National Environmental Standards.	Air Policies: 7-1, 7-5, 7-6 and 7-7	PM <sub>10</sub> * levels, especially in Taumarunui and Taihape	The Regional Council's state of environment air quality monitoring programme
The number of confirmed incidents of objectionable, offensive or noxious airborne substances causing adverse effects beyond <i>property*</i> boundaries is reduced by 10% over the life of this Plan.	Air Policies: 7-1, 7-2, 7-3 and 7-4	Number of confirmed incidents	The Regional Council's incidents database  Consent compliance database

## 7.7 Explanations and Principal Reasons

#### 7.7.1 Ambient Air\* Quality

Objective 7-1, Policies 7-1 to 7-4 and the associated methods establish a framework to manage *ambient air\** quality, in particular to manage the effects of various discharges to air and to reduce nuisance effects.

Policy 7-1 sets out the National Environmental Standards for *ambient air\** quality as required by the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins and Other Toxics) Regulations 2004. The Regional Council has used the standards as a framework for the regional standards for *ambient air\** quality as reflected in Policy 7-2. These policies will assist in developing the methods the Regional Council has put in place to ensure that compliance with the National Environmental Standards is achieved by 1 September 2013. To achieve the compliance date the Regional Council will need to work closely with Territorial Authorities and district health boards to establish clear responsibility protocols.





The Regional Council recognises that some resource users need to discharge to air to provide for their social, cultural and economic wellbeing. Even those who operate under best practice guidelines may receive complaints. Policies 7-3 and 7-4 allow for such resource users and the monitoring methods (such as public information, a 24-hour Pollution Hotline and compliance monitoring) to ensure National Environmental Standards and regional standards are not breached. Policy 7-4 and the associated methods assist in educating the community about rural versus lifestyle block incompatibilities and also encourage Territorial Authorities to review future land use developments to prevent incompatibility and reduce future complaints.

#### 7.7.2 Fine Particle ( $PM_{10}^*$ ) Levels

Objective 7-2, Policies 7-5, 7-6 and 7-7, and the associated methods set out a framework to reduce or manage fine particle ( $PM_{10}^*$ ) levels in order to meet the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004.

The Ministry for the Environment released these regulations in September 2004. One of the standards applies to  $PM_{10}^*$  which can adversely affect people's health. The regulations require that airsheds are established where exceedance of standards is likely, that  $PM_{10}^*$  levels are monitored and reduced in those airsheds to the standards set in the regulations by 2013, and that resource consent applications in those airsheds are determined in accordance with regulations 17A and 17C, 18 and 19.

Monitoring results for wintertime  $PM_{10}^*$  between 2001 and 2003 confirmed that Taumarunui and Taihape exceeded the  $PM_{10}^*$  ambient standard and Ohakune, Feilding, Dannevirke and Pahiatua had the potential to exceed it. Policy 7-5 specifically targets Taumarunui and Taihape and Policy 7-6 targets Ohakune, Dannevirke, Feilding and Pahiatua at a response level consistent with the  $PM_{10}^*$  monitoring results mentioned above. Domestic home heating is the most likely main contributor to wintertime  $PM_{10}^*$  levels. Resource consent applications in the Taumarunui and Taihape airsheds must be determined as per regulations 17A and 17C, 18 and 19.

While Palmerston North remains under the  $PM_{10}^*$  ambient standard, monitoring will continue, to ensure that  $PM_{10}^*$  levels remain at an acceptable standard for the city's population base.









# CHAPTER 8: Coast

Outlines the regionally significant issues for the management of the coastal marine area within the Region, and sets out the objectives, policies and methods that derive from these issues.

#### 8 Coast

#### 8.1 Scope and Background

#### 8.1.1 Scope

This chapter primarily addresses the coastal marine area (CMA) but it also addresses management of the wider coastal environment. The CMA is defined in the Resource Management Act 1991 (RMA). In general, it is the area from mean high water springs (MHWS) seaward 12 nautical miles, and includes foreshore and seabed, the water column, air space, estuarine areas, beaches and salt marshes. The CMA boundary where it crosses identified rivers is shown (and defined) in Schedule I: Part A.

The coastal environment is wider than the CMA and comprises the CMA together with an area landward of MHWS, where coastal qualities or influences predominate.

The CMA is managed by the Regional Council and the Minister of Conservation. The Minister of Conservation is responsible for preparing the New Zealand Coastal Policy Statement (NZCPS). The NZCPS sets the national framework for managing the coastal environment. Regional policy statements, regional plans and district plans must give effect to the NZCPS.

The landward component of the coastal environment is managed by both the Regional Council and Territorial Authorities. Territorial Authorities control land use activities inland from MHWS through their district plans. The Regional Council manages some activities landward of MHWS through other chapters of this Plan.

The MHWS boundary separates the statutory functions of the Regional Council and Territorial Authorities and therefore, to ensure integrated management of the coastal environment, cross-boundary issues must be addressed.

This chapter has two elements:

- (a) It contains objectives, policies and methods for managing activities that occur in the Region's CMA.
- (b) It identifies the need for integrated management of the coastal environment.

#### 8.1.2 The Coastal Resources

The Region's coast includes parts of both the west coast and east coast of the North Island (Figure 8.1) and approximately 3,000 km<sup>2</sup> of surface coastal water.

The west coast, which covers approximately 120 km from Waiinu Beach in the north of the Region to Waikawa Beach in the south, is characterised by narrow sandy beaches backed by sea cliffs in the north, and sandy beaches backed by a dynamic dune system from Wanganui southwards. The sand country comprises some 79,000 ha (3.6% of the Region's area). The three main sources of sand are greywacke from the Tararua and Ruahine ranges, volcanic sediment from the Central Volcanic Plateau and sediment from the Whanganui Basin. The sediments are carried to the coast by the rivers and then tend to move east and southwards along the coast. The prevailing wind has blown this sand inland, forming an extensive network of dunes.



There are several estuaries of varying sizes. The 200 ha Manawatu estuary is the largest and is a wetland of international significance under the RAMSAR agreement. Most of these estuaries have extensive tidal flats and are specifically noted as habitat for birds, including many migratory species. The mouths of most of the rivers are constantly changing, moving south, forming spits as sediment is carried down the coast and then breaking through further north following floods.

This coast is a high energy shore, with wave heights commonly exceeding 3 metres. The dominant climatic feature is the wind, which is predominately westerly, and which has had a major effect on the physical shape of the west

The east coast, which covers approximately 40 km from Cape Turnagain south to the Owahanga River mouth, is characterised by rocky platforms backed by cobbled or sandy beaches dotted with boulders. The landward coastal flats are narrow, backed by hills, and there is an area of sedimentary cliffs at Cape Turnagain. The tidal range along this coast is 1.2 metres.

The river mouths are dynamic and contribute large quantities of sand, gravel and silt to the seabed. The estuaries and tidal flats support a wide range of bird and fish life. The rocky coast provides good habitats, allowing for commercial fishing of paua, crayfish and kina. There is also a substantial finfish resource offshore.

#### 8.1.3 **Future Approach**

In the past 10 years there has been a low demand for activities in the CMA. As at 2005, there were only 46 current coastal permits (approximately 1% of all current consents administered by the Regional Council). The area of the Region landward of MHWS has not faced the same level of development pressure that has been experienced in most other regions of New Zealand.

The main resource management issues relating to the CMA include the following:

- As more people come to the Region for work and recreation, there are increasing demands for public access, and increasing pressures on important values in estuaries and along the open coast, such as impacts on birdlife and fish habitat.
- There needs to be better integration between activities happening on land and those happening in the CMA, to ensure consistent and compatible management. Subdivision, land use intensification and the management of dunes are addressed through district plans and Chapter 4 of this Plan.
- Degraded coastal water quality and loss of biological diversity have resulted from land development and, more particularly, the efflux of contaminants from rivers, which often renders coastal water quality unsuitable for contact recreation.
- There are new demands and technologies, such as aquaculture and advancing technologies for electricity generation (tidal, wave and ocean currents and offshore wind), that are seeking to locate in the CMA.

The regulatory approach used is consistent with the low level of demand for activities within the CMA. The key objective in managing the CMA is to ensure that the natural character and ecosystem processes are maintained while still allowing activities and development. This chapter also recognises that most adverse effects in the CMA result from landward uses and development. Part II of this Plan (which includes all regional rules) seeks to ensure that activities are regulated in a consistent manner across the boundary of the CMA as much as possible.



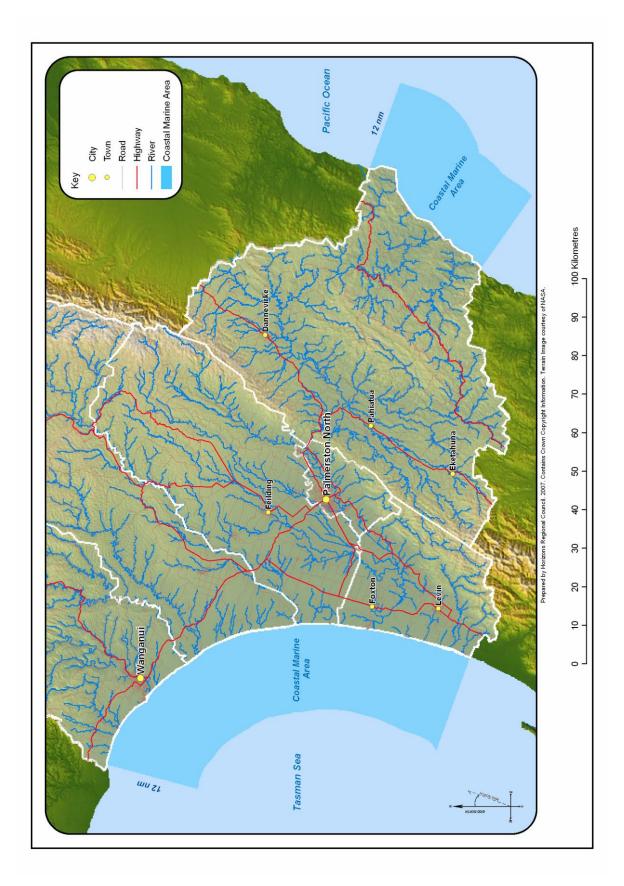


Figure 8.1 Coastal Marine Area for the Manawatu-Wanganui Region.



# 8.2 Significant Resource Management Issues

#### Issue 8-1: Integrated management of the coastal environment

Integration of different agencies' management frameworks across the landward boundary of the CMA is critical for the sustainable management of the coast and the protection of natural character. There is a need to recognise that activities landward of MHWS impact on the quality of the CMA. There are also some activities that should be managed in the same manner irrespective of their location within or outside of the CMA.

# Issue 8-2: Appropriate protection, use and development in the CMA

Some activities rely on a coastal location to operate and need to be located in the CMA - for example, a port. Activities in the CMA, including aquaculture or renewable energy generation, have the potential to create benefits but also the potential to cause adverse effects, if not managed appropriately. Generally, the CMA is valued and enjoyed by people primarily for its natural character, open space, amenity, tikanga Māori and recreation values. In managing activities it is important to ensure that these qualities of the coast are retained and that the integrity of natural coastal processes (such as waves, currents and sand movements) is provided for.

#### Issue 8-3: Water quality

Water quality affects the life-supporting capacity of the CMA as well as people's enjoyment of the CMA. The water entering the CMA from rivers, including streams, has a significant impact on the quality of water in the CMA.

# 8.3 Objectives

#### Objective 8-1: Integrated management of the coastal environment

Achieving integrated management of the coastal environment by:

- (a) providing a consistent, efficient and integrated management framework, and
- (b) recognising and managing the *effects*^ of *land*^ uses and freshwater-based activities (including *discharges*^) on the CMA.

#### Whāinga 8-1: Te whakahaere kōmitimiti i te taiao takutai moana

Ka tutuki pai te whakahaere kōmitimiti i te taiao takutai moana mā te:

- (a) whakarato i tētahi anga whakahaere kōmitimiti whai auautanga, whai tikanga whakamau hoki, me te
- (b) aro atu, te whakahaere hoki i ngā pānga o te whakamahi whenua me ngā ngohe ā-wai māori (ehara tonu ko ngā rukenga parakaingaki) ki runga i te CMA.

# Objective 8-2: Appropriate protection, use and development in the CMA

Managing the CMA as a public area that is fundamental to the social, economic and cultural wellbeing of the people in the Region, while ensuring that the characteristics and Values listed in Tables I.1, I.2 and I.3 of Schedule I and natural character are protected from inappropriate use and development.



# Whāinga 8-2: Te whakamarumaru, te whakamahi, me te whakaahu tika i roto i te CMA

Ka whakahaeretia te CMA hei wāhi tūmatanui e whakahirahira ana ki te oranga pāpori, ohanga, ahurea hoki o ngā tāngata kei roto i te Rohe — e hua ai hoki ka whakamarumarutia ngā āhuatanga me ngā Ūara ka whakarārangitia ki Tables I.1, I.2, me I.3 o Puka Āpiti I me te āhuatanga māori — i te whakamahi, te whakaahu rānei kāore i te tika.

#### Objective 8-3: Water quality

Water<sup>^</sup> quality in the CMA is managed in a manner that has regard to the Values set out in Schedule I: Part C so that:

- (a) water<sup>^</sup> quality is maintained in those parts of the CMA where the existing water<sup>^</sup> quality is sufficient to support the water<sup>^</sup> management Values of the relevant area in the CMA set out in Tables I.2 and I.3 and the water<sup>^</sup> quality targets in Tables I.4 to I.7 of Schedule I, and
- (b) water^ quality is enhanced in those parts of the CMA where the existing water^ quality is not sufficient to support the water^ management Values of the relevant area in the CMA set out in Tables I.2 and I.3 and the water^ quality targets in Tables I.4 to I.7 of Schedule I.

#### Whāinga 8-3: Te kounga o te wai

Ka āta whakahaeretia te kounga o te wai i roto i te CMA me te aro atu ki ngā Ūara i whakatakotoria i roto i Puka Āpiti I: Wāhanga C kia:

- (a) tiakina tonutia ai te kounga o te wai i roto i aua wāhanga o te CMA he pai tonu te kounga o te wai kei reira i nāianei hei taunaki i ngā Ūara whakahaere wai o te wāhi whai pānga kei roto i te CMA e whakatakotoria ana i roto i ngā rārangi e kīia nei ko Tables I.2 me I.3, me ngā keunga kounga wai kei roto i ngā rārangi e kīia nei ko Tables I.4 ki I.7 o Puka Āpiti I.
- (b) whakarākaitia ake te kounga o te wai kei roto i aua wāhanga o te CMA kāore i te pai te kounga o te wai kei reira i nāianei hei taunaki i ngā Ūara whakahaere wai o te wāhi whai pānga kei roto i te CMA e whakatakoto ana i ngā rārangi e kīia nei ko Tables I.2 me I.3, me ngā keunga kounga wai kei roto i ngā rārangi e kīia nei ko Tables I.4 ki I.7 o Puka Āpiti I.

#### 8.4 Policies

#### 8.4.1 Integrated management of the coastal environment

## Policy 8-1: Integrated management of the coastal environment

Integrated management of the coastal environment must be sought, including through:

- (a) provisions in this chapter and the provisions of the Regional Coastal Plan (Chapter 18 and Schedule I as well as Chapters 11, 12 and 19 and the relevant definitions in the Glossary),
- (b) provisions in other chapters of this Plan address water\(^\) quality, erodible land\(^\) (including the coastal foredune\(^\)), natural hazards\(^\), indigenous biological diversity\(^\), landscapes and natural character, air discharges\(^\), and infrastructure\(^\), energy and waste\(^\) (including hazardous substances\(^\)),



- provisions in district plans^ that identify the landward extent of the coastal (c) environment, sustainably manage land use activities and, where appropriate, avoid subdivisions or development in any existing or potential hazard risk area, protect coastal dunes and avoid sprawling subdivision along the coastal edge, and
- joint initiatives where resource management issues arise and are not (d) addressed within the existing management frameworks of the respective regional plans^ and district plans^.

#### 8.4.2 Appropriate protection, use and development in the CMA

#### Policy 8-2: Activity Management Areas

Activities in the CMA must be managed using Activity Management Areas.

The Activity Management Areas comprise:

- (a) a Port Activity Management Area for the purposes of enabling the efficient and practical operation\* of Wanganui Port and associated industries and boating facilities, as shown in Schedule I: Part B, by providing for activities which:
  - facilitate the operation\* of the Wanganui Port and marina, (i) including restricting public access where it is necessary for safety
  - (ii) involve maintenance dredging and associated disposal to maintain a navigational depth
  - (iii) involve the maintenance\*, upgrade\* or extension of existing structures^.
- various Protection Activity Management Areas for the purposes of (b) protecting the ecological and other important characteristics within each specified Area (as shown in Table I.1 of Schedule I: Part B). These Areas are sensitive and must be protected from adverse effects\u00e4 of activities other than activities which:
  - (i) appropriately enable or restrict public access, or
  - (ii) are essential for public safety, or
  - are intended to restore or conserve a site\* or characteristics within (iii) a site\*. or
  - have no more than minor adverse environmental effects\(^\) on the (iv) characteristics to be protected in each Protection Activity Management Area.
- (c) a General Activity Management Area for the purposes of managing activities in all areas other than areas covered by the Port Activity Management Area and Protection Activity Management Areas. purpose of the General Activity Management Area is to ensure that adverse effects\(^\) are avoided as far as reasonably practicable and, where they cannot be avoided, are remedied or mitigated.

#### Policy 8-3: Aquaculture Management Areas

Aquaculture activities^ in the CMA require the establishment of an aquaculture management area by way of a notified *change*<sup>^</sup> to Chapter 18 of this Plan.



#### Policy 8-4: Appropriate use and development

Any use or development in the CMA must:

- have a functional necessity to be located in the CMA, (a)
- (b) facilitate restoration or rehabilitation of natural features where reasonably practicable, and
- avoid, as far as reasonably practicable, any adverse effects on the (c) following important values:
  - any characteristic listed in Table I.1 in Schedule I: Part B for each Protection Activity Management Area
  - elements and processes that contribute to the natural character (ii) and open space characteristics of the CMA
  - the landscape and seascape elements that contribute to the (iii) natural character of the CMA
  - areas of significant indigenous vegetation and significant habitats (iv) of indigenous fauna, and the maintenance of indigenous biological diversity^
  - the intrinsic values of ecosystems (v)
  - (vi) the natural integrity and functioning of physical processes (including recognition of sea level rise\*)
  - (vii) historic heritage^.

When avoidance is not reasonably practicable, the adverse effects\(^\) must be remedied or mitigated.

#### Policy 8-5: **Public access**

- (a) Activities in the CMA must be established and operated in a manner which readily provides for public access. Public access must be restricted only where necessary for commercial, safety, cultural or conservation purposes, or to ensure a level of security appropriate for activities authorised by a resource consent^.
- Public access in the CMA for recreational purposes must be provided in a (b) manner that protects bird habitat areas, estuarine plant communities and dune stability.

#### 8.4.3 **Water Quality**

#### Policy 8-6: Water quality

For the purposes of maintaining or enhancing water quality, the CMA is divided into a Seawater Management Zone\* and various Estuary Water Management Subzones\* which are described in Schedule I: Part C and shown in Part A. Water^ in the CMA must be managed in a way which:

- has regard to the Values and water quality targets for the Seawater (a) Management Zone\* and Estuary Water Management Sub-zones\*, as set out in Schedule I: Part C
- applies Policies 5-3 (ongoing compliance where water quality targets are (b) met), 5-4 (enhancement where water quality targets are not met), 5-9 (point source discharges to water and 5-11 (human sewage discharges^) to the CMA as if any reference to water^ in those policies is a reference to water in the CMA.



# 8.5 Methods

Managing activities in the CMA largely involves a regulatory approach. Chapter 18 in Part II of this Plan contains regional rules relating to the activities described in this chapter. The key non-regulatory methods which the Regional Council will pursue are outlined below.

Method 8-1	Coastal Management Forum
Description	Convene and facilitate a coastal management forum to address issues on an "as-required" basis. The coast is a complex area to manage and not all issues can be addressed through this Plan. The aim of the forum is to facilitate integrated solutions to problems arising in coastal areas. The problem may occur across the whole Region or it may require a site-specific solution. Emphasis is on seeking a joint solution.
Who	The Regional Council will convene the meetings and, in conjunction with the Department of Conservation and Territorial Authorities, will identify issues that need to be addressed. Other key stakeholders, such as the Ministry of Fisheries, $hap\bar{u}^*$ and $iw\bar{i}^*$ , coast care groups, district health boards, conservation groups, infrastructure and energy interests or other interested parties, will also be invited to participate depending on the issue being addressed.
Links to Policy	This method implements Policies 8-1 and 8-2.
Targets	Year 1: Forum to meet six-monthly to identify priority issues facing the Region, and seek to develop joint actions for addressing any issues raised. Issues requiring joint management may include:  • vehicles on beaches and dunes  • land use pressures on coastal resources  • illegal dumping of waste  • restrictions on shellfish gathering or bathing due to water quality reasons  • restoration work.
	Year 2 onwards:  Forum to continue six-monthly meetings and to undertake actions through the respective member agencies. Identifying resources (funding and people) needed to resolve issues will be required.

Method 8-2	Coast Care	
Description	The Regional Council will work with the Department of Conservation, communities and landowners to restore and enhance the natural character of the coastal environment and promote sustainable land use practices, through establishing a regional coast care coordinator to support and resource coast care groups.	
Who	The Regional Council will seek funding from a range of interested agencies to provide the funding needed to employ a regional coast care coordinator.	
Links to Policy	This method implements Policies 8-1, 8-2, 8-4 and 8-5.	
Targets	Years 1-5:  Establish and develop working relationships with existing coast care groups, identify priorities for any new coast care groups, and help with resourcing of groups.  Establish working links with land care groups for areas inland of MHWS.	





Method 8-2	Coast Care
	Provide advice on dune stabilisation and hazard risks.
	Years 5-10:  Work with groups to achieve improvements to the coastal environment including weeding, planting, wetland enhancement, dune lake enhancement, stream enhancement, litter removal, monitoring of beach quality and monitoring of vehicle use on beaches.

Method 8-3	Vehicle Bylaw
Description	The Regional Council recognises that vehicles on dunes and beaches is an increasing issue, particularly for the Region's west coast. This issue cannot be successfully managed through the RMA or consent processes. It is considered that a bylaw should be developed and applied consistently across the west coast, to control the future use of vehicles on dunes and beaches.
Who	The Regional Council will take a lead role in convening the Territorial Authorities and Police to discuss the appropriate provisions to be included in a "model" bylaw.
Links to Policy	This method implements Policies 8-1, 8-2 and 8-5.
Targets	Year 1:  Encourage Territorial Authorities to extend their territorial boundary down to mean low water spring to enable Local Government Act bylaws to apply to the whole of the foreshore area.  Years 2-5:  Each Territorial Authority to adopt a bylaw for their district to control
	vehicles on dunes and beaches. Seek commitment from Police to implement these bylaws, in conjunction with Territorial Authorities.  • Review effectiveness of bylaws after five years.

Method 8-4	Coastal Information
Description	This programme will support the collection of further information on biology, coastal processes, historic heritage and significant <i>sites*</i> and values within the CMA. This will enable refinement of the Protection Activity Management Areas and build upon the existing coastal information.
Who	The Regional Council, in conjunction with the Department of Conservation, will undertake to scope this work area. This will include a focus on natural features, historic heritage and Māori cultural information where appropriate. In guiding future development, it will also contribute significantly to a planning constraints map. The Regional Council is developing a monitoring strategy that will include coastal information. The Regional Council will seek to work with and involve other relevant agencies in this programme.
Links to Policy/ Method	This method implements Policies 8-2, 8-3, 8-4, 8-6, 6-11, 6-12 and Method 6-10.
Targets	Years 1-3:  Identify scope (including costings) of further information required and appropriate methods for collecting.  Years 3-10:  Progressively aim to improve the coastal information base.



Method 8-5	Coastal Advocacy
Description	This area of work is wide-ranging and includes responding to proposals from other agencies, responding to activities landward of MHWS that could impact on the CMA, and ensuring coastal activities are undertaken in a way that is compatible with the management framework set out in the One Plan. The method may also involve working with other agencies, such as the Department of Conservation, on special projects.
Who	The Regional Council will undertake this work on an "as needs" basis. As issues arise in the Region that affect the coast, the Council will take an active advocacy role and work with other relevant agencies as appropriate.
Links to Policy	This method implements Policies 8-1, 8-2, 8-3, 8-4, 8-5 and 8-6.
Targets	Ongoing as issues arise.

# 8.6 Anticipated Environmental Results

Anticipated Environmental Result	Link to Policy	Indicator	Data Source
By 2017, water quality in the open sea is generally suitable for the specified Values at all times. Water quality in estuary areas is no worse than it was prior to this Plan becoming operative.	Coastal Policy: 8-6	<ul> <li>Measured water quality compared to water quality targets in Schedule I, especially measures for "safe swimming", "safe food gathering" and "aquatic ecosystem health"</li> <li>Incidents where water quality in the CMA is confirmed as unfit for use</li> </ul>	<ul> <li>Regional         Council's state of environment water quality monitoring programme     </li> <li>Regional Council's incidents database</li> </ul>
Except for change because of natural processes, or as a result of activities authorised by this Plan or a resource consent, by 2017 the characteristics/values of outstanding landscapes and natural features identified in the CMA (Schedule F) will be in the same state as (or better than) before this Plan became operative.	Coastal Policies: 8-1, 8-2, 8-3, 8-4 and 8-5	Number of Schedule G outstanding landscapes and natural features in the CMA where identified characteristics/values have been damaged	Outstanding landscapes and natural features characteristics/ values assessment survey     Regional Council's incidents database     Regional Council's SED (Subdivision Enquiry Database)     Territorial Authority district plans     Territorial Authority consent decisions
By 2017, there will be a net reduction in the damage to property or infrastructure as a result of coastal erosion, the effects of sandstorms or sea level rise* in the	Coastal Policies: 8-1, 8-4	Coastal erosion/accretion     Confirmed incidents of property or infrastructure damage	Regional     Council's state of     environment land     monitoring     programme



Link to Policy	Indicator	Data Source
		<ul> <li>Regional Council and Territorial Authority incidents databases</li> </ul>
		<ul> <li>Land use mapping</li> </ul>
		<ul> <li>Sustainable Land         Use Initiative implementation reports (two-yearly)     </li> </ul>
	Link to Policy	Link to Policy Indicator

# 8.7 Explanations and Principal Reasons

This section provides an explanation of the policies in Chapter 8 (as required by s62(1)(d) RMA) and the principal reasons for adopting the objectives, policies and methods in this chapter (as required by s62(1)(f) RMA).

#### 8.7.1 Integrated management of the coastal environment

Objective 8-1, Policy 8-1 and the associated methods recognise the need for integrated management to facilitate better management across the jurisdictional line of MHWS. The coastal environment is a complex area to manage and not all issues can be addressed by any one agency.

The coast is a dynamic environment and the landward margins are intimately linked with natural processes such as waves, sediment and weather. Activities landward of MHWS significantly impact on the quality of the CMA through, for example, land use activities, public access and recreational activities, and economic or social uses of an area. Other chapters of this Plan, and provisions in district plans, will assist in managing the consequential effects of landward activities on the CMA.

## 8.7.2 Appropriate use and development in the CMA

Objective 8-2, Policies 8-2, 8-3, 8-4, 8-5 and 8-6 and the associated methods set out a framework for protecting aspects of the CMA while enabling people to use and enjoy the area. In accordance with the RMA, management of the CMA is predominately by way of a regulatory approach. The RMA and the NZCPS also identify a range of matters which are of national importance and require protection from inappropriate use and development. The primary tool used to achieve this is zoning. Three Activity Management Areas have been created: Protection, Port and General Activity Management Areas. Although many of the rules are common to the entire CMA, Policies 8-4, 8-5 and 8-6 in particular will be used in any consent decision-making process. Some rules are also specific to an Area.

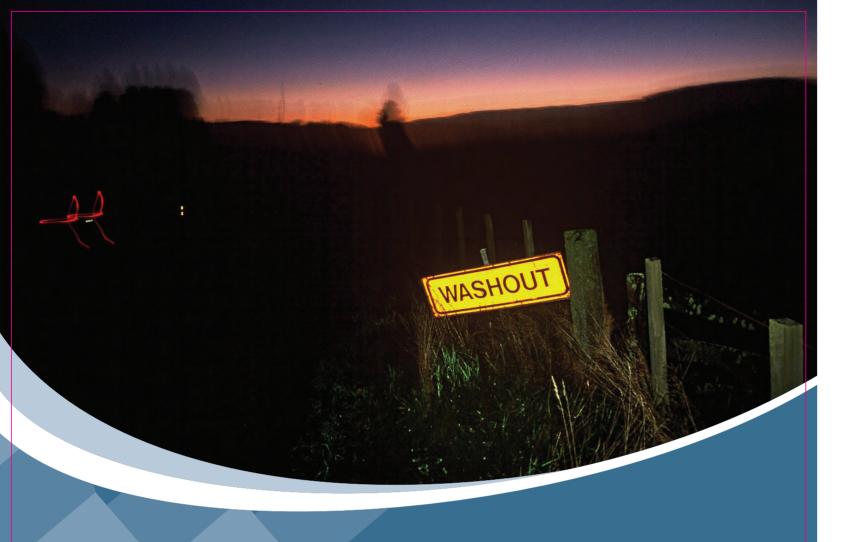
## 8.7.3 Water quality

Objective 8-3, Policy 8-6 and the associated methods (information and advocacy) set out a framework for maintaining and enhancing water quality in the CMA. Water quality in the CMA should be managed consistently with the approach taken in Chapter 5 for freshwater resources. *Water Management Zones\** and *Subzones\** have been used to recognise the difference in water quality between estuary areas and the open sea. Water quality targets have been set for each



Water Management Zone\* or Sub-zone\* (in Schedule I: Part C) to act as a guide to decision-makers.





# CHAPTER 9: Natural Hazards

Outlines the regionally significant issues for natural hazard management within the Region, and sets out the objectives, policies and methods that derive from these issues.



# 9 Natural Hazards

# 9.1 Scope and Background

This chapter establishes an overall framework for natural hazard management under the RMA. It also sets out the division of responsibilities between the Regional Council and Territorial Authorities for natural hazard management under the RMA.

The Region is vulnerable to a number of natural hazards. The principal threat is from flooding. Other natural hazards include earthquakes, tsunami, volcanic action and land subsidence. Climate change is likely to influence the frequency, scale or intensity of atmospherically influenced natural hazards such as flooding. The vulnerability of the Manawatu-Wanganui Region to natural hazard events is increased because of human activity such as:

- land disturbance\* and vegetation clearance\*, particularly on hill slopes in a Hill Country Erosion Management Area\*, which can increase the erosion risk and the amount of sediment in the flood channel, in turn increasing the intensity of, and effects from, floods and reducing the effectiveness of mitigation measures such as stopbanks
- the increasing number of people living in hazard-prone areas (including associated infrastructure) such as along the coast and adjacent to rivers, which increases the damage potential from natural hazard events, putting lives at risk. It can also reduce the effectiveness of existing mitigation measures such as stopbanks.

Most of the Regional Council's operational work on natural hazard management is carried out under the Soil Conservation and Rivers Control Act 1941, which provides for the establishment of river and drainage schemes. Emergency response, community readiness, recovery planning and research into natural hazard risks, is carried out under the Civil Defence and Emergency Management Act 2002. These roles are implemented through the Civil Defence and Emergency Management Group Plan rather than through the One Plan. The role of the Regional Council and Territorial Authorities under the RMA is primarily one of risk reduction to ensure that resource use activities do not exacerbate natural hazard risks or impede natural hazard mitigation works, thereby ensuring that developments do not put people or property in places or circumstances of undue risk.

The approach to managing natural hazards in this Plan is to:

- (a) set out a clear regional framework for natural hazard management,
- (b) improve clarity around the respective roles of the Regional Council and Territorial Authorities under the RMA,
- (c) discourage future residential development and placement of *critical* infrastructure\* in areas prone to natural hazard events, particularly areas at high risk of flooding, and
- (d) continue to provide information to Territorial Authorities and the general public with regard to natural hazards.

#### **Flooding**

Flooding occurs frequently in the Region. The impacts of floods are mostly localised, but the likelihood of a major flood occurring in any year is high.



The February 2004 storm event caused widespread flooding. Recovery from that event will span many years. It showed only too well the problems that can arise from the combination of such a large storm event with *vegetation clearance\** on hill slopes and residential settlements and infrastructure on flood-prone or unstable land. The resulting sedimentation in water bodies and erosion on land has impacted on infrastructure, people, land use and the natural environment.

Today over half of the Region's population lives on the floodplains of the major rivers. The establishment of river and drainage schemes (with the associated construction of stopbanks, floodgates, spillways and retention dams) has been an integral part of the development of the Region. Current schemes undergo regular review and assessments are undertaken for areas that could be included in these schemes or established as new schemes. More information on minimising the effects of erosion and flooding on the beds of rivers and lakes can be found in Chapter 5.

#### **Erosion**

Hill country erosion and coastal erosion are both of concern, as human activity has the potential to greatly increase erosion risk and associated impacts on people and property. Hill country erosion is addressed in Chapter 4.

#### Other natural hazards

Other natural hazards that occur less frequently include earthquakes, volcanic action, land subsidence and coastal environment hazards (including tsunami, storm surge and sea level rise\* hazards). Despite their low frequency, they have potential to put the Region at risk. Although little is known of the risks of these hazards, current research, such as the Regional Council's tsunami hazards study, will enable better future planning. Due to limited knowledge of the influence climate change may have on some natural hazard events, a precautionary approach to establishing or intensifying land use activities in areas potentially subject to natural hazards is required. Potential impacts will continue to be dealt with by contingency planning, such as the regional civil defence response team and insurance schemes, until further research can be undertaken.

# 9.2 Significant Resource Management Issue

#### Issue 9-1: Effects of natural hazard events

Natural hazard events can adversely affect people, including their social, economic and cultural wellbeing, and the natural and physical resources they rely on, such as property and infrastructure. In particular:

- (a) development can exacerbate the risks from natural hazards, particularly flooding and coastal hazards, by placing more people, property and infrastructure in hazard-prone areas and by reducing the effectiveness of existing hazard mitigation measures such as stopbanks.
- (b) climate change is likely to cause the hydrological cycle to become more extreme, resulting in an increase in the intensity and frequency of hazards such as droughts, heavy rainfall, cyclones and storm surges, and
- (c) predicted sea level rise\* is likely to increase the risk of inundation and damage to communities and infrastructure in coastal areas during natural hazard events.



# 9.3 Objective

#### Objective 9-1: Effects<sup>^</sup> of natural hazard<sup>^</sup> events

The adverse *effects*<sup>^</sup> of *natural hazard*<sup>^</sup> events on people, property, *infrastructure*<sup>^</sup> and the wellbeing of communities are avoided or mitigated.

# Whāinga 9-1: Ngā pānga o ngā mea mōrearea o te ao tūroa

Ka parea, ka whakaitingia ngā pānga kino o ngā mea mōrearea o te ao tūroa ki te tangata, ngā rawa, ngā kaupapa o raro, me te oranga ōhanga o ngā hapori.

#### 9.4 Policies

# Policy 9-1: Responsibilities for natural hazard^ management

In accordance with s62(1)(i) RMA, *local authority*^ responsibilities for *natural hazard*^ management in the Region are as follows:

- (a) The Regional Council and *Territorial Authorities*<sup>^</sup> must be jointly responsible for:
  - (i) raising public awareness of the risks of *natural hazards*^ through education, including information about what *natural hazards*^ exist in the Region, what people can do to minimise their own level of risk, and what help is available.
- (b) The Regional Council must be responsible for:
  - (i) developing objectives and policies for Region-wide management of activities for the purpose of avoiding or mitigating *natural hazards*^,
  - (ii) developing specific objectives, policies and methods (including *rules*^) for the control of:
    - (A) all land use activities in the coastal marine area,
    - (B) erosion protection works that cross or adjoin mean high water springs,
    - (C) all *land*^ use activities in the *beds*^ of *rivers*^ and *lakes*^, for the purpose of avoiding or mitigating *natural hazards*^, and
  - (iii) taking the lead role in collecting, analysing and storing regional natural hazard^ information and communicating this information to Territorial Authorities^.
- (c) Territorial Authorities^ must be responsible for:
  - (i) developing objectives, policies and methods (including *rules*^) for the control of the use of *land*^ to avoid or mitigate *natural hazards*^ in all areas and for all activities except those areas and activities described in (b)(ii) above, and
  - (ii) identifying *floodways*\* (as shown in Schedule J<sup>1</sup>) and other areas known to be inundated by a 0.5% annual exceedance probability (AEP) flood event<sup>2</sup> on planning maps in *district plans*^, and controlling *land*^ use activities in these areas in accordance with Policies 9-2 and 9-3.

9-3

Flood event does not include the effects of stormwater which are managed by *Territorial Authorities*^ under different criteria including engineering, subdivision and design standards/manuals



One Plan - 2014

Schedule J is not a component of Part I – the Regional Policy Statement. It is a component of Part II – the Regional Plan.

#### Policy 9-2: Development in areas prone to flooding

- (a) The Regional Council and *Territorial Authorities*^ must not allow the establishment of any new *structure*^ or activity, or any increase in the scale of any existing *structure*^ or activity, within a *floodway*\* mapped in Schedule J unless:
  - (i) there is a functional necessity to locate the *structure*^ or activity within such an area, and
  - (ii) the *structure*^ or activity is designed so that the adverse *effects*^ of a 0.5% annual exceedance probability (AEP) (1 in 200 year) flood event<sup>2</sup> on it are avoided or mitigated, and
  - (iii) the *structure*^ or activity is designed so that adverse *effects*^ on the *environment*^, including the functioning of the floodway, arising from the *structure*^ or activity during a flood event<sup>2</sup> are avoided or mitigated,

in which case the structure<sup>^</sup> or activity may be allowed.

- (b) Outside of a *floodway*\* mapped in Schedule J the Regional Council and *Territorial Authorities*^ must not allow the establishment of any new *structure*^ or activity, or an increase in the scale of any existing *structure*^ or activity, within an area which would be inundated in a 0.5% AEP (1 in 200 year) flood event<sup>2</sup> unless:
  - (i) flood hazard avoidance\* is achieved or the 0.5% AEP (1 in 200 year) flood hazard is mitigated, or
  - (ii) the non-habitable structure^ or activity is on production land^, or
  - (iii) there is a functional necessity to locate the *structure*^ or activity within such an area,

in any of which cases the structure or activity may be allowed.

- (c) Flood hazard avoidance\* must be preferred to flood hazard mitigation.
- (d) When making decisions under Policies 9-2(a) and b(i) regarding the appropriateness of proposed flood hazard mitigation measures, the Regional Council and *Territorial Authorities*^ must:
  - (i) ensure that occupied structures have a finished floor or ground level, which includes reasonable freeboard, above the 0.5% AEP (1 in 200 year) flood level.
  - (ii) ensure that in a 0.5% AEP (1 in 200 year) flood event<sup>2</sup> the inundation of access between occupied structures<sup>^</sup> and a safe area where evacuation may be carried out (preferably ground that will not be flooded) must be no greater than 0.5 m above finished ground level with a maximum water velocity of 1.0 m/s, or some other combination of water depth and velocity that can be shown to result in no greater risk to human life, *infrastructure*<sup>^</sup> or *property*\*.
  - (iii) ensure that any more than minor adverse *effects*^ on the effectiveness of existing *flood hazard avoidance*\* or mitigation measures, including works and *structures*^ within River and Drainage Schemes, natural landforms that protect against inundation, and overland stormwater flow paths, are avoided,
  - (iv) ensure that adverse effects on existing *structures*^ and activities are avoided or mitigated,
  - (v) have regard to the likelihood and consequences of the proposed flood hazard mitigation measures failing,
  - (vi) have regard to the consequential *effects*<sup>^</sup> of meeting the requirements of (d)(ii), including but not limited to landscape and



- natural character, urban design, and the displacement of floodwaters onto adjoining *properties\**, and
- (vii) have regard to the proposed ownership of, and responsibility for maintenance of, the flood hazard mitigation measures including the appropriateness and certainty of the maintenance regime.
- (e) Within that part of the Palmerston North City Council district that is protected by the Lower Manawatu River Flood Control Scheme to a 0.2% AEP (1 in 500 year) standard, including the Mangaone Stream stopbank system, additional *flood hazard avoidance\** or mitigation measures will generally not be required when establishing any new *structure\** or activity or increasing the scale of any existing *structure\** or activity.
- (f) Despite Policy 9-2(d)(i) and (ii), within that part of the Wanganui central city bounded by Bates Street, Ridgway Street and Victoria Avenue, flood hazard mitigation measures will not be limited to considering flood height and flow but will include such methods as resilient construction and emergency management systems.
- (g) This policy does not apply to new critical infrastructure\*.

# Policy 9-3: New critical infrastructure\*

The placement of new *critical infrastructure*\* in an area likely to be inundated by a 0.5% AEP (1 in 200 year) flood event<sup>2</sup> (including floodways mapped in Schedule J), or in an area likely to be adversely affected by another type of *natural hazard*^, must be avoided, unless there is satisfactory evidence to show that the *critical infrastructure*\*:

- (a) will not be adversely affected by floodwaters or another type of natural hazard<sup>^</sup>.
- (b) will not cause any adverse *effects*^ on the *environment*^ in the event of a flood or another type of *natural hazard*^,
- (c) is unlikely to cause a significant increase in the scale or intensity of *natural hazard*^ events, and
- (d) cannot reasonably be located in an alternative location.

# Policy 9-4: Other types of natural hazards^

The Regional Council and *Territorial Authorities*<sup>^</sup> must manage future development and activities in areas susceptible to *natural hazard*<sup>^</sup> events (excluding flooding) in a manner which:

- (a) ensures that any increase in risk to human life, property or *infrastructure*^ from *natural hazard*^ events is avoided where practicable, or mitigated where the risk cannot be practicably avoided,
- (b) is unlikely to reduce the effectiveness of existing works, *structures*^, natural landforms or other measures which serve to mitigate the *effects*^ of *natural hazard*^ events, and
- (c) is unlikely to cause a significant increase in the scale or intensity of natural hazard<sup>^</sup> events.

#### Policy 9-5: Climate change<sup>^</sup>

The Regional Council and *Territorial Authorities*<sup>^</sup> must take a precautionary approach when assessing the effects of climate change and *sea level rise*<sup>\*</sup> on the scale and frequency of *natural hazards*<sup>^</sup> with regard to decisions on:



- (a) stormwater discharges^ and effluent disposal,
- (b) coastal development and coastal land^ use,
- (c) activities adjacent to rivers^,
- (d) water^ allocation and water^ takes,
- (e) activities in a Hill Country Erosion Management Area\*,
- (f) flood mitigation activities, and
- (g) managing storm surge.

# 9.5 Methods

The following are non-regulatory methods to implement the policies of Chapter 9:

Method 9-1	Hazards Research
Description	This method provides for the investigation, identification and mapping of those parts of the Region that are at risk from natural hazards, including seismic, volcanic, land subsidence, tsunami, flooding and coastal erosion hazards. It includes consideration of sea level rise* and climate change implications on those hazards.
	This information will be provided to Territorial Authorities for district planning purposes and to other interested parties, and maps will be updated as required.
Who	Civil Defence and Emergency Management Group, Regional Council, Territorial Authorities and research institutes.
Links to Policy	This method implements Policies 9-1, 9-3 and 9-4.
Target	Hazards are mapped by 2010 and updated as required.

Method 9-2	Areas Prone to Flooding Research
Description	A Region-wide study of areas prone to flooding, including consideration of sea level rise* and climate change implications, will be carried out to update flood maps and information in order to assist Territorial Authorities in the development of district plans, and the Regional Council's advice service.
Who	Civil Defence and Emergency Management Group, Regional Council, and research institutes.
Links to Policy	This method implements Policies 9-1, 9-2, 9-3 and 9-5.
Target	Hazards are mapped by 2010 and updated as required.

Method 9-3	Natural Hazard Information and Advice
Description	The Regional Council will provide Territorial Authorities and other interested parties with up-to-date natural hazard information to assist in the assessment of land development consent applications, particularly subdivisions.
Who	Regional Council.
Links to Policy	This method implements Policies 9-1, 9-2, 9-3, 9-4 and 9-5.
Target	Ongoing advice to Territorial Authorities and other interested parties.



Method 9-4	Public Information – Natural Hazards
Description	Easily accessible information will be developed and provided to increase public awareness of the risks of natural hazards, including earthquake, volcanic action, land subsidence, tsunami, flooding and coastal erosion, including consideration of sea level rise* and climate change implications.
	Up-to-date natural hazard information will be provided to the general public and other interested parties (for example, advance warning flood and lahar systems and civil defence literature), together with advice on appropriate options for avoiding or mitigating natural hazards.
Who	Civil Defence and Emergency Management Group, Regional Council, Territorial Authorities, research institutes and other relevant agencies.
Links to Policy	This method implements Policies 9-1, 9-2, 9-3 9-4 and 9-5
Target	Information provided via website and available in paper form by 2010.

# 9.6 Anticipated Environmental Results

Anticipated Environmental Result	Link to Policy	Indicator	Data Source
By 2017, the risk to people, property and <i>critical infrastructure</i> * will be the same as or less than before this Plan became operative.	Natural Hazards Policies: 9-1, 9-2, 9-3, 9-4 and 9-5  Land Policies: 4-1, 4-2 and 4-3  Water Policies: 5-24 and 5-26	<ul> <li>Number of new dwelling houses in areas prone to flooding consistent with Policy 9-2</li> <li>Number of incidents where activities are affecting schemes, especially stopbanks</li> <li>Natural hazard information shared with Territorial Authorities and interested parties</li> <li>District plans incorporating hazardous areas on planning maps and associated regulation of land use in those areas</li> </ul>	<ul> <li>Territorial Authorities</li> <li>Regional Council's Operations Group maintenance records</li> <li>Regional Council's compliance database</li> <li>Regional Council's incidents database</li> </ul>
By 2017, people will be more aware of the risks of natural hazards in the Region and how to cope with them than they were before this Plan became operative.	Natural Hazards Policies: 9-1, 9-2, 9-3, 9-4 and 9-5	<ul> <li>Public perception</li> <li>Number of requests for information</li> <li>District plans incorporating hazardous areas on planning maps and associated regulation of land use in those areas</li> </ul>	<ul> <li>Customer surveys</li> <li>Subdivision Enquiry Database (SED)</li> </ul>

# 9.7 Explanations and Principal Reasons

Objective 9-1, Policies 9-1 to 9-5 and the methods above set out a regional framework for avoiding or mitigating the adverse effects of natural hazard events on communities, infrastructure and the natural environment.

Policy 9-1 clarifies the respective roles of the Regional Council and Territorial Authorities as required by s62 RMA. Policy 9-1 largely continues the delineation





of responsibilities under the former Regional Policy Statement. The Regional Council has taken on the role of setting a regional framework for natural hazard management, while allowing decisions on most land use activities to be made by Territorial Authorities.

Policy 9-2 targets floodways and areas prone to flooding, as flooding is the most significant natural hazard in the Region. Areas prone to flooding (including the "floodable area" as in Figure J:2) are defined as those areas that would be inundated by a 0.5% AEP (1 in 200 year) flood event<sup>2</sup>. This is a change from the previously used standard for delineating areas prone to flooding of a 1% AEP (1 in 100 year) flood event<sup>2</sup>, in order to take into account the likely effects of climate change. Policy 9-2 generally seeks to avoid residential development and other new activities in areas likely to be affected by flooding, due to the risks to human life and property. It is recognised, however, that some activities have a functional necessity to be located in areas prone to flooding (Policy 9-2(a) and Policy 9-2(b)), or that mitigation for dwellings and other activities (for example, access in or out of areas prone to flooding and building design) can be put in place to avoid any increase in impacts of floods (Policy 9-2(d)(i) and (ii)).

Policy 9-4 sets up the general management regime for other types of natural hazards. Hazard avoidance is preferred to hazard mitigation because of the impacts on human life, property and infrastructure. Avoiding all hazards is difficult, however, because of their infrequency and the widespread nature of their effects.

Policies 9-2, 9-3 and 9-4 also include provisions seeking to ensure that the effectiveness of existing hazard mitigation measures is not undermined by future activities.

Policy 9-3 seeks to ensure that *critical infrastructure\** is not disabled by natural hazard events, by avoiding the placement of *critical infrastructure\** in areas prone to natural hazards. The policy recognises that in some cases this is unavoidable – for example, roading and gas supplies in coastal areas regardless of tsunami risk, and infrastructure in settlements located on liquefaction zones.

Policy 9-5 seeks to ensure that the implications of climate change are considered as appropriate.





# CHAPTER 10: Administration

Defines our approach to administering the Plan including monitoring, review and cross boundary issues.

# 10 Administration

This chapter details how the Regional Council will deal with some of its administrative responsibilities under the RMA.

# 10.1 Cross-boundary Issues

Ruapehu, Wanganui, Rangitikei, Manawatu, Tararua and Horowhenua districts and Palmerston North City are all contained within the Region, along with small parts of Waitomo, Stratford and Taupo districts. The Regional Council also shares boundaries with Greater Wellington Regional Council, Hawke's Bay Regional Council, Taranaki Regional Council and Environment Waikato.

The environmental effects of some resource uses in the Region's catchments and coastal marine area are experienced by more than one local authority. This can happen when:

- a *property*\* straddles a boundary between local authorities, for example, when a dairy shed located in one local authority discharges *waste*\* into another, or
- the effects of an activity cross district council boundaries for example, when hill country erosion in one district adversely affects water quality in the district downstream, or
- an activity crosses Regional Council boundaries for example, water is taken and diverted from the Region for electricity generation and discharged into the Environment Waikato Region, or
- a development such as a wind farm is visible across local authority boundaries within the Region or across Regional Council boundaries.

The Regional Council acknowledges that it needs to work with other organisations with resource management responsibilities or interests to achieve its objectives. These include:

- iwi authorities, hapū\* and iwi\*
- Department of Conservation
- Ministry for the Environment
- district health boards
- Fish & Game New Zealand
- Maritime Safety Authority
- Ministry of Fisheries
- Heritage New Zealand
- Royal Forest and Bird Protection Society of New Zealand
- non-governmental organisations including environmental, tourism and primary sector groups
- other Government departments.

In general, the Regional Council will deal with cross-boundary issues through consultation, collaboration and continuing to build relationships with other resource management organisations. Specific approaches include:

- (a) using the protocols for communication and coordination with Territorial Authorities outlined in the Triennial Agreement for the Manawatu-Wanganui Region
- (b) clearly defining the responsibilities of the Regional Council and Territorial Authorities for:
  - (i) maintaining indigenous biological diversity (refer Policy 6-1)



- (ii) managing coastal resources (refer Policy 8-1)
- (iii) managing natural hazards (refer Policy 9-1)
- (iv) managing hazardous substances (refer Policy 3-12)
- (c) with resource management organisations transferring functions to Territorial Authorities in the Region when this is agreed to be appropriate
- (d) providing Regional Council resources to manage the relationship between the Regional Council and Territorial Authorities within the Region
- (e) using the protocol for joint applications and hearings set out in the Horizons Regional Council Protocol Manual Consents Section
- (f) encouraging consultation and submissions from other resource management organisations to the Regional Council's planning documents
- (g) consulting with and making submissions to the planning documents of other resource management organisations
- (h) participating in Regional Council peer group forums
- (i) participating in other inter-agency forums where this will enhance relationships
- (j) working with adjoining Regional Councils to identify, discuss and address cross-boundary issues.

# 10.2 Plan Monitoring

The Regional Council will regularly check the effectiveness of the policies and methods in this Plan in achieving anticipated environmental results. This will be done every three years at the same time as reporting progress made by the community in achieving community outcomes for the Region. This amalgamation of reporting is logical because:

- (a) the anticipated environmental results in this Plan and the community outcomes developed for the Regional Council's Long-Term Council Community Plan (LTCCP) are very similar, and
- (b) there is a strong connection between the policies and methods in this Plan and the projects and targets identified in the LTCCP. The methods in this Plan are identified as projects in the LTCCP.

This means that information needed for plan effectiveness monitoring is almost identical to that needed to evaluate progress toward achieving community outcomes.

Monitoring and reporting on the effectiveness of this Plan will be based on the following process:

- evaluation of the Regional Council's Annual Reports and the policies and methods in this Plan to assess which policies and methods have been implemented,
- (b) evaluation of the LTCCP and Annual Reports to assess actual work done to implement this Plan compared to the intended level of work each year, including consent, compliance and environmental incident response activity,
- (c) evaluation of the results of environmental monitoring carried out under the Regional Monitoring Strategy to assess the condition and trends of the Region's environment, with an emphasis on those parts of the



environment where specific work has been done to make improvements. (Note that a state of the environment report or update will be required every three years to meet the information requirements of this process), and

(d) assessment of whether changes need to be made to policies and methods where there is slow or no progress toward achieving anticipated environmental results.

#### 10.3 Plan Review

The Regional Council intends to manage this Plan as a living document and to ensure its content is responsive to the performance of policies and methods in achieving anticipated environmental outcomes. Changes to the Plan will be sought when:

- (a) plan effectiveness monitoring identifies the need to enhance progress toward achieving anticipated environmental results, or
- (b) major resource management developments arise such as significant amendments to the RMA or the adoption of national policy statements or national environmental standards by Government that have major implications for the contents of this Plan, or
- (c) the results of new scientific work enhance this Plan and make plan provisions more certain for resource users.

Changes to Part I (the Regional Policy Statement) of this Plan may be started by a Minister of the Crown, the Regional Council or any District Council within, or partly within, the Region. Changes may also be triggered after a review of Part I of this Plan, by the provisions of the Marine and Coastal Area (Takutai Moana) Act 2011.

Changes to Part II (the Regional Plan) of this Plan may be requested by any person.

The process used to review and change this Plan is set out in Schedule I to the RMA.

A full review of Parts I and II of this Plan will be initiated by the Regional Council on the tenth anniversary of the Plan being made operative, unless there has been reason to do so earlier.

#### 10.4 Methods

The policies in Parts I and II of this Plan will be implemented through the exercising of the Regional Council's functions as a consent authority, through Territorial Authorities giving effect to Part I of the Plan, and through the methods of Part I of this Plan.

Method 10-1	Regional Plans and District Plans	
Description	Regional plans, regional land transport plans, regional pest management plans and district plans are methods to implement this Plan.	
Who	The Regional Council and Territorial Authorities.	
Links to Policy	Relevant objectives and policies in Part I.	
Targets	Ongoing.	



Method 10-2	Regional Plans and District Plans
Description  Regional plans (except for Part II of this Plan which effect to Part I) and district plans must be changed Part I – Regional Policy Statement of this Plan on the or change or variation to the regional plan or district five years, whichever is the earliest.	
Who	The Regional Council and Territorial Authorities.
Links to Policy	Relevant objectives and policies in Part I.
Targets	Within five years all regional plans and district plans must give effect to Part I of the Plan.





# Part II: Regional Plan

Controls on resource use

CHAPTER 11: Introduction to Regional Plan

# 11 Introduction to Regional Plan

#### 11.1 Introduction to Part II

As described at the outset, the One Plan comprises two parts.

**Part I** is the Regional Policy Statement under the Resource Management Act 1991 (RMA) for the Manawatu-Wanganui Region (Chapters 1 to 10, Schedule G and relevant definitions in the Glossary). It describes the significant resource management issues facing the Region and sets out the objectives, policies and methods for addressing those issues. Part I presents the overarching resource management framework for the Region.

**Part II** is the Regional Plan under the RMA for the Region (Chapters 11 to 19, relevant schedules and definitions in the Glossary). It includes the Regional Coastal Plan (Chapter 18 and Schedule I as well as Chapters 11, 12 and 19 and relevant definitions in the Glossary). The primary focus of Part II is on regional rules prescribing how activities controlled by the Regional Council under the RMA are regulated. Part II also contains policies designed to guide decision-making on resource consent applications.

The contents of Part II are as follows:

- **Chapter 11** (this chapter) provides a users' guide to the regional rules, describing how activities can be regulated under the RMA and explaining the tables used for presenting the rules in this Plan. Chapter 11 also provides a summary table of all the rules. This summary (in Section 11.1.4) is a useful starting point for anyone wishing to find the rule or rules for a particular activity.
- Chapter 12 contains objectives and policies relating to consent compliance processes, including consent durations, review and enforcement.
- Chapters 13 to 18 set out the rules for:
  - land use activities and certain activities in rare habitats\*, threatened habitats\* and at-risk habitats\* (Chapter 13);
  - discharges to land and water (Chapter 14);
  - discharges to air (Chapter 15);
  - takes, uses and diversions of water, and bores\* (Chapter 16);
  - the beds of rivers, lakes and artificial watercourses, and damming (Chapter 17);
  - activities in the coastal marine area (CMA) (Chapter 18).

The rules in each of these chapters are supported by objectives and policies setting out decision-making criteria or matters to be considered during resource consent processes.

Finally, Chapter 19 sets out provisions for financial contributions.



#### 11.1.1 Users' Guide to Rules

Chapters 13 to 18 of this Plan contain rules that allow, regulate or prohibit resource use activities. This users' guide provides an explanation of the classification of activities under the RMA and a guide to understanding how the rules are set out in the rule tables.

# 11.1.2 Activity Classifications

The various types of activities are described in s77A RMA. The information below is intended to provide a summary of the Act as it relates to rules in a regional plan.

- (a) If an activity is described as a **permitted** activity, it can be carried out without a resource consent provided it complies with the conditions, standards or terms, if any, specified in the rule.
- (b) If an activity is described as a **controlled** activity, a resource consent is required but the Regional Council must grant the consent if the conditions, standards and terms, if any, in the rule are met. However, the Regional Council may impose conditions on the consent relating to matters specified in the rule over which control is reserved.
- (c) If an activity is described as a **restricted discretionary** activity, a resource consent is required and the Regional Council will decide whether or not to grant the consent. However, the Regional Council's powers to decline a resource consent or to impose consent conditions are restricted to the matters specified in the rule over which discretion is restricted.
- (d) If an activity is described as a **discretionary** activity, a resource consent is required and the Regional Council will decide whether or not to grant the consent. This decision will depend upon how consistent the proposed activity is with provisions of the RMA and the objectives and policies set out in this Plan.
- (e) If an activity is described as a **non-complying** activity, a resource consent is required. Consent can only be granted if the Regional Council is satisfied that either the adverse effects on the environment will be minor, or the activity will not be contrary to the objectives and policies of this Plan.
- (f) If an activity is described as a **prohibited** activity, the activity is not allowed under any circumstances.



# 11.1.3 Guide to Rule Tables

The rules in this Plan are arranged in tables. Each table has five columns. After each table of rules, a "rule guide" may be included to explain how activities which are not included in the table, or which fail to comply with the provisions of a particular rule, are classified.

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion, Non-Notification
This column contains the rule number and rule title.	describes the	This column contains the classification of the activity - ie., permitted, controlled, restricted discretionary, discretionary, non-complying or prohibited.	This column contains conditions, standards and terms for permitted activities, controlled activities and 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 conditions, standards and terms amounts to a breach of the rule.	This column is relevant only for <b>controlled</b> activities and <b>restricted discretionary</b> activities. For controlled activities, this column contains the matters over which the Regional Council has reserved its control. For restricted discretionary activities, it contains the matters to which the Regional Council has restricted the exercise of its discretion.  This column also includes any statements about non-notification. The Regional Council is not obliged to make statements about non-notification: the Regional Council can simply choose to rely on the provisions of the RMA which describe when public notification is, or is not, required.



# 11.1.4 Summary of Rules

# Table 11.1Summary of regional rules:

Rule Number and Title	Classification		
CHAPTER 13: LAND USE ACTIVITIES AND INDIGENOUS BIOLOGICAL DIVERSITY			
Vegetation clearance*, land disturbance*, forestry * and cultivation* and indigenous biological diversity			
<ul> <li>13-1 Small-scale land disturbance*</li> <li>13-2 Large-scale land disturbance*, including earthworks</li> <li>13-3 Forestry*</li> <li>13-4 Cultivation*</li> <li>13-5 Vegetation clearance*</li> <li>13-6 Specified vegetation clearance*, land disturbance* or cultivation* in a Hill Country Erosion Management Area</li> <li>13-7 Vegetation clearance*, land disturbance*, cultivation* or forestry* that does not comply with Rules 13-2 to 13</li> <li>13-8 Some activities within at-risk habitats*</li> </ul>	-6 Discretionary Discretionary		
13-9 Some activities within rare habitats* and threatened habitats*	Non-complying Non-complying		
CHAPTER 14: DISCHARGES TO LAND AND WATER			
Agricultural Activities  14-1 Existing intensive farming land^ use activities  14-2 Existing intensive farming land^ use activities not complying with Rule 14-1  14-3 New intensive farming land^ use activities  14-4 New intensive farming land^ use activities not complying with Rule 14-3  14-5 Fertiliser*  14-6 Stock feed including feedpads*  14-7 Discharges^ of grade Aa biosolids* and compost* to production land^  14-8 Grade Ab, Ba or Bb biosolids*  14-9 Discharges^ of poultry farm litter* or pig farm litter* and associated temporary stockpiling  14-10 Offal holes and farm dumps  14-11 Farm animal effluent* including effluent from dairy sheds, poultry farms and piggeries	Controlled Restricted Discretionary Controlled Restricted Discretionary Permitted Permitted Permitted Restricted Discretionary Permitted Restricted Discretionary Permitted Permitted Controlled		
Discharges of Water	D:#d		
14-12 Discharges^ of water^ to water^	Permitted		
Human Effluent and Domestic Wastewater*  14-13 Existing discharges^ of domestic wastewater*  14-14 New and upgraded discharges^ of domestic wastewater*  14-15 Discharges^ of domestic wastewater* not complying with Rules 14-13 and 14-14	Permitted Permitted Restricted Discretionary		



Rule Number and Title	Classification
14-16 Human effluent storage and treatment facilities	Permitted
14-17 Discharges <sup>^</sup> of untreated human effluent* directly into surface water <sup>^</sup>	Prohibited
Stormwater	
14-18 Discharges^ of stormwater to surface water^ and land^	Permitted
14-19 Discharges^ of stormwater to surface water^ or land^ not complying with Rule 14-18	Restricted Discretionary
Dyes and Tracers	
14-20 Discharges <sup>^</sup> of dye and salt tracers	Permitted
Cleanfill Material*, Composting*, Landfills* and Solid Waste*	
14-21 Discharges <sup>^</sup> of cleanfill material*	Permitted
14-22 Composting* activities	Permitted
14-23 Closed landfills*	Controlled
14-24 Discharges <sup>^</sup> of persistent and harmful contaminants <sup>^</sup>	Non-complying
Discharges of Contaminants to Natural State Reaches and Sites of Significance - Aquatic	
14-25 Discharges <sup>^</sup> of contaminants <sup>^</sup> to a reach of a river <sup>^</sup> or its bed <sup>^</sup> with Schedule B Values of Natural State and Sites of Significance - Aquatic	Discretionary
Generic Discharge Rules	,
14-26 Discharges^ of contaminants^ to surface water^	Permitted
14-27 Discharges <sup>^</sup> of contaminants <sup>^</sup> onto or into land <sup>^</sup> that will not enter water <sup>^</sup>	Permitted
14-28 Discharges <sup>^</sup> of contaminants <sup>^</sup> onto or into land <sup>^</sup> that may enter water <sup>^</sup>	Permitted
14-29 Replacement consents for discharges <sup>^</sup> of water <sup>^</sup> and contaminants <sup>^</sup> to water <sup>^</sup> and land <sup>^</sup> from existing hydroelectricity schemes	Controlled
Default Discharge Rule	
14-30 Discharges <sup>^</sup> of water <sup>^</sup> or contaminants <sup>^</sup> to land <sup>^</sup> or water <sup>^</sup> not covered by other rules <sup>^</sup> in this Plan or chapter	Discretionary
CHAPTER 15: DISCHARGES TO AIR	
Agrichemicals* (Discharges into Air, Land and Water)	Permitted
15-1 Small-scale application of <i>agrichemicals</i> * 15-2 Widespread application of <i>agrichemicals</i> *	Permitted
15-2 Widespread application of agricine micals  15-3 Small-scale and widespread application of vertebrate pest control products*	Permitted
15-3 Small-scale and widespread application of <i>vertebrate pest control products</i> * not complying with Rule 15-3	Restricted Discretionary
15-5 Discharges <sup>*</sup> of agrichemicals <sup>*</sup> not complying with permitted activity <sup>*</sup> rules <sup>*</sup> and small-scale and widespread application of vertebrate pest	reduioled Biodictionary
control products* not complying with Rule 15-4	Discretionary
Burning	, ,
15-6 Small-scale fuel burning	Permitted
15-7 Outdoor burning*	Permitted
15-8 Burning activities regulated by RM Regulations 2004, including <i>woodburners</i> *	As described under "Activity" in rule
15-9 Prohibited burning activities	Prohibited
15-10 Other burning activities	Discretionary



Rule Number and Title	Classification		
Other Discharges to Air 15-11 Abrasive blasting* within an enclosure 15-12 Wet abrasive blasting* and water^ blasting 15-13 Dry abrasive blasting* using a moveable source 15-14 Miscellaneous discharges^ into air from industrial or trade premises^ 15-15 Flaring of hydrocarbons 15-16 Discharges^ from specified mobile sources 15-17 Other discharges^	Permitted Permitted Discretionary Permitted Controlled Permitted Discretionary		
CHAPTER 16: TAKES, USES AND DIVERSIONS OF WATER, AND BORES*			
Takes and Uses of Water  16-1 Minor takes and uses of surface water^  16-2 Minor takes and uses of groundwater  16-3 Use of heat or energy from surface water^  16-4 Bore* and groundwater testing  16-5 Takes and uses of surface water^ complying with core allocations  16-6 Existing essential takes and uses of surface water^ complying with core allocations taken at or below the minimum flow  16-7 Replacement consents for takes and uses of surface water^ by existing hydroelectricity schemes  16-8 Takes and uses of surface water^ not complying with core allocations or takes and uses of water^ taken at or below minimum flow  16-9 Other takes and uses of water^  Diversions of Water including Drainage	Permitted Permitted Permitted Permitted Controlled Discretionary Controlled Non-complying Discretionary		
16-10 Lawfully established diversions, including existing drainage 16-11 New drainage 16-12 New diversions 16-13 Diversions that do not comply with permitted activity^ and controlled activity^ rules^  Bore* Drilling and Bore* Sealing	Permitted Permitted Permitted Discretionary		
16-14 The drilling, construction or alteration of any <i>bore</i> * and any ancillary <i>discharge</i> ^ of <i>water</i> ^ or <i>contaminants</i> ^ 16-15 Unsealed <i>bores</i> *	Controlled Prohibited		
CHAPTER 17: ACTIVITIES IN ARTIFICIAL WATERCOURSES*, BEDS OF RIVERS AND LAKES, AND DAMMING Special Rivers and Lakes			
17-1 Damming of protected <i>rivers</i> ^ 17-2 Reclamation and drainage of regionally significant <i>lakes</i> ^ 17-3 <i>Structures</i> ^ and disturbances involving a reach of <i>river</i> ^ or its <i>bed</i> ^ with Schedule B Values of Natural State, Sites of Significance - Aquatic, and Sites of Significance - Cultural	Prohibited Non-complying Discretionary		
Use, <i>Maintenance</i> *, <i>Upgrade</i> *, Removal and Demolition of Structures  17-4 Use of structures^	Permitted		



Rule N	umber and Title	Classification		
17-5 17-6	Maintenance* and upgrade* of structures^, and ancillary removal of bed^ material and plants Removal and demolition of structures^	Permitted Permitted		
Dams a	and Damming			
17-7	New and existing small dams	Permitted		
17-8	Replacement consents for existing damming of water <sup>^</sup>	Controlled		
	Structures			
17-9	Lines, cables, pipelines and ropeways	Permitted		
17-10	Culverts	Permitted		
17-11	Other structures <sup>^</sup> including bridges, fords and other access structures <sup>^</sup>	Permitted		
17-12	Recording sites*	Permitted		
17-13	Bridges and culverts constructed to comply with Rules 14-1 to 14-4	Controlled		
	es Within Rivers with a Schedule B Value of Flood Control and Drainage	D		
17-14	Activities undertaken by or on behalf of the Regional Council in <i>rivers</i> <sup>^</sup> with a Schedule B Value of Flood Control and Drainage	Permitted		
17-15	Activities affecting Schedule B Value of Flood Control and Drainage	Discretionary		
	Extraction, Bed Disturbances and Plants	D		
17-16	Small-scale gravel extraction	Permitted		
17-17 17-18	Other gravel extraction Other minor bed^ disturbances	Discretionary Permitted		
17-10	Plants	Permitted		
		remitted		
17-20	es in <i>Artificial Watercourses</i> * and Non-natural <i>Lakes</i> ^	Permitted		
17-20	Minor activities involving artificial watercourses*  Bed^ disturbance of non-natural lakes^ to maintain their function	Controlled		
		Controlled		
	Activities that do not Comply with Permitted Activity, Controlled Activity or Restricted Discretionary Activity Rules and all other s13(1) RMA Activities Not Covered by this Chapter			
17-22	Activities that do not comply with <i>permitted activity</i> ^ <i>rule</i> ^ general <i>conditions</i> ^			
17-22	Activities that do not comply with permitted activity *rule* general conditions*  Activities that do not comply with permitted activity*, controlled activity* and restricted discretionary activity* rules* and all other s13(1) RMA	Restricted Discretionary		
1, 20	activities not covered by this chapter	Discretionary		



Rule N	umber and Title	Classification		
CHAP	TER 18: ACTIVITIES IN THE COASTAL MARINE AREA			
Occup	Occupation			
18-1	Occupation <sup>^</sup> by existing structures <sup>^</sup>	Permitted		
18-2	Temporary occupation <sup>^</sup>	Permitted		
18-3	Occupation^ of space^ by aquaculture	Controlled		
18-4	Exclusive occupation <sup>^</sup>	Discretionary		
18-5	Occupation^ of space^ in Protection Activity Management Areas	Non-complying		
Struct	ures	, , ,		
18-6	Maintenance* of structures^	Permitted		
18-7	Removal or demolition of structures <sup>^</sup>	Permitted		
18-8	Navigation aids, lines, cables, pipelines and ropeways, whitebait* stands and maimai	Permitted		
18-9	Structures <sup>^</sup> in the Port Activity Management Area	Controlled		
18-10	Wharf extension in the Port Activity Management Area	Permitted		
18-11	Structures <sup>^</sup> for public access	Restricted Discretionary		
18-12	Aquaculture structures^	Controlled		
18-13	Large structures^ which impound the CMA, are parallel to shore, or are oblique or perpendicular to shore	Discretionary		
18-14	Petroleum and chemical storage	Discretionary		
18-15	Energy generation structures <sup>A</sup> in a Protection Activity Management Area	Non-complying		
18-16	Structures <sup>^</sup> in a Protection Activity Management Area	Prohibited		
	nation and Drainage			
	Drainage	Discretionary		
18-18	Small reclamations except in Protection Activity Management Areas	Discretionary		
18-19 18-20	Small reclamations within the Port Activity Management Area  Large reclamations except in Protection Activity Management Areas	Restricted Discretionary		
18-21	Small reclamations in Protection Activity Management Areas	Discretionary		
18-22	Large reclamations in Protection Activity Management Areas	Non-complying		
	pances, Removal and Deposition	Non-complying		
18-23	Removal of minor quantities of material	Permitted		
18-24	Minor disturbances, removal and deposition	Permitted		
18-25	Minor disturbances, removal and deposition  Minor disturbances from drilling	Permitted		
18-26	Shellfish enhancement	Permitted		
18-27	Beach nourishment	Controlled		
18-28	Port Activity Management Area and Whanganui River maintenance dredging	Discretionary		
18-29	Port and General Activity Management Areas: Large-scale disturbances, removal and deposition	Discretionary		
18-30	Protection Activity Management Areas: Small-scale to medium-scale disturbances, removal and deposition	Non-complying		
18-31	Protection Activity Management Areas: Large-scale disturbances, removal and deposition	Non-complying		



Rule Number and Title	Classification
Water Takes, Uses, Damming and Diversions	
18-32 Take and use of water <sup>A</sup>	Permitted
18-33 Drainage and diversions of <i>water</i> ^ in the CMA	Permitted
Discharges	
18-34 Discharges <sup>^</sup> into water <sup>^</sup> from ships <sup>^</sup> , boats, fire-fighting and oil* spills	Permitted
18-35 Discharges <sup>A</sup> of stormwater	Permitted
18-36 Discharges <sup>^</sup> of stormwater not complying with Rule 18-35	Controlled
18-37 Discharges <sup>A</sup> of dye and salt tracers	Permitted
18-38 Application of agrichemicals*	Permitted
18-39 Application of agrichemicals* not complying with Rule 18-38	Controlled
18-40 Sewage and s107(2) RMA discharges <sup>A</sup>	Discretionary
18-41 Dumping^ of hazardous substances*	Prohibited
Noise and Discharges into Air	
18-42 Noise emissions	Permitted
Exotic and Introduced Plants	
18-43 Exotic and introduced plants	Discretionary
Activities that are not Covered by other Rules, or which do not Comply with Permitted Activity and Controlled Activity Rules	
18-44 Activities that are not covered by any other rule^, or which do not comply with permitted activity^ and controlled activity^ rules^	Discretionary
	,







CHAPTER 12: General Objectives and Policies

# 12 General Objectives and Policies

#### 12.1 Scope and Background

Under the RMA most activities affecting air quality, water quality and quantity, the beds of rivers and lakes and the coastal marine area (CMA) are restricted unless allowed by a rule or resource consent. Many such activities have only minor effects and requiring a resource consent in every case would be unduly bureaucratic and costly. By contrast, land use activities are allowed under the RMA unless restricted by a rule. Some land use activities can have very significant effects which require a level of control. Through rules the Regional Council can both free up as many minor activities as possible, thereby minimising costs on resource users, and restrict activities that might otherwise cause significant effects. This chapter describes the Regional Council's overarching objectives and policies for regulating activities.

#### 12.2 Objectives

#### Objective 12-1: Resource management in the Region

- (a) The regulation of activities in a manner which maximises certainty and avoids unnecessary costs on resource users and other parties.
- (b) The regulation of activities in a manner which gives effect to the provisions of Part I of this Plan, the Regional Policy Statement.

#### Objective 12-2: Consent duration, review and enforcement

- (a) The provisions of the RMA dealing with the duration of resource consents, review of consent conditions, and enforcement procedures must be implemented in a manner that provides the maximum reasonable certainty to resource users, affected parties and submitters.
- (b) The Regional Council will provide user-friendly consents of appropriate duration and will carefully monitor and manage compliance.

#### 12.3 Policies

## Policy 12-1: Regional rules^ for restricted activities

For activities that are restricted under Part 3 of the RMA, pursuant to ss12(1), 12(2), 13(1), 13(2), 14(1), 14(2), 15(1) and 15(2A), regional rules^ must be adopted which:

(a) classify as **permitted** those activities that are unlikely to have more than minor adverse *effects*^ on the *environment*^, or are able to be managed through *permitted activity*^ *conditions*^ and do not require any *site*\*-specific regulation by way of *resource consents*^;



- (b) classify as **controlled** those activities that can have more than minor adverse *effects*^ on the *environment*^, but where the need for *site*\*-specific management can be confined to a narrow list of matters that can be addressed by way of consent *conditions*^ on a consent that must be granted;
- (c) classify as **restricted discretionary** those activities for which the Regional Council needs to retain its discretion to decline consent owing to the potentially significant level of adverse *effects*^, but it is possible to restrict the exercise of the Regional Council's discretion to a specified list of matters;
- (d) classify as **discretionary** those activities for which the Regional Council needs to retain its discretion to decline consent owing to the potentially significant level of adverse *effects*^, and it is not practicable to restrict the exercise of the Regional Council's discretion to a specified list of matters;
- (e) classify as **non-complying** those activities for which the Regional Council would generally not grant a *resource consent*^ owing to the potential for very significant adverse *effects*^ on the *environment*^;
- (f) classify as **prohibited** those activities for which there is clear evidence that the activity is likely to have adverse *effects*<sup>^</sup> that are so significant that they could not be adequately avoided, remedied or mitigated under any circumstances.

## Policy 12-2: Regional rules^ for unrestricted activities

For activities that are allowed under Part 3 of the RMA, pursuant to ss9(3), 12(3), 13(2) and 14(2) the Regional Council will intervene by way of regional rules^ only where:

- (a) any such activity is likely to cause significant adverse effects<sup>^</sup> on the environment<sup>^</sup>; and
- (b) regional rules^ are the best means of addressing those adverse effects^.

For any *rules*^ adopted for these activities, activities will be classified in the same manner as that set out under Policy 12-1.

#### Policy 12-3: Conditions<sup>^</sup>, standards and terms in regional rules<sup>^</sup>

Regional rules^ must contain measurable and enforceable conditions^, standards and terms so that there is certainty for both resource users and other interested parties.

## Policy 12-4: Consent conditions^

- (a) The Regional Council will grant consents with *conditions*^ identified as necessary during the *resource consent*^ process, including *conditions*^ proposed by the applicant as a result of pre-application consultation agreements.
- (b) In respect of (a) above, the Regional Council will draft consent *conditions*^ that ensure:



- (i) the applicant is certain how compliance will be achieved and monitored;
- (ii) the *conditions*<sup>^</sup> are specific to the activity being undertaken;
- (iii) the *conditions*<sup>^</sup> are fair, reasonable and practical;
- (iv) the conditions<sup>^</sup> are in plain English; and
- (v) the *conditions*^ are enforceable.

#### Policy 12-5: Consent durations

- (a) Other than as provided for under (b), the Regional Council will generally grant *resource consents*<sup>^</sup> for the term sought by the applicant unless reasons are identified during the consent process that make this inappropriate.
- (b) Resource consent<sup>A</sup> durations for applications required under ss13, 14 and 15 of the RMA will generally be set to the next common catchment expiry date listed in Table 12.1. The dates listed in Table 12.1 show the initial expiry or review dates for consents within the catchment. Future dates for expiry or review of consents within that catchment must occur again every 10 years thereafter. Consents granted within three years prior to the relevant common catchment expiry date may be granted with a duration to align with the second common expiry date (that is the number of years up to the next expiry date plus 10 years). Dates may also be extended in 10 year increments where a term longer than 10 years can be granted after considering the following criteria:
  - (i) the extent to which an activity is carried out in accordance with a recognised code of practice, environmental standard or good practice guideline;
  - (ii) the most appropriate balance between environmental protection and investment by the applicant;
  - (iii) the provision of s128 review opportunities to enable matters of contention to be periodically reviewed in light of monitoring and compliance information; and
  - (iv) whether the activity is *infrastructure*<sup>^</sup>; *water*<sup>^</sup>, sewage or stormwater treatment plants and facilities; or publicly accessible *solid* waste<sup>\*</sup> facilities including *landfills*<sup>\*</sup>, transfer stations and resource recovery facilities.

For a consent which is granted for a duration longer than 10 years, review of the consent must occur, as a minimum, on the review date in Table 12.1 and every 10 years thereafter until consent expiry. Extra review dates may be set in accordance with Policy 12-6.

- (c) Matters to be considered in determining a shorter consent duration than that requested under (a):
  - (i) whether it is necessary for an activity to cease at a specified time;
  - (ii) whether the activity has *effects*<sup>^</sup> that are unpredictable and potentially serious for the locality where it is undertaken and a precautionary approach is needed;
  - (iii) the risks of long-term allocation of a resource whose availability changes over time in an unpredictable manner, requiring a precautionary approach; and
  - (iv) in the case of existing activities, whether the consent holder has a good or poor compliance history in relation to environmental *effects*^ for the same activity.



**Table 12.1:** Common expiry/review dates for consents in *Water Management Sub-zones*\*

Water Management Zone*	Water Management Sub-zone*	Expiry / review (1 July)
Upper Manawatu	Upper Manawatu, Mangatewainui and Mangatoro	2011
Weber-Tamaki	Weber-Tamaki and Mangatera	2011
Upper Tamaki	Upper Tamaki	2011
Upper Kumeti	Upper Kumeti	2011
Tamaki-Hopelands	Tamaki-Hopelands, Lower Tamaki, Lower Kumeti, Oruakeretaki and Raparapawai	2011
Hopelands-Tiraumea	Hopelands-Tiraumea	2011
Tiraumea	Upper and Lower Tiraumea, Mangaone, Makuri and Mangaramarama	2010
Mangatainoka	Upper, Middle and Lower Mangatainoka and Makakahi	2010
Upper Gorge	Upper Gorge, Mangapapa, Mangaatua, Upper and Lower Mangahao	2013
Middle Manawatu	Middle Manawatu, Upper, Middle and Lower Pohangina, and Aokautere	2013
Lower Manawatu	Lower Manawatu, Turitea, Kahuterawa, Upper and Lower Mangaone Stream and Main Drain	2013
Oroua	Upper, Middle and Lower Oroua, Kiwitea and Makino	2019
Coastal Manawatu	Coastal Manawatu, Upper and Lower Tokomaru, Mangaore, Koputaroa and Foxton Loop	2018
Upper Rangitikei	Upper Rangitikei	2017
Middle Rangitikei	Middle Rangitikei, Pukeokahu-Mangaweka, Upper, Middle and Lower Moawhango, Upper and Lower Hautapu	2017
Lower Rangitikei	Lower Rangitikei and Makohine	2017
Coastal Rangitikei	Coastal and Tidal Rangitikei, Porewa and Tutaenui	2017
Upper Whanganui	Upper Whanganui	2015
Cherry Grove	Cherry Grove, Upper and Lower Whakapapa, Piopiotea, Pungapunga and Upper and Lower Ongarue	2015
Te Maire	Te Maire	2015
Middle Whanganui	Middle Whanganui, Upper and Lower Ohura and	2015



Water Management Zone*	Water Management Sub-zone*	Expiry / review (1 July)
	Retaruke	
Pipiriki	Pipiriki, Tangarakau, Whangamomona, Upper and Lower Manganui o te Ao, Oroutoha, Middle Manganui o te Ao, Waimarino, Makatote and Mangaturuturu	2015
Paetawa	Paetawa	2015
Lower Whanganui	Lower and Coastal Whanganui, Upokongaro and Matarawa	2015
Upper Whangaehu	Upper Whangaehu, Tokiahuru, Waitangi	2009
Middle Whangaehu	Middle Whangaehu	2009
Lower Whangaehu	Lower Whangaehu, Upper and Lower Makotuku, Upper and Lower Mangawhero and Makara	2009
Coastal Whangaehu	Coastal Whangaehu	2009
Turakina	Upper and Lower Turakina and Ratana	2014
Ohau	Upper and Lower Ohau	2012
Owahanga	Owahanga	2016
East Coast	East Coast	2016
Akitio	Upper and Lower Akitio and Waihi	2016
Northern Coastal	Northern Coastal	2012
Kai lwi	Kai lwi	2012
Mowhanau	Mowhanau	2012
Kaitoke Lakes	Kaitoke Lakes	2014
Southern Whanganui Lakes	Southern Whanganui Lakes	2014
Northern Manawatu Lakes	Northern Manawatu Lakes	2014
Waitarere	Waitarere	2014
Lake Papaitonga	Lake Papaitonga	2014
Waikawa	Waikawa and Manakau	2014
Lake Horowhenua	Lake Horowhenua and Hokio	2014



#### Policy 12-6: Consent review

In addition to the reasons specified in s128(1)(a)(i) and (ii) RMA, the Regional Council will, under s128(1)(a)(iii) RMA, generally impose consent conditions<sup>^</sup> that specify a review of consent conditions<sup>^</sup> during the term of the consent for:

- (a) reviewing the appropriateness of any *condition*^ requiring the consent holder to supply the *consent authority*^ with information relating to the exercise of the *resource consent*^:
- (b) reviewing any unknown or uncertain adverse *effects*^ caused as a result of planned or required changes or *upgrades*\* to the activity;
- (c) reviewing the *conditions*^ of a consent at the same time as review of other consents within the same *Water Management Sub-zone*\* for example, at a *common catchment expiry or review date*\*; and
- (d) reviewing the effectiveness of consent conditions<sup>^</sup> to avoid, remedy or mitigate any adverse effects<sup>^</sup> of the activity on the environment<sup>^</sup>.

The Regional Council will generally initiate reviews of *conditions*<sup>^</sup> when monitoring results or other evidence demonstrate a review is required.

#### Policy 12-7: Sites\* with multiple activities, and activities covering multiple sites\*

For applications made to the Regional Council for either:

- (a) a site\* with a number of different activities requiring consent; or
- (b) a particular type of activity that will be undertaken by the consent holder at a number of sites\*,

consent applicants may combine some or all activities or *sites*\* under umbrella consents. If the Council considers that such an approach is appropriate then it must establish consent *conditions*^, durations and review provisions which enable an integrated approach to be taken for managing environmental *effects*^ from the *site*\* or activity as a whole. There may be circumstances where individual activities are considered at their given classification rather than the most stringent activity classification. There may also be circumstances where specific *conditions*^ are required to address *site*\*-specific circumstances and *effects*^.

#### Policy 12-8: Enforcement procedures

- (a) The Regional Council will generally use *abatement notices*<sup>^</sup>, infringement notices, *enforcement orders*<sup>^</sup> or prosecution in response to non-compliance with this Plan or the RMA, unless an alternative approach will achieve a better outcome.
- (b) In determining the type of enforcement tool to be used, the following factors will be taken into account:
  - (i) the environmental outcome or behaviour change required'
  - (ii) the cause of non-compliance'
  - (iii) the actual or potential scale of the adverse *effects*^;
  - (iv) whether the non-compliance is due to an ongoing activity or an isolated incident;



- (v) any proactive response by the person who has committed the offence;
- (vi) the person's previous compliance history;
- (vii) whether urgent remedial action is required;
- (viii) which enforcement tool is most likely to produce the desired environmental outcome or change in behaviour; and
- (ix) any defences the person may rely upon.







CHAPTER 13:
Land Use Activities and
Indigenous Biological Diversity

# 13 Land Use Activities and Indigenous Biological Diversity

#### 13.1 Land Use Activities

## 13.1.1 Objectives

#### Objective 13-1: Accelerated erosion\* - regulation of vegetation clearance\*, land disturbance\*, forestry\* and cultivation\*

The regulation of *vegetation clearance\**, *land disturbance\**, *forestry\** and *cultivation\** in a manner that ensures:

- (a) accelerated erosion\* and any associated damage to people, buildings and *infrastructure*^ and other physical resources of regional or national importance are avoided as far as reasonably practicable or otherwise remedied or mitigated, and
- (b) increased sedimentation in *water bodies*^ as a result of human activity is avoided as far as reasonably practicable, or otherwise mitigated.

#### 13.1.2 Policies

#### Policy 13-1: Regional rules^ for vegetation clearance\*, land disturbance\*, forestry\* and cultivation\*

The Regional Council must:

- regulate *vegetation clearance*\*, *land disturbance*\*, *forestry*\* and *cultivation*\* through *regional rules*^ in accordance with Objectives 12-1, 12-2 and 13-1 and Policies 12-1 to 12-8, and
- (b) manage the effects\(^\) of vegetation clearance\(^\*\), land disturbance\(^\*\) and cultivation\(^\*\) by requiring resource consents\(^\) for those activities:
  - (i) adjacent to some water bodies^,
  - (ii) involving the removal of some woody vegetation\* in Hill Country Erosion Management Areas\*,
  - (iii) involving land disturbance\* or cultivation\* in Hill Country Erosion Management Areas\*,
  - (iv) involving large-scale land disturbance\*, or
  - (v) within the coastal foredune\*



### Policy 13-2: Consent decision-making for vegetation clearance\*, land disturbance\*, forestry\* and cultivation\*

For vegetation clearance\*, land disturbance\*, forestry\* or cultivation\* and ancillary discharges to and diversions of surface water^ that requires resource consent^ under Rule 13-2, Rule 13-6 or Rule 13-7, the Regional Council must make decisions on consent applications and set consent conditions^ on a case-by-case basis, having regard to:

- (a) the Regional Policy Statement, particularly Objective 4-2 and Policies 4-2 and 4-3,
- (b) managing the effects^ of land disturbance\*, including large-scale earthworks, by requiring Erosion and Sediment Control Plans\* or other appropriate plans to be prepared,
- (b) managing the *effects*^ of *forestry*\* by requiring sustainable *forestry*\* management practices to be adopted and *Erosion and Sediment Control Plans*\* or other appropriate plans to be prepared,
- (d) managing the effects^ of cultivation\* on water bodies^ through the use of sediment run-off control methods and setbacks from water bodies^,
- (e) the appropriateness of establishing *infrastructure*^ and other physical resources of regional or national importance as identified in Policy 3-1,
- (f) generally allowing the clearance of *woody vegetation*\* on established pasture if that clearance will not lead to *accelerated erosion*\* or the increased sedimentation of *water bodies*^,
- (g) generally allowing activities that are for the purpose of managing *natural hazards*^, including the reduction of flood risk,
- (h) generally allowing *forestry\** for soil conservation purposes,
- (i) generally allowing activities that result in improved land\(^\) stability or enhanced surface water\(^\) quality,
- (j) any relevant codes of practice, standards, guidelines, or environmental management plans and accepting compliance with them to the extent that they can be used as *conditions*^ on *resource consents*^,
- (k) sediment and erosion control measures required to reasonably minimise adverse *effects*^, including those caused by rainfall and storm events,
- (I) achieving integrated management through consents that are Region-wide or cover large areas for activities that are widespread and undertaken by or on behalf of a single consent holder including, but not limited to, *infrastructure*^ and other physical resources of regional or national importance, or *forestry*\*, provided any such consents are subject to *conditions*^, including review provisions, enabling *site*\*-specific matters to be addressed as necessary, and
- (m) for activities involving an ancillary discharge<sup>\(\)</sup> to surface water<sup>\(\)</sup>, the matters in Policy 14-9.



**Advice note:** The *rules*^ in this *regional plan*^ do not authorise the modification or disturbance of any archaeological or registered *waahi tapu*\* sites within the area of activity. Written authority from the Heritage New Zealand is required prior to any destruction, damage or modification of an archaeological or registered *waahi tapu*\* site or an area where there is reasonable cause to suspect there is an archaeological site. Should any artefacts, bones or any other sites of archaeological or cultural significance be discovered within the area affected by the activity, written authorisation should be obtained from the Heritage New Zealand before any damage, modification or destruction is undertaken.

## 13.2 Indigenous Biological Diversity

#### 13.2.1 Objective

#### Objective 13-2: Regulation of activities affecting indigenous biological diversity^

The regulation of resource use activities to protect areas of significant indigenous vegetation and significant habitats of indigenous fauna or to maintain indigenous biological diversity\*, including enhancement where appropriate.

#### 13.2.2 Policies

#### Policy 13-3: Regional rules^ for activities affecting indigenous biological diversity^

The Regional Council must require resource consents<sup>^</sup> to be obtained for vegetation clearance<sup>\*</sup>, land disturbance<sup>\*</sup>, cultivation<sup>\*</sup>, bores<sup>\*</sup>, discharges<sup>^</sup> of contaminants<sup>^</sup> into or onto land<sup>^</sup> or water<sup>^</sup>, taking, use, damming or diversion of water<sup>^</sup> and activities in the beds<sup>^</sup> of rivers<sup>^</sup> or lakes<sup>^</sup> within rare habitats<sup>\*</sup>, threatened habitats<sup>\*</sup> and at-risk habitats<sup>\*</sup>, and for forestry<sup>\*</sup> that does not minimise potential adverse effects<sup>^</sup> on those habitats, through regional rules<sup>^</sup> in accordance with Objectives 12-1, 12-2 and 13-2 and Policies 12-1 to 12-8.

#### Policy 13-4: Consent decision-making for activities in rare habitats\*, threatened habitats\* and at-risk habitats\*

- (a) For activities regulated under Rule 13-8 and 13-9, the Regional Council must make decisions on consent applications and set consent conditions on a case-by-case basis:
  - (i) For all activities, having regard to:
    - (A) the Regional Policy Statement, particularly Objective 6-1 and Policy 6-2,
    - (B) a rare habitat\* or threatened habitat\* is an area of significant indigenous vegetation or a significant habitat of indigenous fauna,
    - (C) the significance of the area of habitat, in terms of its representativeness, rarity and distinctiveness, and ecological context, as assessed under Policy 13-5,
    - (D) the potential adverse effects^ of the proposed activity on significance,



- (E) for activities regulated under ss13, 14 and 15 RMA, the matters set out in Policy 13-2(k) and relevant objectives and policies in Chapters 5, 14, 16 and 17, and
- (F) for activities involving a discharge, the matters in Policy 14-9.
- (ii) For electricity transmission and renewable energy generation activities, providing for any national, regional or local benefits arising from the proposed activity.
- (b) Consent must generally not be granted for resource use activities in a *rare habitat*\*, *threatened habitat*\* or *at-risk habitat*\* assessed to be an area of significant indigenous vegetation or a significant habitat of indigenous fauna under Policy 13-5, unless:
  - (i) any more than minor adverse *effects*^ on that habitat's representativeness, rarity and distinctiveness, or ecological context assessed under Policy 13-5 are avoided.
  - (ii) where any more than minor adverse *effects*^ cannot reasonably be avoided, they are remedied or mitigated at the point where the adverse *effect*^ occurs.
  - (iii) where any more than minor adverse *effects*^ cannot reasonably be avoided, remedied or mitigated in accordance with (b)(i) and (ii), they are offset to result in a net indigenous *biological diversity*^ gain.
- (c) Consent may be granted for resource use activities in an *at-risk habitat*\* assessed not to be an area of significant indigenous vegetation or a significant habitat of indigenous fauna under Policy 13-5 when:
  - (i) there will be no significant adverse *effects*^ on that habitat's representativeness, rarity and distinctiveness, or ecological context as assessed in accordance with Policy 13-5, or
  - (ii) any significant adverse effects\(^\) are avoided.
  - (iii) where any significant adverse *effects*^ cannot reasonably be avoided, they are remedied or mitigated at the point where the adverse effect occurs.
  - (iv) where significant adverse *effects*^ cannot reasonably be avoided, remedied or mitigated in accordance with (c)(ii) and (iii), they are offset to result in a net indigenous *biological diversity*^ gain.
- (d) An offset assessed in accordance with b(iii) or (c)(iv), must:
  - (i) provide for a net indigenous *biological diversity*^ gain within the same habitat type, or where that habitat is not an area of significant indigenous vegetation or a significant habitat of indigenous fauna, provide for that gain in a *rare habitat*\* or *threatened habitat*\* type, and
  - (ii) reasonably demonstrate that a net indigenous *biological diversity*^ gain has been achieved using methodology that is appropriate and commensurate to the scale and intensity of the residual adverse *effect*^, and
  - (iii) generally be in the same ecologically relevant locality as the affected habitat, and
  - (iv) not be allowed where inappropriate for the ecosystem or habitat type by reason of its rarity, vulnerability or irreplaceability, and



- (v) have a significant likelihood of being achieved and maintained in the long term and preferably in perpetuity, and
- (vi) achieve conservation outcomes above and beyond that which would have been achieved if the offset had not taken place.

#### Policy 13-5: Criteria for assessing the significance of, and the effects<sup>^</sup> of activities on, an area of habitat

- (a) Rare habitats\* are areas of significant indigenous vegetation or significant habitats of indigenous fauna under criterion (ii)(E) below. Threatened habitats\* are areas of significant indigenous vegetation or significant habitats of indigenous fauna under criterion (i)(A) below. An area of rare habitat\* or threatened habitat\* may also be an area of significant indigenous vegetation or significant habitat of indigenous fauna under one or more of the other criteria below. An at-risk habitat\* may be recognised as being an area of significant indigenous vegetation or a significant habitat of indigenous fauna if one or more of the following criteria are met:
  - (i) in terms of representativeness, that habitat:
    - (A) comprises indigenous habitat type that is under-represented (20% or less of known or likely former cover), or
    - (B) is an area of indigenous vegetation that is typical of the habitat type in terms of species composition, structure and diversity, or that is large relative to other areas of the same habitat type in the Ecological District or Ecological Region, or has functioning ecosystem processes.

or

- (ii) in terms of rarity and distinctiveness, that habitat supports an indigenous species or community that:
  - (A) is classified as threatened (as determined by the New Zealand Threat Classification System and Lists\*), or
  - (B) is distinctive to the Region, or
  - (C) is at a natural distributional limit, or
  - (D) has a naturally disjunct distribution that defines a floristic gap, or
  - (E) was originally (ie., prehuman) uncommon within New Zealand, and supports an indigenous species or community of indigenous species.

or

- (iii) in terms of ecological context, that habitat provides:
  - (A) connectivity (physical or process connections) between two or more areas of indigenous habitat, or
  - (B) an ecological buffer (provides protection) to an adjacent area of indigenous habitat (terrestrial or aquatic) that is ecologically significant, or
  - (C) part of an indigenous ecological sequence or connectivity between different habitat types across a gradient (eg., altitudinal or hydrological), or



- (D) important breeding areas, seasonal food sources, or an important component of a migration path for indigenous species, or
- (E) habitat for indigenous species that are dependent on large and contiguous habitats.
- (b) The potential adverse *effects*^ of an activity on a *rare habitat*\*, *threatened habitat*\* or *at-risk habitat*\* must be determined by the degree to which the proposed activity will diminish any of the above characteristics of the habitat that make it significant, while also having regard to any additional ecological values and to the ecological sustainability of that habitat.

# 13.3 Rules - Vegetation clearance\*, land disturbance\*, forestry\* and cultivation\* and indigenous biological diversity

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
13-1 Small-scale land disturbance*	Except as regulated by Rules 13-6, 13-8 and 13-9, any land disturbance* pursuant to s9(2) RMA of a total area up to 2500 m² per property* per 12-month period and any ancillary:  (a) diversion of water^ pursuant to s14(2) RMA on the land^ where the land disturbance* is undertaken, or  (b) discharge^ of sediment into water^ pursuant to s15(1) RMA resulting from the land disturbance*.	Permitted	<ul> <li>(a) The activity must not take place on land^ that is within a coastal foredune*.</li> <li>(b) Erosion and sediment control methods, which may include bunding, silt traps, interception drains or other alternative methods, to minimise sediment discharge^ to water^ must be installed prior to, and maintained during, the land disturbance* activity</li> <li>(c) Any ancillary discharge of sediment into water^ must not, after reasonable mixing, cause the receiving water body^ to breach the water quality standards for visual clarity set out in Schedule E for that water body^.</li> <li>(d) The activity must not occur on land^ that is in, or within 5 m of: <ul> <li>(i) the bed^ of a river^ that is permanently flowing,</li> <li>(ii) the bed^ of a lake^.</li> </ul> </li> <li>(e) The activity must not occur on land^ that is in, or within 10 m of: <ul> <li>(i) A wetland^ as identified in Schedule F,</li> <li>(ii) Sites valued for Trout Spawning as identified in Schedule B,</li> <li>(iii) Sites of Significance - Aquatic as identified in Schedule B.</li> </ul> </li> </ul>	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
Large-scale land disturbance*, including earthworks	Except as regulated by Rules 13-6, 13-8 and 13-9, any land disturbance* pursuant to s9(2) RMA of a total area greater than 2500 m² per property* per 12-month period and any ancillary:  (a) diversion of water^ pursuant to s14(2) RMA on the land^ where the land disturbance* is undertaken, or  (b) discharge^ of sediment into water^ pursuant to s15(1) RMA resulting from the land disturbance*.	Controlled	<ul> <li>(a) The activity must not take place on land<sup>h</sup> that is within a coastal foredune*.</li> <li>(b) The activity must be undertaken in accordance with an Erosion and Sediment Control Plan*.</li> <li>(c) Any ancillary discharge<sup>h</sup> of sediment into water<sup>h</sup> must not, after reasonable mixing, cause the receiving water body<sup>h</sup> to breach the water quality standards for visual clarity set out in Schedule E for that water body<sup>h</sup>.</li> <li>(d) The activity must not occur on land<sup>h</sup> that is in, or within 5 m of: <ul> <li>(i) the bed<sup>h</sup> of a river<sup>h</sup> that is permanently flowing,</li> <li>(ii) the bed<sup>h</sup> of a river<sup>h</sup> that is not permanently flowing -and has an active bed* width greater than 1 m,</li> <li>(iii) the bed<sup>h</sup> of a lake<sup>h</sup>.</li> </ul> </li> <li>(e) The activity must not occur on land<sup>h</sup> that is in, or within 10 m of: <ul> <li>(i) A wetland<sup>h</sup> as identified in Schedule F,</li> <li>(ii) Sites valued for Trout Spawning as identified in Schedule B,</li> <li>(iii) Sites of Significance - Aquatic as identified in Schedule B.</li> </ul> </li> </ul>	Control is reserved over:  (a) the location, nature, scale, timing and duration of the activity  (b) Additional content of and the standard to which the Erosion and Sediment Control Plan* must be prepared, the implementation of the plan, and the timing of when it must be prepared and submitted  (c) the effects^ of the activity and associated sediment run-off on soil conservation, surface water* quality and aquatic ecology and the methods to be taken to avoid, remedy or mitigate them  (d) the provision of greater setback distances from water bodies^ than those specified under conditions (d) and (e) to provide greater protection to a water body^ if required  (e) duration of consent  (f) review of consent conditions^ (g) compliance monitoring  (h) the matters in Policy 14-9.  Resource consent^ applications under this rule^ will not be notified and written approval of affected persons will not be required (notice of applications need not be served^ on affected persons).



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification Advice Note:
				Examples of alternative methods to avoid, remedy or mitigate sediment run-off can be found in Chapters 3-9 of the "Erosion and Sediment Control Guidelines for the Wellington Region" (September 2002).
13-3 Forestry*	Except as regulated by Rule 13-8 and 13-9, any forestry* pursuant to s9(2) RMA, and any ancillary:  (a) disturbance of the bed^ of a river^ or lake^ pursuant to s13(1) RMA by forestry*, or  (b) diversion of water^ pursuant to s14(2) RMA on the land^ (but not within a river^) where the forestry is undertaken, or  (c) discharge^ of sediment or slash* into water^ or onto or into land^ that may enter water^ pursuant to s15(1) or 15(2A) RMA resulting from the forestry*.	Permitted	<ul> <li>(a) The activity must not take place on land^ that is within a coastal foredune*.</li> <li>(b) Any earthworks, the formation of any new track* and any planting or replanting of forestry* trees must not occur on land^ that is in, or within 5 m of: <ol> <li>(i) the bed^ of a river^ that is permanently flowing</li> <li>(ii) the bed^ of a lake^</li> <li>(iii) a rare habitat*, threatened habitat* or at-risk habitat*.</li> <li>unless the new track* or earthworks in (b)(i) or (b)(ii) is:</li> <li>(A) necessary to connect to and from a formed river* crossing point that is a consented or permitted activity, and/or</li> <li>(B) for the purpose of the maintenance* or upgrade* of an existing track* or earthwork.</li> <li>(c) Any new planting of forestry* trees and associated formation of any new track* or earthworks must not occur on land* that is in, or within 10 m of wetland^ habitat types (including lakes^) as defined in Schedule F.</li> <li>(d) Any earthworks or the formation of any new track* must not occur on land^ that is in, or within 10 m of a reach of a river^ or its bed^ with a Schedule B Value of Trout Spawning or Trout Fishery, unless the new track* or earthworks is:</li> <li>(A) necessary to connect to and from a formed river* crossing point that is a consented or permitted activity, and/or</li> <li>(B) for the purpose of the maintenance* or upgrade* of an</li> </ol> </li> </ul>	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion
				Non-Notification
			existing <i>track*</i> or earthwork.	
			(e) If any rare habitat*, threatened habitat* or at-risk habitat* is present within 5 m of an area of forestry* prior to undertaking harvesting an Operational Plan*, detailing measures taken to avoid or mitigate adverse effects^ on these areas, must be prepared and submitted to the Regional Council at least 48 hours prior to harvesting commencing and the Operational Plan* must be complied with.	
			(f) Any area of forestry* that is harvested (other than firebreaks, tracks*, landing sites* or areas in (a) and (b)) must be planted or replanted to protect from erosion as soon as practicable and no later than 18 months from the date of the harvesting, unless the area is left to revegetate naturally.	
			(g) Water^ run-off controls must be installed and maintained for tracks* and landing sites*.	
			<ul> <li>(h) Batters, cuts and side castings must be established by methods that prevent slumping.</li> </ul>	
			(i) Felled vegetation must be felled away from and not be dragged through any water body^ other than where this is necessary to avoid endangering the health and safety of workers, or where it is unavoidable and is the best harvest method such as, but not limited to, hauling through corridors or butt extraction, and	
			<ul> <li>(i) any discharge<sup>^</sup> resulting from the activity must not, after reasonable mixing, breach the water quality standards for change in visual clarity identified for that water body<sup>^</sup> set out in Schedule E, and</li> </ul>	
			<ul> <li>the activity must not occur in a water body<sup>A</sup> with a Trout Spawning Value identified in Schedule B during the trout spawning season (1 May to 30 September inclusive), and</li> </ul>	
			(iii) the activity must not occur in a water body <sup>^</sup> greater than 5 m in width, and	
			(iv) the activity must not occur in an area listed in (b) (iii).	



Rule	Activity	Classification	Conditions/Standards/Terms Control/Discretion Non-Notification
			(j) Harvesting must be planned and carried out so as to minimise the amount of slash* discharging^ into any area listed in (b)(i) and (ii) and entering any area listed in (b)(iii).
			(k) Slash* must be removed from within areas listed in (b)(i) where it is blocking <i>river</i> ^ flow, or is diverting <i>river</i> ^ flow and causing bank erosion.
			(I) Slash* associated with landing sites* and processing sites* must be placed on stable ground and contained to prevent accumulated slash from causing erosion or land instability.
			(m) The use of mobile machinery in or on the <i>bed</i> ^ of a <i>river</i> ^ with a Schedule B Value of Trout Spawning in a manner that disturbs the <i>bed</i> ^ of the active flowing channel must not take place during the trout spawning season (1 May to 30 September inclusive).
			(n) The use of mobile machinery in or on the <i>bed</i> ^ of a <i>river</i> ^ with a Schedule B Value of Whitebait Migration in a manner that disturbs the <i>bed</i> ^ of the active flowing channel must not take place 15 August to 30 November (inclusive).
			(o) The activity must be undertaken in accordance with an <i>Erosion</i> and <i>Sediment Control Plan*</i> which must be submitted to the Regional Council upon request.
			(p) Any discharge^ resulting from the activity must not, after reasonable mixing, breach the water quality standards for change in visual clarity identified for that water body^ set out in Schedule E.
			(q) Regional Council must be notified at least 48 hours prior to the activity commencing.
13-4 Cultivation*	Except as regulated by Rules 13-6, 13-8 and 13-9, any <i>cultivation</i> * and ancillary	Permitted	(a) The activity must not take place on land^ that is within a coastal foredune*.
Calavadon	land disturbance* for the purposes of constructing erosion and sediment control methods to minimise sediment run-off into water^ pursuant to s9(2) RMA		(b) Bunding, silt traps, interception drains or other alternative methods to minimise sediment run-off to water^ must be installed prior to and maintained during cultivation*.
	and any ancillary:		(c) Any ancillary discharge of sediment into water must not,



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	<ul> <li>(a) diversion of water^ pursuant to s14(2) RMA on the land^ where the cultivation* is undertaken, or</li> <li>(b) discharge^ of sediment into water^ pursuant to s15(1) RMA resulting from the cultivation* or the use of ancillary erosion and sediment control methods to minimise sediment run-off into water^.</li> </ul>		after reasonable mixing, cause the receiving water body^ to breach the water quality standards for visual clarity set out in Schedule E for that water body^.  (d) For vegetable crops listed within the Commodity Levies (Vegetables and Fruit) Order 2007 a paddock assessment must be undertaken in accordance with the Code of Practice for Commercial Vegetable Growing in the Horizons Region (Horticulture New Zealand) Version 2010/2.  (e) The activity must not occur on land^ that is in, or within 5 m of:  (i) the bed^ of a river^ that is permanently flowing,  (ii) the bed^ of a river^ that is not permanently flowing and has an active bed* width greater than 1 m,  (iii) the bed^ of a lake^.  (f) The activity must not occur on land^ that is in, or within 10 m of:  (i) A wetland^ as identified in Schedule F,  (ii) Sites valued for Trout Spawning as identified in Schedule B,  (iv) Sites of Significance - Aquatic as identified in Schedule B.	Non-Notification
			Advice Note:  Examples of alternative methods for minimising sediment run-off can be found in the Code of Practice for Commercial Vegetable Growing in the Horizons Region (Horticulture New Zealand).	
13-5 Vegetation Clearance*	Except as regulated by Rules 13-6, 13-8 and 13-9, any <i>vegetation clearance*</i> pursuant to s9(2) RMA and any ancillary:  (a) diversion of <i>water</i> ^ pursuant to s14(2) RMA on the <i>land</i> ^ where the <i>vegetation clearance*</i> is undertaken,  (b) <i>discharge</i> ^ of sediment into <i>water</i> ^ pursuant to s15(1) RMA resulting from the <i>vegetation clearance</i> .	Permitted	<ul> <li>(a) The activity must not take place on land^ that is within a coastal foredune*.</li> <li>(b) Any ancillary discharge^ of sediment into water^ must not, after reasonable mixing, cause the receiving water body^ to breach the water quality standards for visual clarity set out in Schedule E for that water body^.</li> <li>(c) The activity must not occur on land^ that is in, or within 5 m of:  (i) the bed^ of a river^ that is permanently flowing</li> </ul>	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
13-6	Pursuant to s9(2) RMA, except as	Restricted	<ul> <li>(ii) the bed^ of a river^ that is not permanently flowing and has an active bed* width greater than 1 m</li> <li>(iii) the bed^ of a lake^.</li> <li>(d) The activity must not occur on land^ that is in, or within 10 m of: <ul> <li>(i) A wetland^ as identified in Schedule F</li> <li>(ii) Sites valued for Trout Spawning as identified in Schedule B</li> </ul> </li> <li>(a) The activity must not take place on land^ that is within a</li> </ul>	Discretion is restricted to:
Specified vegetation clearance*, land disturbance* or cultivation* in a Hill Country Erosion Management Area*	regulated by Rule 13-8 and 13-9, any:  (a) land disturbance* of more than 100 m² per property* per 12-month period, or  (b) vegetation clearance* of 1 ha or greater per property* per 12-month period where the age of the vegetation in the area to be cleared is greater than seven years, or  (c) cultivation*, undertaken within a Hill Country Erosion Management Area* and any ancillary:  (a) diversion of water^ pursuant to s14(2) RMA on the land^ where the vegetation clearance*, land disturbance* or cultivation* is undertaken, or  (b) discharge^ of sediment into water^ pursuant to s15(1) RMA resulting from the vegetation clearance*, land	Discretionary	coastal foredune*.  (b) The activity must not occur on land^ that is in, or within 10 m of:  (i) the bed^ of a river^ that is permanently flowing,  (ii) the bed^ of a river^ that is not permanently flowing and has an active bed* width greater than 1 m,  (iii) the bed^ of a lake^,  (iv) a wetland^ as identified in Schedule F,  (v) sites valued for Trout Spawning as identified in Schedule B,  (vi) Sites of Significance - Aquatic as identified in Schedule B.	<ul> <li>(a) the location, nature, scale, timing and duration of the activity,</li> <li>(b) effects^ of the activity and associated sediment run-off on soil conservation, surface water^ quality and aquatic ecology and the methods to be taken to avoid, remedy or mitigate them,</li> <li>(c) the requirement to provide an Erosion and Sediment Control Plan*, the content of and standard to which the plan must be prepared, the implementation of the plan, and the timing of when it must be prepared and submitted,</li> <li>(d) the provision of greater setback distances from water bodies^ than those specified under condition (b) to provide greater protection to a water body^ if required,</li> </ul>
	disturbance* or cultivation*.			(e) the extent of non-compliance with the water quality target* for visual clarity set out in Schedule E,



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
				<ul> <li>(f) duration of consent,</li> <li>(g) review of consent <i>conditions</i>^,</li> <li>(h) compliance monitoring,</li> <li>(i) the matters in Policy 14-9.</li> </ul>
				Resource consent <sup>A</sup> applications under this rule <sup>A</sup> will not be notified and written approval of affected persons will not be required (notice of applications need not be served <sup>A</sup> on affected persons).
				Advice Note:  Examples of alternative methods to avoid, remedy or mitigate sediment run-off can be found in:
				(a) Chapters 3-9 of the Erosion and Sediment Control Guidelines for the Wellington Region" (September 2002, and
				(b) The Code of Practice for Commercial Vegetable Growing in the Horizons Region (Horticulture New Zealand).
13-7 Vegetation clearance*, land disturbance*, cultivation* or forestry* that does not comply with	Except as regulated by Rule 13-8 and 13-9, any vegetation clearance*, land disturbance*, cultivation* or forestry* pursuant to s9(2) RMA that does not meet the conditions^, standards or terms of Rules 13-1, 13-2, 13-3, 13-4, 13-5 or 13-6 and any ancillary:	Discretionary		
Rules 13-1 to 13-6	(a) disturbance of the bed^ of a river^ or lake^ by forestry* authorised by those rules^ pursuant to s13(1)			



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	RMA  (b) diversion of water^ authorised by those rules^ pursuant to s14(2) RMA, or  (c) discharge^ of sediment or slash* authorised by those rules^ pursuant to s15(1) RMA.			
13-8 Some activities within at-risk habitats*	Except as regulated by Rules 14-5, 14-13, 14-24, 16-9, 17-2, 17-4, 17-5, 17-7 in relation to any existing small dam structure^, 17-14 and 17-15, any of the following activities within an at-risk habitat*:	Discretionary		
	(a) vegetation clearance*, land disturbance* or cultivation* pursuant to s9(2) RMA			
	<ul><li>(b) forestry* pursuant to s9(2) RMA that does not meet condition^, standard or term of Rule 13-3(b)(iii) or (e)</li></ul>			
	(c) the drilling, construction or alteration of any <i>bore</i> * pursuant to s9(2) RMA			
	(d) activities restricted by s13(1) or s13(2) RMA in the beds^ of rivers^ or lakes^			
	(e) the taking, using, damming or diverting of water^ pursuant to s14(2) RMA			
	(f) discharge^ of water^ or contaminants^ into water^ or onto or into land^ pursuant to s15(1) or s15(2A) RMA.			
	This rule does not apply to activities described in paragraphs (a) to (f) where they are carried out for the purposes of			



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	protecting or enhancing the habitat, including the control of pest animals and pest plants.			
13-9 Some activities within rare habitats* and threatened habitats	Except as regulated by Rules 14-5, 14-13, 14-24, 16-9, 17-2, 17-4, 17-5, 17-7 in relation to any existing small dam structure <sup>^</sup> , 17-14 and 17-15, any of the following activities within a rare habitat*, threatened habitat*:	Non-Complying		
	(a) vegetation clearance*, land disturbance* or cultivation* pursuant to s9(2) RMA			
	(b) forestry* pursuant to s9(2) RMA that does not meet condition^, standard or term of Rule 13-3 (b)(iii) or (e)			
	(c) the drilling, construction or alteration of any <i>bore</i> * pursuant to s9(2) RMA			
	(d) activities restricted by s13(1) or s13(2) RMA in the beds^ of rivers^ or lakes^			
	(e) the taking, using, damming or diverting of water^ pursuant to s14(2) RMA			
	(f) discharge^ of water^ or contaminants^ into water^ or onto or into land^ pursuant to s15(1) or s15(2A) RMA.			
	This rule does not apply to activities described in paragraphs (a) to (f) where they are carried out for the purposes of protecting or enhancing the habitat, including the control of pest animals and pest plants.			







CHAPTER 14:
Discharges to Land and Water

# 14 Discharges to Land and Water

## 14.1 Objectives

# Objective 14-1: Management of discharges<sup>^</sup> to land<sup>^</sup> and water<sup>^</sup> and land<sup>^</sup> uses affecting groundwater and surface water quality

The management of *discharges*^ onto or into *land*^ (including those that enter *water*^) or directly into *water*^ and *land*^ use activities affecting groundwater and surface *water*^ quality in a manner that:

- (a) safeguards the life supporting capacity of water and recognises and provides for the Values and management objectives in Schedule B,
- (b) provides for the objectives and policies of Chapter 5 as they relate to surface water and groundwater quality, and
- (c) where a *discharge*^ is onto or into *land*^, avoids, remedies or mitigates adverse *effects*^ on surface *water*^ or groundwater.

#### 14.2 Policies

# Policy 14-1: Consent decision-making for discharges<sup>^</sup> to water<sup>^</sup>

When making decisions on resource consent' applications, and setting consent conditions', for discharges' of water' or contaminants' into water', the Regional Council must specifically consider:

- (a) the objectives and Policies 5-1 to 5-5 and 5-9 of Chapter 5,
- and have regard to:
- (b) avoiding discharges^ which contain any persistent contaminants^ that are likely to accumulate in a water body^ or its bed^,
- (c) the appropriateness of adopting the best practicable option to prevent or minimise adverse effects in circumstances where:
  - (i) it is difficult to establish *discharge*^ parameters for a particular *discharge*^ that give effect to the management approaches for *water*^ quality and *discharges*^ set out in Chapter 5, or
  - (ii) the potential adverse *effects*^ are likely to be minor, and the costs associated with adopting the *best practicable option*^ are small in comparison to the costs of investigating the likely *effects*^ on *land*^ and *water*^, and
- (d) the objectives and policies of Chapters 2, 3, 6, 9 and 12 to the extent that they are relevant to the discharge^.



### Policy 14-2: Consent decision-making for discharges<sup>^</sup> to land<sup>^</sup>

When making decisions on resource consent<sup>^</sup> applications, and setting consent conditions<sup>^</sup>, for discharges<sup>^</sup> of contaminants<sup>^</sup> onto or into land<sup>^</sup> the Regional Council must have regard to:

- (a) the objectives and policies of Chapter 5 regarding the management of groundwater quality and discharges^,
- (b) where the *discharge*^ may enter surface *water*^ or have an adverse *effect*^ on surface *water*^ quality, the degree of compliance with the approach for managing surface *water*^ quality set out in Chapter 5,
- (c) avoiding as far as reasonably practicable any adverse *effects*^ on any sensitive receiving *environment*^ or potentially incompatible *land*^ uses, in particular any residential buildings, educational facilities, churches, marae, public areas, *infrastructure*^ and other physical resources of regional or national importance identified in Policy 3-1, *wetlands*^, surface *water bodies*^ and the *coastal marine area*^,
- (d) the appropriateness of adopting the best practicable option to prevent or minimise adverse effects in circumstances where:
  - (i) it is difficult to establish *discharge*^ parameters for a particular *discharge*^ that give effect to the management approaches for *water*^ quality and *discharges*^ set out in Chapter 5,
  - (ii) the potential adverse *effects*^ are likely to be minor, and the costs associated with adopting the *best practicable option*^ are small in comparison to the costs of investigating the likely *effects*^ on *land*^ and *water*^,
- (e) avoiding discharges^ which contain any persistent contaminants^ that are likely to accumulate in the soil or groundwater, and
- (f) the objectives and policies of Chapters 2, 3, 6, 9 and 12 to the extent that they are relevant to the discharge^.

#### Policy 14-3: Industry-based standards

The Regional Council will examine on an on-going basis relevant industry-based standards (including guidelines and codes of practice), recognising that such industry based standards generally represent current best practice, and may accept compliance with those standards as being adequate to avoid, remedy or mitigate adverse *effects*^ to the extent that those standards address the matters in Policies 14-1, 14-2, 14-4 and 14-5.

#### Policy 14-4: Options for discharges<sup>^</sup> to surface water<sup>^</sup> and land<sup>^</sup>

When applying for consents and making decisions on consent applications for *discharges*^ of *contaminants*^ into *water*^ or onto or into *land*^, the opportunity to utilise alternative *discharge*^ options, or a mix of *discharge*^ regimes, for the purpose of mitigating adverse *effects*^, applying the best practicable option, must be considered, including but not limited to:

- (a) discharging contaminants^ onto or into land^ as an alternative to discharging contaminants^ into water^,
- (b) withholding from discharging contaminants^ into surface water^ at times of low flow, and



(c) adopting different treatment and *discharge*^ options for different receiving *environments*^ or at different times (including different flow regimes or levels in surface *water bodies*^).

#### Policy 14-5: Management of intensive farming land^ uses

In order to give effect to Policy 5-7 and Policy 5-8, intensive farming *land*^ use activities affecting groundwater and surface *water*^ quality must be managed in the following manner:

- (a) The following land uses have been identified as intensive farming *land*^ uses:
  - (i) Dairy farming\*
  - (ii) Commercial vegetable growing\*
  - (iii) Cropping\*
  - (iv) Intensive sheep and beef\*
- (b) The intensive farming *land* uses identified in (a) must be regulated where:
  - (i) They are existing intensive farming land\(^\) uses, in the targeted Water Management Sub-zones\(^\) identified in Table 14.1.
  - (ii) They are new (ie., established after the Plan has legal effect<sup>1</sup>) intensive farming *land*^ uses, in all *Water Management Sub-zones*\* in the Region.
- (c) Nitrogen leaching maximums have been established in Table 14.2.
- (d) Existing intensive farming *land*<sup>^</sup> uses regulated in accordance with (b)(i) must be managed to ensure that the leaching of nitrogen from those *land*<sup>^</sup> uses does not exceed the *cumulative nitrogen leaching maximum*<sup>\*</sup> values for each year contained in Table 14.2, unless the circumstances in Policy 14-6 apply.
- (e) New intensive farming *land*<sup>h</sup> uses regulated in accordance with (b)(ii) must be managed to ensure that the leaching of nitrogen from those *land*<sup>h</sup> uses does not exceed the *cumulative nitrogen leaching maximum*\* values for each year contained in Table 14.2.
- (f) Intensive farming land uses regulated in accordance with (b) must exclude cattle from:
  - (i) A wetland or lake that is a rare habitat, threatened habitat or at-risk habitat.
  - (ii) Any river^ that is permanently flowing or has an active bed\* width greater than 1 metre.
- (g) All places where cattle cross a river that is permanently flowing or has an *active bed*\* width greater than 1 metre must be culverted or bridged and those culverts or bridges must be used by cattle whenever they cross the river.

The Plan has legal effect in the case of dairy farming\* from 24 August 2010 and for commercial vegetable growing\*, cropping\* and intensive sheep and beef\* it has legal effect from 9 May 2013.



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### Policy 14-6: Resource consent decision-making for intensive farming land^ uses

When making decisions on resource consent<sup>^</sup> applications, and setting consent conditions<sup>^</sup>, for intensive farming land<sup>^</sup> uses the Regional Council must:

- (a) Ensure the nitrogen leaching from the land is managed in accordance with Policy 14-5.
- (b) An exception may be made to (a) for existing intensive farming *land*^ uses in the following circumstances:
  - (i) where the existing intensive farming *land*<sup>A</sup> use occurs on land that has 50% or higher of LUC Classes IV to VIII and has an average annual rainfall of 1500 mm or greater; or
  - (ii) where the existing intensive farming *land*^ use cannot meet year 1 *cumulative nitrogen leaching maximums*\* in year 1, they shall be managed through conditions on their resource consent to ensure year 1 *cumulative nitrogen leaching maximums*\* are met within 4 years.
- (c) Where an exception is made to the *cumulative nitrogen leaching maximum*\* the existing intensive farming *land*^ uses must be managed by consent conditions to ensure:
  - (i) Good management practices to minimise the loss of nitrogen, phosphorus, faecal contamination and sediment are implemented.
  - (ii) Any losses of nitrogen, which cannot be minimised, are remedied or mitigated, including by other works or environmental compensation. Mitigation works may include but are not limited to, creation of wetland and riparian planted zones.
- (d) Ensure that cattle are excluded from surface water in accordance with Policy 14-5 (f) and (g) except where landscape or geographical constraints make stock exclusion impractical and the effects of cattle stock movements are avoided, remedied or mitigated. In all cases any unavoidable losses of nitrogen, phosphorus, faecal contamination and sediment are remedied or mitigated by other works or environmental compensation. Mitigation works may include (but are not limited to) creation of wetland and riparian planted zones.

#### Policy 14-7: Management of discharges<sup>^</sup> of domestic wastewater<sup>\*</sup>

When making decisions on resource consent<sup>^</sup> applications, and setting consent conditions<sup>^</sup>, for on-site discharges<sup>^</sup> of domestic wastewater<sup>\*</sup>, the Regional Council must generally ensure that the discharge<sup>^</sup> is in accordance with the Manual for On-site Wastewater Systems Design and Management (Horizons Regional Council 2010).

For discharges<sup>^</sup> that are not in accordance with the Manual for On-site Wastewater Systems Design and Management (Horizons Regional Council 2010) the Regional Council must make decisions on resource consent<sup>^</sup> applications, and set consent conditions<sup>^</sup>, for on-site discharges<sup>^</sup> of domestic wastewater<sup>\*</sup>, to ensure that:

(a) the *site*\* is suitable for the intended on-site wastewater management system,



- (b) the *discharge*^ does not result in actual or potential contamination of:
  - (i) groundwater at any point of abstraction utilised for irrigation, stock or domestic drinking water^,
  - (ii) surface water bodies^,
  - (iii) stormwater drains,
  - (iv) artificial watercourses\*, or
  - (v) neighbouring properties\*,
- (c) the discharge^ does not constitute a public health threat,
- (d) the discharge^ does not cause any offensive or objectionable odour beyond the property\* boundary, and
- (e) a sufficient area of *land* is set aside as a reserve disposal area.

#### Policy 14-8: Monitoring requirements for consent holders

Point source discharges^ of contaminants^ to water^ must generally be subject to the following monitoring requirements:

- (a) the regular monitoring of *discharge*^ volumes on *discharges*^ smaller than 100 m³/day and making the records available to the Regional Council on request,
- (b) the installation of a pulse-count capable meter in order to monitor the volume *discharged*^ for *discharges*^ of 100 m<sup>3</sup>/day or greater,
- (c) the installation of a Regional Council compatible telemetry system on discharges<sup>A</sup> of 300 m<sup>3</sup>/day or greater, and
- (d) monitoring and reporting on the quality of the *discharge*^ at the point of *discharge*^ before it enters surface *water*^ and the quality of the receiving *water*^ upstream and downstream of the point of *discharge*^ (after *reasonable mixing*\*) may also be required. This must align with the Regional Council's environmental monitoring programme where reasonably practicable to enable cumulative impacts to be measured.

#### Policy 14-9: Consent decision making requirements from the National Policy Statement for Freshwater Management

- (a) This policy applies to any application for the following *discharges*^ (including a diffuse *discharge*^ by any person or animal):
  - (i) a new discharge^; or
  - (ii) 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*^.



- (b) When considering any application for a *discharge*^ the Regional Council must have regard to the following matters:
  - (i) 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
  - ii) 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.

This clause of the policy 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.

- (c) When considering any application for a *discharge*^ the Regional Council must have regard to the following matters:
  - (i) the extent to which the *discharge*\(^\) would avoid contamination that will have an adverse effect on the health of people and communities as affected by their secondary contact with fresh *water*\(^\); and
  - (ii) the extent to which it is feasible and dependable that any more than minor adverse effect on the health of people and communities as affected by their secondary contact with fresh *water*^ resulting from the *discharge*^ would be avoided.

This clause of the policy does not apply to any application for consent first lodged before the National Policy Statement for Freshwater Management 2014 took effect on 4 July 2014.

## 14.3 Rules - Agricultural Activities

Table 14.1 sets out the target *Water Management Sub-zones*\* where management of existing intensive farming *land*^ use activities must be specifically controlled.

Table 14.1 Targeted Water Management Sub-zones\*

Catchment	Water Management Sub zone*	Date the Rules of the Plan have legal effect <sup>2</sup> in relation to Rule 14-1	
Mangapapa	Mangapapa Mana_9b	1 July 2014	
Waikawa	Waikawa West_9a	1 July 2014	
	Manakau West_9b		

The Plan has legal effect in the case of dairy farming\* from 24 August 2010 and for commercial vegetable growing\*, cropping\* and intensive sheep and beef\* it has legal effect from 9 May 2013.



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Catchment	Water Management Sub-zone*	Date the Rules of the Plan have legal effect <sup>2</sup> in relation to Rule 14-1	
Other south-west catchments (Papaitonga)	Lake Papaitonga West_8	1 July 2014	
Mangatainoka	Upper Mangatainoka Mana_8a	1 July 2015	
	Middle Mangatainoka Mana_8b		
	Lower Mangatainoka Mana_8c		
	Makakahi Mana_8d		
Other coastal lakes	Northern Manawatu Lakes West_6	1 July 2015	
	Kaitoke Lakes West_4		
	Southern Wanganui Lakes West _5		
Coastal Rangitikei	Coastal Rangitikei Rang_4	1 July 2015	
Lake Horowhenua	Lake Horowhena Hoki_1a I July 2015		
	Hokio Hoki_1b		
Upper Manawatu above Hopelands	Upper Manawatu Mana_1a	1 July 2016	
	Mangatewainui Mana_1b		
	Mangatoro Mana_1c		
	Weber-Tamaki Mana_2a		
	Mangatera Mana_2b		
	Upper Tamaki Mana_3		
	Upper Kumeti Mana_4		
	Tamaki-Hopelands Mana_5a		
	Lower Tamaki Mana_5b		
	Lower Kumeti Mana_5c		
	Oruakeretaki Mana_5d		
	Raparapawai Mana_5e		
Manawatu above gorge	Hopelands-Tiraumea Mana_6	1 July 2016	
	Upper Gorge Mana_9a		
	Mangaatua Mana_9c		



Table 14.2 sets out the *cumulative nitrogen leaching maximum*\* for the *land*^ used for intensive farming *land*^ use activities within each specified *land use capability class*\*.

Table 14.2 Cumulative nitrogen leaching maximum\* by Land Use Capability Class\*

Period (from the year that the rule has legal effect≟)	LUC* I	LUC* II	LUC* III	LUC* IV	LUC* V	LUC* VI	LUC* VII	LUC* VIII
Year 1	30	27	24	18	16	15	8	2
Year 5	27	25	21	16	13	10	6	2
Year 10	26	22	19	14	13	10	6	2
Year 20	25	21	18	13	12	10	6	2

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
14-1 Existing intensive farming land^ use activities	The use of land^ pursuant to s9(2) RMA for any of the following types of intensive farming:  (i) dairy farming*  (ii) commercial vegetable growing*  (iii) cropping*  (iv) intensive sheep and beef farming*  that was existing in the Water Management Sub-zones* listed in and from the dates specified in Table 14.1 and any of the following discharges^ pursuant to ss15(1) or 15(2A) RMA associated with that intensive farming:  (a) the discharge^ of fertiliser* onto or into land^  (b) the discharge^ of contaminants^ onto or into land^ from	Controlled	<ul> <li>(a) A nutrient management plan* must be prepared for the land^, and provided annually to the Regional Council.</li> <li>(b) The activity must be undertaken in accordance with the nutrient management plan* prepared under (a).</li> <li>(c) The nutrient management plan* prepared under (a) must demonstrate that the nitrogen leaching loss from the activity will not exceed the cumulative nitrogen leaching maximum* specified in Table 14.2.</li> <li>(d) Cattle must be excluded from: <ol> <li>(i) wetlands^ and lakes^ that are a rare habitat* or threatened habitat*, and</li> <li>(ii) the beds^ of rivers^ that are permanently flowing or have an active bed* width greater than 1 m.</li> <li>(e) Rivers^ that are permanently flowing or have an active bed* width greater than 1 m, that are crossed by cattle must be bridged or culverted, and the cattle must</li> </ol> </li></ul>	Control is reserved over:  (a) the implementation of the nutrient management plan*  (b) compliance with the cumulative nitrogen leaching maximum* specified in Table 14.2  (c) the matters of control in Rule 14-11  (d) avoiding, remedying or mitigating the effects of odour, dust, fertiliser* drift or effluent drift  (e) provision of information including the nutrient management plan*  (f) duration of consent  (g) review of consent conditions^  (h) compliance monitoring  (i) the matters in Policy 14-9.

The Plan has legal effect in the case of dairy farming\* from 24 August 2010 and for commercial vegetable growing\*, cropping\* and intensive sheep and beef\* it has legal effect from 9 May 2013.



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Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	<ul> <li>(i) the preparation, storage, use or transportation of stock feed on production land^</li> <li>(ii) the use of a feedpad*</li> <li>(c) the discharge^ of grade Aa biosolids* or compost* onto or into production land^</li> <li>(d) the discharge^ of poultry farm litter* onto or into production land^</li> <li>(e) the discharge^ of farm animal effluent* onto or into production land^ (or upon expiry or surrender of any existing consent for that discharge^) including: <ul> <li>(i) effluent from dairy sheds and feedpads*</li> <li>(ii) effluent received from piggeries</li> <li>(iii) sludge from farm effluent ponds</li> <li>(iv) poultry farm effluent</li> </ul> and any ancillary discharge^ of contaminants^ into air pursuant to ss15(1) or 15(2A) RMA.</li> <li>Where the existing intensive farming land^ use is located partly on land within one or more of the water management subzones* listed in Table 14.1 and partly on other land, this rule only applies:</li> <li>(a) if at least 20% of the existing intensive farming land^ use is located on land within the listed water management subzones*; and</li> <li>(b) to the portion of the existing intensive farming land^ use that is located within</li> </ul>		cross via that bridge or culvert, and run-off originating from the carriageway of the bridge or culvert must be discharged^ onto or into land^.  (f) The discharge^ of fertiliser* onto or into land^ and any ancillary discharge^ of contaminants^ into air must comply with the conditions^ of Rule 14-5.  (g) The discharge^ of contaminants^ onto or into land^ from:  (i) the preparation, storage, use or transportation of stock feed on production land^, or  (ii) the use of a feedpad*  and any ancillary discharge^ of contaminants^ into air must comply with the conditions^ of Rule 14-6.  (h) The discharge^ of grade Aa biosolids* or compost* onto or into production land^ and any ancillary discharge^ of contaminants^ into air must comply with the conditions^ of Rule 14-7.  (i) The discharge^ of poultry farm litter* onto or into production land^ and any ancillary discharge^ of contaminants^ into air must comply with the conditions^ of Rule 14-9.  (j) The discharge^ of farm animal effluent* onto or into production land^ including:  (i) effluent from dairy sheds and feedpads*  (ii) effluent received from piggeries  (iii) sludge from farm effluent ponds  (iv) poultry farm effluent  and any ancillary discharge^ of contaminants^ into air must comply with the conditions^ , standards and terms of Rule 14-11.	Resource consent <sup>A</sup> applications under this rule <sup>A</sup> will not be notified and written approval of affected persons will not be required (notice of applications need not be served <sup>A</sup> on affected persons).



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	the listed water management sub- zones*.			
14-2 Existing intensive farming land^ use activities not complying with Rule 14-1	The use of land^ pursuant to s9(2) RMA for any of the following intensive farming:  (i) dairy farming*  (ii) commercial vegetable growing*  (iii) cropping*  (iv) intensive sheep and beef farming*  that was existing in the Water Management Sub-zones* listed in and from the dates specified in Table 14.1, and any of the following discharges^ pursuant to ss15(1) or 15(2A) RMA associated with intensive farming, that do not comply with one or more of the conditions^, standards and terms of Rule 14-1:  (a) the discharge^ of fertiliser* onto or into land^  (b) the discharge^ of contaminants^ onto or into land^ from  (i) the preparation, storage, use or transportation of stock feed on production land^  (ii) the use of a feedpad*  (c) the discharge^ of grade Aa biosolids* or compost* onto or into production land^  (d) the discharge^ of poultry farm litter* onto or into production land^  (e) the discharge^ of farm animal effluent* onto or into production land^ (or upon	Restricted Discretionary		Discretion is restricted to:  (a) preparation of and compliance with a nutrient management plan* for the land^  (b) the extent of non-compliance with the cumulative nitrogen leaching maximum* specified in Table 14.2  (c) measures to avoid, remedy or mitigate nutrient leaching, faecal contamination and sediment losses from the land^  (d) measures to exclude cattle from wetlands^ and lakes^ that are a rare habitat* or threatened habitat*, and rivers^ that are permanently flowing or have an active bed* width greater than 1 m  (e) the bridging or culverting of rivers^ that are permanently flowing or have an active bed* width greater than 1 m that are crossed by cattle  (f) the matters referred to in the conditions^ of Rules 14-5, 14-6, 14-7, and 14-9  (g) the matters referred to in the matters of control in Rule 14-11  (h) avoiding, remedying or mitigating the effects of odour, dust, fertiliser* drift or effluent drift  (i) provision of information including the



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	expiry or surrender of any existing consent for that discharge^) including:  (i) effluent from dairy sheds and feedpads*  (ii) effluent received from piggeries  (iii) sludge from farm effluent ponds  (iv) poultry farm effluent  and any ancillary discharge^ of contaminants^ into air pursuant to ss15(1) or 15(2A) RMA.			annual nutrient management plan*  (j) duration of consent (k) review of consent conditions^ (l) compliance monitoring (m) the matters in Policy 14-9.
14-3 New intensive farming land^ use activities	The use of land^ pursuant to s9(2) RMA for any conversion to any of the following intensive farming:  (i) dairy farming*  (ii) commercial vegetable growing*  (iii) cropping*  (iv) intensive sheep and beef farming*  that occurs from the date this rule has legal effect <sup>4</sup> anywhere within the Region and any of the following discharges^ pursuant to ss15(1) or 15(2A) RMA associated with that intensive farming:  (a) the discharge^ of fertiliser* onto or into land^  (b) the discharge^ of contaminants^ onto or into land^ from  (i) the preparation, storage, use or transportation of stock feed on production land^	Controlled	<ul> <li>(a) A nutrient management plan* must be prepared for the land^ and provided annually to the Regional Council.</li> <li>(b) The activity must be undertaken in accordance with the nutrient management plan* prepared under (a).</li> <li>(c) The nutrient management plan* prepared under (a) must demonstrate that the nitrogen leaching loss from the activity will not exceed the cumulative nitrogen leaching maximum* specified in Table 14.2.</li> <li>(d) Cattle must be excluded from: <ul> <li>(i) wetlands^ and lakes^ that are a rare habitat* or threatened habitat*, and</li> <li>(ii) the beds^ of rivers^ that are permanently flowing or have an active bed* width greater than 1 m.</li> </ul> </li> <li>(e) Rivers^ that are permanently flowing or have an active bed* width greater than 1 m, that are crossed by cattle, must be bridged or culverted and the cattle must cross via that bridge or culvert, and run-off originating from the carriageway of the bridge or culvert must be discharged^ onto or into land^.</li> </ul>	Control is reserved over:  (a) the implementation of the nutrient management plan*  (b) compliance with the cumulative nitrogen leaching maximum* specified in Table 14.2  (c) the matters of control in Rule 14-11  (d) avoiding, remedying or mitigating the effects of odour, dust, fertiliser* drift or effluent drift  (e) provision of information including the nutrient management plan*  (f) duration of consent  (g) review of consent conditions^  (h) compliance monitoring  (i) the matters in Policy 14-9.  Resource consent^ applications under this rule^ will not be notified and written approval

The rule has legal effect in the case of dairy farming\* from 24 August 2010 and for commercial vegetable growing\*, cropping\* and intensive sheep and beef\* it has legal effect from 9 May 2013.



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	<ul> <li>(ii) the use of a feedpad*</li> <li>(c) the discharge^ of grade Aa biosolids*, or compost* onto or into production land^</li> <li>(d) the discharge^ of poultry farm litter* onto or into production land^</li> <li>(e) the discharge^ of farm animal effluent* onto or into production land^ including: <ul> <li>(i) effluent from dairy sheds and feedpads*</li> <li>(ii) effluent received from piggeries</li> <li>(iii) sludge from farm effluent ponds</li> <li>(iv) poultry farm effluent</li> </ul> and any ancillary discharge^ of contaminants^ into air pursuant to ss15(1) or 15(2A) RMA.</li> </ul>		<ul> <li>(f) The discharge^ of fertiliser* onto or into land^ and any ancillary discharge^ of contaminants^ into air must comply with the conditions^ of Rule 14-5.</li> <li>(g) The discharge^ of contaminants^ onto or into land^ from: <ul> <li>(i) the preparation, storage, use or transportation of stock feed on production land^, or</li> <li>(ii) the use of a feedpad* <ul> <li>and any ancillary discharge^ of contaminants^ into air must comply with the conditions^ of Rule 14-6.</li> </ul> </li> <li>(h) The discharge^ of grade Aa biosolids* or compost* onto or into production land^ and any ancillary discharge^ of contaminants^ into air must comply with the conditions^ of Rule 14-7.</li> <li>(i) The discharge^ of poultry farm litter* onto or into production land^ and any ancillary discharge^ of contaminants^ into air must comply with the conditions^ of Rule 14-9.</li> <li>(j) The discharge^ of farm animal effluent* onto or into production land^ including: <ul> <li>(i) effluent from dairy sheds and feedpads*</li> <li>(ii) effluent received from piggeries</li> <li>(iii) sludge from farm effluent ponds</li> <li>(iv) poultry farm effluent and any ancillary discharge^ of contaminants^ into air must comply with the conditions^, standards and terms of Rule 14-11.</li> </ul> </li> </ul></li></ul>	of affected persons will not be required (notice of applications need not be served^on affected persons).
14-4 New intensive farming <i>land</i> ^ use activities not complying with Rule	The use of land^ pursuant to s9(2) RMA for any of the following intensive farming  (i) dairy farming*  (ii) commercial vegetable growing*	Restricted Discretionary		Discretion is restricted to:  (a) preparation of and compliance with a nutrient management plan* for the land^



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
14-3	<ul><li>(iii) cropping*</li><li>(iv) intensive sheep and beef farming*</li><li>that occurs from the date this rule has legal</li></ul>			(b) the extent of non-compliance with the cumulative nitrogen leaching maximum*specified in Table 14.2
	effect <sup>5</sup> anywhere within the Region, and any of the following <i>discharges</i> <sup>^</sup> pursuant to ss15(1) or 15(2A) RMA associated with			(c) measures to avoid, remedy or mitigate nutrient leaching, faecal contamination and sediment losses from the <i>land</i> ^
	intensive farming, that do not comply with one or more of the <i>conditions</i> ^, standards and terms of Rule 14-3:  (a) the <i>discharge</i> ^ of <i>fertiliser</i> * onto or into <i>land</i> ^  (b) the <i>discharge</i> ^ of <i>contaminants</i> ^ onto or into <i>land</i> ^ from  (i) the preparation, storage, use or transportation of stock feed on <i>production land</i> ^			(d) measures to exclude cattle from wetlands^ and lakes^ that are a rare habitat* or threatened habitat*, and rivers^ that are permanently flowing or have an active bed* width greater than
				1 m (e) the bridging or culverting of <i>rivers</i> ^ that
				are permanently flowing or have an active bed* width greater than 1 m that are crossed by cattle
	<ul><li>(ii) the use of a feedpad*</li><li>(c) the discharge^ of grade Aa biosolids*</li></ul>			(f) the matters referred to in the conditions <sup>^</sup> of Rules 14-5, 14-6, 14-7, and 14-9
	or compost* onto or into production land^  (d) the discharge^ of poultry farm litter*			(g) the matters referred to in the conditions <sup>n</sup> of Rule 14-11 and the matters of control in Rule 14-11
	onto or into production land^  (e) the discharge^ of farm animal effluent* onto or into production land^ including:			(h) avoiding, remedying or mitigating the effects of odour, dust, <i>fertiliser*</i> drift or effluent drift
	(i) effluent from dairy sheds and feedpads*			(i) provision of information including the annual <i>nutrient management plan*</i>
	(ii) effluent received from piggeries			(j) duration of consent
	(iii) sludge from farm effluent ponds (iv) poultry farm effluent			<ul><li>(k) review of consent conditions^</li><li>(l) compliance monitoring</li></ul>

The rule has legal effect in the case of dairy farming\* from 24 August 2010 and for commercial vegetable growing\*, cropping\* and intensive sheep and beef\* it has legal effect from 9 May 2013.



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	and any ancillary <i>discharge</i> ^ of <i>contaminants</i> ^ into air pursuant to ss15(1) or 15(2A) RMA.			(m) the matters in Policy 14-9.
14-5 Fertiliser*	The discharge^ of fertiliser* onto or into land^ pursuant to ss15(1) or 15(2A) RMA and any ancillary discharge^ of contaminants^ into air pursuant to ss15(1) or 15(2A) RMA, except where the discharge^ is undertaken in association with a use of land^ controlled by Rules 14-1 to 14-4.	Permitted	<ul> <li>(a) There must be no direct discharge^ of fertiliser* into any surface water body^ or its bed^ or artificial watercourse* other than as provided for under (b).</li> <li>(b) All reasonable measures must be taken to prevent:  (i) any discharge^ of fertiliser* within the bed^ of a river^ that is permanently flowing or has an active bed* width greater than 2 m, or any lake^ or wetland^ that has an area of 1 ha or more</li> <li>(ii) any discharge^ into any rare habitat*, threatened habitat* or at-risk habitat*, except for the purpose of enhancing such habitats.</li> <li>Under condition (b) "reasonable measures" includes the use of GPS technology.</li> <li>(c) For production land^ the fertiliser* must be discharged^ in accordance with the Code of Practice for Nutrient Management (New Zealand Fertiliser Manufacturers' Research Association, 2007).</li> <li>(d) Where nitrogen fertiliser* is discharged^ onto land^ in excess of 60 kgN/ha/year averaged across the whole farm area or in excess of an average rate of 150 kgN/ha/year on any application area a nutrient budget undertaken using the OVERSEER® model, which takes into account all other sources of nitrogen, and covers and identifies the whole farm area including details of individual blocks and which is designed to minimise nitrogen leaching rates, must be used to plan and carry out the fertiliser* discharge^ and be made available to the Regional Council upon request. If a nutrient management plan* is required under Rules 14-1, 14-2, 14-3 or 14-4 then the nutrient</li> </ul>	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
			budget required by this condition^ must be consistent with it and the activity must be carried out in accordance with it.  (e) The discharge^ must not result in any offensive or objectionable odour or fertiliser* drift beyond the property* boundary.	
14-6 Stock feed including feedpads*	The discharge^ of contaminants^ onto or into land^ pursuant to ss15(1) or 15(2A) RMA from:  (a) the preparation, storage, use or transportation of stock feed on production land^, or  (b) the use of a feedpad* and any ancillary discharge^ of contaminants^ into air pursuant to ss15(1) or 15(2A) RMA, except where the discharge^ is undertaken in association with a use of land^ controlled by Rule 14-1 to 14-4.	Permitted	<ul> <li>(a) All silage (excluding maize silage) storage pits that have an area greater than 500 m² and all feedpads*, must be sealed to restrict seepage of contaminants^. The permeability of the sealing layer must not exceed 1x10-9 m/s.</li> <li>(b) All areas used for storing stock feed, for feedpads* or for otherwise feeding stock (including feeding silage) must be located and managed in a manner that ensures at all times when such areas are in use: <ol> <li>(i) run-off from the area into surface water^ or artificial watercourses*, is prevented</li> <li>(ii) run-off from the surrounding catchment is prevented from entering the area.</li> </ol> </li> <li>(c) All areas used for storing stock feed, for feedpads* or for otherwise feeding stock (including feeding silage) must comply with the following separation distances: <ol> <li>(i) 50 m from rare habitats*, threatened habitats* and at-risk habitats*,</li> <li>(ii) 20 m from bores*, surface water bodies^, artificial watercourses*, and the coastal marine area^, and</li> <li>(iii) 50 m from any historic heritage^ identified in any district plan^ or regional plan^.</li> </ol> </li> <li>(d) All animal effluent* collected from feedpads* must be treated and discharged^ in accordance with Rule</li> </ul>	
			14-11.  (e) The discharge^ must not result in any offensive or	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
			objectionable odour or dust beyond the <i>property</i> * boundary.	
14-7 Discharges^ of grade Aa biosolids* and compost* to production land^	The discharge <sup>^</sup> of grade Aa biosolids* or compost* onto or into production land <sup>^</sup> pursuant to ss15(1) or 15(2A) RMA, and any ancillary discharge <sup>^</sup> of contaminants <sup>^</sup> into air pursuant to ss15(1) or 15(2A) RMA, except where the discharge <sup>^</sup> is undertaken in association with a use of land <sup>^</sup> controlled by Rules 14-1 to 14-4.	Permitted	<ul> <li>(a) There must be no direct discharge^ or run-off into any surface water body^ or its bed^ or artificial watercourse*.</li> <li>(b) For compost* the material must not contain any human or animal pathogens, or any hazardous substances*.</li> <li>(c) For grade Aa biosolids* the discharge^ must comply with the requirements for grade Aa biosolids* as included with Chapters 4 and 7 of Volume 1 and Chapters 8 (including monitoring requirements) and 9 of Volume 2 of the Guidelines for the Safe Application of Biosolids to Land in New Zealand (New Zealand Water and Waste Association, August 2003).</li> <li>(d) The discharge^ must comply with the following separation distances: <ul> <li>(i) 50 m from rare habitats*, threatened habitats* and at-risk habitats*</li> <li>(ii) 20 m from bores*, surface water bodies^, artificial watercourses* and the coastal marine area^</li> <li>(iii) 50 m from any historic heritage^ identified in any district plan^ or regional plan^.</li> </ul> </li> <li>(e) A nutrient budget undertaken using the OVERSEER® model, which takes into account all other sources of nitrogen and which is designed to minimise nitrogen leaching rates, must be used to plan and carry out the discharge^ of the grade Aa biosolids* or compost*. If a nutrient management plan* is required under Rules 14-1 to 14-4 then the nutrient budget required by this condition^ must be consistent with it and the activity must be carried out in accordance with it.</li> </ul>	
			(f) The discharge <sup>^</sup> must not result in any offensive or	



Rule	Activity	Classification		Control/Discretion Non-Notification
14-8	The <i>discharge</i> ^ of grade Ab, Ba or Bb	Restricted	objectionable odour or dust beyond the <i>property*</i> boundary.  (g) The discharger must keep the following records:  (i) a daily record of the <i>discharge^*</i> volume and location  (ii) a monthly (or more frequent) analysis of the nitrogen concentration of a <i>discharge^*</i> sample and make these records available to the Regional Council upon request.  (a) There must be no direct <i>discharge^*</i> or run-off into any	Discretion is reserved over:
Grade Ab, Ba or Bb biosolids*	biosolids* onto or into production land^ pursuant to ss15(1) or 15(2A) RMA, and any ancillary discharge^ of contaminants^ into air pursuant to ss15(2) or 15(2A) RMA, except where the discharge^ is undertaken in association with a use of land^ controlled by Rules 14-1 to 14-4.	Discretionary	surface water body^ or its bed^ or artificial watercourse*.  (b) The material must have undergone stabilisation processes to achieve at least B grade as defined by the Guidelines for the Safe Application of Biosolids to Land in New Zealand (New Zealand Water and Waste Association, August 2003). Hazardous substances* must not exceed b grade limits as given by the Guidelines for the Safe Application of Biosolids to Land in New Zealand (New Zealand Water and Waste Association, August 2003).  (c) The discharge^ must comply with the following separation distances:  (i) 150 m from residential buildings, public places and amenity areas where people congregate, education facilities and public roads	<ul> <li>(a) the rate of discharge^ and frequency of discharge^ to control nutrient and contaminant loading rates</li> <li>(b) maintenance of vegetative cover in the area of discharge^</li> <li>(c) avoiding, remedying or mitigating the effects of odour or dust</li> <li>(d) contingency measures, including for events of mechanical failure and prolonged wet weather</li> <li>(e) monitoring and information requirements</li> <li>(f) duration of consent</li> <li>(g) review of consent conditions^</li> <li>(h) compliance monitoring</li> <li>(i) the matters in Policy 14-9.</li> </ul>



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
			district plan^ or regional plan^.  (d) A nutrient budget undertaken using the OVERSEER® model, which takes into account all other sources of nitrogen and which is designed to minimise nitrogen leaching rates, must be used to plan and carry out the biosolids* discharge^. If a nutrient management plan* is required under Rules 14-1 to 14-4 then the nutrient budget required by this condition^ must be consistent with it and the activity must be carried out in accordance with it.  (e) The discharge^ must not result in any offensive or objectionable odour or dust beyond the property*	
14-9 Discharges^ of poultry farm litter* or pig farm litter* and associated temporary stockpiling	The discharge <sup>^</sup> of poultry farm litter <sup>*</sup> or pig farm litter <sup>*</sup> and associated stockpiling onto or into production land <sup>^</sup> pursuant to ss15(1) or 15(2A) RMA and any ancillary discharge <sup>^</sup> of contaminants <sup>^</sup> into air pursuant to ss15(1) or 15(2A) RMA, except where the discharge <sup>^</sup> is undertaken in association with a use of land <sup>^</sup> controlled by Rules 14-1 to 14-4.	Permitted	<ul> <li>(a) The rate of <i>discharge</i>^ must be no greater than 150 kgN/ha/year in any 12 month period and must not exceed 60 kgN/ha in any 24 hour period.</li> <li>(b) There must be no direct <i>discharge</i>^ or run-off into any surface <i>water body</i>^ or its <i>bed</i>^ or <i>artificial watercourse</i>*.</li> <li>(c) The <i>discharge</i>^ of <i>poultry farm litter</i>* or <i>pig farm litter</i>* and associated temporary stockpiling must comply with the following separation distances: <ul> <li>(i) 150 m from any residential buildings, public places and amenity areas where people congregate, and education facilities</li> <li>(ii) 50 m from <i>property</i>* boundaries</li> <li>(iii) 50 m from <i>property</i>* boundaries</li> <li>(iv) 20 m from <i>bores</i>*, surface <i>water bodies</i>^, <i>artificial watercourses</i>* and the <i>coastal marine area</i>^</li> <li>(v) 50 m from any <i>historic heritage</i>^ identified in any <i>district plan</i>^ or <i>regional plan</i>^.</li> </ul> </li> </ul>	



Rule	Activity	Classification	Conditions/Standards/Terms  Control/Discretion Non-Notification
			<ul> <li>(d) A nutrient budget undertaken using the OVERSEER® model, which takes into account all other sources of nitrogen and which is designed to minimise nitrogen leaching rates, must be used to plan and carry out the discharge^ of poultry farm litter* or pig farm litter*. If a nutrient management plan* is required under Rules 14-1 to 14-4 then the nutrient budget required by this condition^ must be consistent with it and the activity must be carried out in accordance with it.</li> <li>(e) The discharge^ of poultry farm litter* or pig farm litter* and associated temporary stockpiling must not result in any offensive or objectionable odour or dust beyond the property* boundary.</li> <li>(f) All areas used for temporary stockpiling must be located and managed in a manner that ensures at all times when such areas are in use:  (i) run-off from the area into water^ or an artificial watercourse* is prevented</li> <li>(ii) run-off from the surrounding catchment is prevented from entering the area.</li> </ul>
14-10 Offal holes and farm dumps	The discharge <sup>^</sup> of contaminants <sup>^</sup> onto or into production land <sup>^</sup> pursuant to ss15(1), 15(2) or 15(2A) RMA associated with an offal hole or farm dump, and any ancillary discharge <sup>^</sup> of contaminants <sup>^</sup> into air pursuant to ss15(1) or 15(2A) RMA, except where the discharge <sup>^</sup> is undertaken in association with a use of land <sup>^</sup> controlled by Rules 14-1 to 14-4.	Permitted	<ul> <li>(a) Only animal carcasses, or parts thereof, and waste*, which is sourced from the property* on which the offal hole or farm dump is located, can be disposed of.</li> <li>(b) The waste* must not contain any hazardous substances* or sewage.</li> <li>(c) There must be no discharge^ into any surface water body^ or its bed^ or artificial watercourse*.</li> <li>(d) The lowest point of the offal hole or farm dump must be at least 1 m above the seasonally highest water^ table.</li> <li>(e) The offal hole or farm dump must comply with the following separation distances:</li> </ul>



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
14-11 Farm animal effluent* including effluent from dairy sheds, poultry farms and piggeries	The discharge^ of farm animal effluent* onto or into production land^ pursuant to ss15(1) or 15(2A) RMA including: (a) effluent from dairy sheds and feedpads* (b) effluent from piggeries (c) sludge from farm effluent ponds (d) poultry farm effluent and any ancillary discharge^ of contaminants^ into air pursuant to ss15(1) or 15(2A) RMA, except where the discharge^ is undertaken in association with a use of land^ controlled by Rules 14-1 to 14-4.	Controlled	<ul> <li>(i) 150 m from any residential buildings, public places and amenity areas where people congregate, education facilities and public roads</li> <li>(ii) 10 m from property* boundaries</li> <li>(iii) 50 m from rare habitats*, threatened habitats* and at-risk habitats*</li> <li>(iv) 20 m from bores*, surface water bodies^, artificial watercourses* and the coastal marine area^</li> <li>(v) 50 m from any historic heritage^ identified in any district plan^ or regional plan^.</li> <li>(f) Measures must be used as necessary to minimise animal pests from entering the offal hole or farm dump.</li> <li>(g) There must be no offensive or objectionable odour or dust beyond the property* boundary.</li> <li>(a) There must be no direct discharge^ or run-off of effluent into a surface water body^ or its bed^ or artificial watercourse*, including from effluent holding facilities.</li> <li>(b) The entire extent of effluent storage and treatment facilities (including sumps and ponds) must be sealed so as to restrict seepage of effluent where all or any part of the storage facility (including weeping walls, stone traps, sumps and ponds) is established or extended (including deepening) from the date the Plan is made operative^. The permeability of the sealing layer must not exceed 1x10-9 m/s subject to the following exceptions:</li> <li>(i) Where there are multiple ponds that make up the storage facility, but not all are being extended then only those that are being extended are required to be fully sealed, or</li> </ul>	Control is reserved over:  (a) amount of effluent per discharge^ and frequency of discharge^ (b) effluent discharge^ volume and rate in relation to the infiltration rate and the available water^ storage capacity of the soil (deferred irrigation)  (c) nitrogen loading in terms of kgN/ha/year and kgN/ha in any 24 hour period  (d) effluent storage facilities (including storage volume) to allow for the withholding of effluent during periods of prolonged wet weather when the soil moisture deficit is insufficient to allow for deficit effluent irrigation to occur  (e) measures to manage the ponding of



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
			<ul> <li>(ii) The establishment or extension of sumps, weeping walls or stone traps alone do not trigger a requirement for sealing of existing ponds.</li> <li>(c) The discharge^ must comply with the following separation distances: <ul> <li>(i) for discharges^ of piggery effluent, 150 m from any residential buildings, public places and amenity areas where people congregate and education facilities</li> <li>(ii) for other discharges^, 20 m from any residential buildings, public places and amenity areas where people congregate and education facilities</li> <li>(iii) for all discharges^, 50 m from rare habitats*, threatened habitats* and at-risk habitats*</li> <li>(iv) for all discharges^, 20 m from bores*, surface water bodies^, artificial watercourses* and the coastal marine area^</li> <li>(v) for all discharges^, 50 m from any historic heritage^ identified in any district plan^ or regional plan^.</li> <li>(d) Stormwater from ancillary roof areas, and hardstand areas which do not hold animals, must not discharge^ to the effluent storage facility unless the volume calculation for the pond takes into consideration the input from ancillary roof and hardstand areas.</li> <li>(e) A nutrient budget, undertaken using the OVERSEER® model, which takes into account all other sources of nitrogen and which is designed to minimise nitrogen leaching rates, must be used to plan and carry out the animal effluent* discharge^. If a nutrient management plan* is required under Rules 14-1 to 14-4 then the nutrient budget required by this condition^ must be consistent with it and the activity must be carried out</li> </ul> </li> </ul>	effluent on the discharge^ area  (f) maintenance of vegetative cover on the discharge^ area  (g) management of odours arising from the effluent discharge^  (h) contingency measures, including for events of mechanical failure and prolonged wet weather  (i) duration of consent  (j) review of consent conditions^  (k) compliance monitoring  (l) the matters in Policy 14-9.  Except for new piggeries, resource consent^ applications under this rule^ will not be notified and written approval of affected persons will not be required (notice of applications need not be served^ on affected persons).



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
			in accordance with it.  (f) There must be no offensive or objectionable odour, dust, or effluent drift beyond the <i>property*</i> boundary.	

The location of archaeological sites when defined by a single co-ordinate is unlikely to define the true extent of subsurface archaeological evidence. The 50 metre rule should apply from the outer perimeter of the site.

Some activities in *rare habitats*\*, *threatened habitats*\* and *at-risk habitats*\* are regulated by Rules 13-8 and 13-9. Discharges from agricultural activities at other locations are regulated as follows:

- (a) Discharges not covered by rules Agricultural discharges pursuant to ss15(1) RMA that are not covered by the rules above are a discretionary activity under Rule 14-30.
- (b) Activities that do not comply Except for Rule 14-3, activities pursuant to ss15(1) or 15(2A) RMA that do not comply with the permitted or controlled activity rules above are a discretionary activity under general Rule 14-30.



# 14.4 Rules - Discharges of Water

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
14-12 Discharges^ of water^ to water^	The discharge^ of water^ into water^ pursuant to s15(1) RMA (excluding drainage water^ which is regulated by Rules 16-10 and 16-11 and the discharge^ of water^ into water^ that is part of the normal operation* of a dam which is regulated by Rule 17-7 or Rule 17-8).	Permitted	<ul> <li>(a) The discharge^ must not cause or exacerbate the flooding of any neighbouring property*.</li> <li>(b) The discharge^ must not cause any scouring or erosion of any land^ or bed^ of a water body^ beyond the point of discharge^.</li> <li>(c) The discharge^ must not alter the natural course of any water body^.</li> <li>(d) The discharge^ must not be to any rare habitat*, threatened habitat* or at-risk habitat* (discharges^ into at-risk habitats* are discretionary activities^ under Rule 13-8 and into rare habitats* or threatened habitats* are non-complying activities under Rule 13-9).</li> <li>(e) The discharge^ must not, after reasonable mixing*, change the natural temperature of the receiving water^ by more than the maximum temperature or temperature change specified by the water quality standards for the Water Management Sub-zone* listed in Schedule E.</li> </ul>	

### Rule Guide:

Activities that do not comply - Discharges of water pursuant to s15(1) RMA that do not comply with the permitted activity rule above are a discretionary activity under Rule 14-30.



# 14.5 Rules - Human effluent and domestic wastewater\*

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
14-13 Existing discharges^ of domestic wastewater*	The discharge^ of domestic wastewater* onto or into land^ pursuant to ss15(1) or 15(2A) RMA from an on-site wastewater treatment and land^ application system and any ancillary discharge^ of contaminants^ into air pursuant to ss15(1) or 15(2A) RMA lawfully in existence at 1 July 2011.  New and upgraded discharges^ of domestic wastewater* are controlled by Rule 14-14.	Permitted	<ul> <li>(a) The design flow as specified in section 3 of the Manual for On-Site Wastewater Systems Design and Management (Horizons Regional Council, 2010) must be no greater than 2 m³/d (2,000 litres per day).</li> <li>(b) The flow allowance used to calculate the system design flow must be no less than 145 litres per person per day where the water^ supply is provided by roof water^ collection, or no less than 180 litres per person per day for other sources of water^ supply.</li> <li>(c) The discharge^ must consist only of contaminants^ normally associated with domestic sewage and greywater.</li> <li>(d) There must be no direct discharge^ of wastewater to groundwater.</li> <li>(e) The discharge^ must comply with the following separation distances: <ul> <li>(i) at least 20 m from any bore* used for drinking water^ supply</li> <li>(ii) at least 20 m from surface water bodies^, artificial watercourses* and the coastal marine area^.</li> </ul> </li> <li>(f) The discharge^ must not cause any offensive or objectionable odour beyond the property* boundary.</li> <li>(g) There must be no increase in the concentration of pathogenic organisms in any surface water body^ as a result of the discharge^.</li> <li>(h) The wastewater treatment and land^ application system must be maintained by a manufacturerapproved contractor in accordance with the supplier's</li> </ul>	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
			specifications or the requirements of the Manual for On-Site Wastewater Systems Design and Management (Horizons Regional Council, 2010), whichever are the more stringent. All records of each maintenance* action must be retained and made available for inspection by the Regional Council or its agents upon request.	
14-14 New and upgraded discharges^ of domestic wastewater*	The discharge^ of domestic wastewater* onto or into land^ pursuant to ss15(1) or 15(2A) RMA and any ancillary discharge^ of contaminants^ into air pursuant to ss15(1) or 15(2A) RMA from a new or upgraded on- site wastewater treatment and land^ application system which either:  (a) is newly established after this rule^ becomes operative^, or  (b) involves the upgrade* of a system that existed at the date that this rule^ becomes operative^.	Permitted	<ul> <li>(a) The activity must comply with conditions (a) to (g) of Rule 14-13.</li> <li>(b) All aspects of the wastewater treatment and land^ application system, including soil assessment, design, installation and operation, must be in accordance with the Manual for On-Site Wastewater Systems Design and Management (Horizons Regional Council, 2010).</li> <li>(c) Where the property* within which the discharge^ occurs is 10 ha or greater: <ul> <li>(i) septic tanks must be fitted with effluent outlet filters, unless the equivalent level of treatment is provided within a secondary or advanced secondary wastewater treatment system</li> <li>(ii) the areal loading rate within the wastewater land^ application area must be no greater than the least conservative rate provided in Tables 6.2, 6.6, 6.8 and 6.10 of the Manual for On-Site Wastewater Systems Design and Management (Horizons Regional Council, 2010).</li> <li>(d) Where the property* within which the discharge^ occurs is less than 10 ha but 4 ha or greater:</li> <li>(i) the treatment system must be either secondary treatment which must achieve, as a minimum, the following discharge^ quality standards: 20 g/m³ Biochemical Oxygen Demand and 30 g/m³</li> </ul> </li> </ul>	



Suspended Solids or an improved primary septic tank and outlet filter  (ii) the land^ application system must be via pumping to dose load pressure compensating dripper irrigation lines for secondary or advanced secondary treated effluent and shallow low pressure effluent distribution trenches for primary treated effluent or lesser rate in accordance with that prescribed in Table 6.2 in the Manual for On-Site Wastewater Systems Design and Management (Horizons Regional Council, 2010)  (iii) the areal loading rate within the wastewater land^ application area must be no greater than 5 mm/d (5 litres per m² per day) for secondary treated effluent and no greater than 3 mm/d (3 litres per m² per day) for specondary treated effluent and no greater than 3 mm/d (3 litres per m² per day) for specondary treated effluent specific sp	etion ion
pumping to dose load pressure compensating dripper irrigation lines for secondary or advanced secondary treated effluent and shallow low pressure effluent distribution trenches for primary treated effluent or lesser rate in accordance with that prescribed in Table 6.2 in the Manual for On-Site Wastewater Systems Design and Management (Horizons Regional Council, 2010)  (iii) the areal loading rate within the wastewater land^ application area must be no greater than 5 mm/d (5 litres per m² per day) for secondary treated effluent and no greater than 3 mm/d (3 litres per m² per day) for primary treated effluent.  (e) Where the property* within which the discharge^ occurs is less than 4 ha:	
land^ application area must be no greater than 5 mm/d (5 litres per m² per day) for secondary treated effluent and no greater than 3 mm/d (3 litres per m² per day) for primary treated effluent.  (e) Where the property* within which the discharge^ occurs is less than 4 ha:	
occurs is less than 4 ha:	
(i) the <i>property</i> * must cover an area of at least	
either 5,000 m² for properties* created by subdivision after this rule^ becomes operative^, or 2,500 m² for properties* that existed at the date that this rule^ becomes operative^	
(ii) the wastewater treatment system must include secondary treatment which must achieve, as a minimum, the following <i>discharge</i> ^ quality standards: 20 g/m³ Biochemical Oxygen Demand, 30 g/m³ Suspended Solids, and 60 g/m³ Total Nitrogen	
(iii) the land^ application system must be via pumping to dose load pressure compensating dripper irrigation lines  (iv) the areal loading rate within the wastewater	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
			land^ application area must be no greater than 3 mm/d (3 litres per m² per day) or lesser rate in accordance with that prescribed in Table 6.2 in the Manual for On-Site Wastewater Systems Design and Management (Horizons Regional Council, 2010).	
			(f) Separation distances to water bodies^ and property* boundaries must be in accordance with those specified in Table 2.2 in the Manual for On-Site Wastewater Systems Design and Management (Horizons Regional Council, 2010).	
			(g) The placement, burial, covering and exclusion of the land^ application area must be as specified in section 6 in the Manual for On-Site Wastewater Systems Design and Management (Horizons Regional Council, 2010).	
			(h) For secondary treatment systems there must be at least a 50% reserve disposal area allocation. For primary treatment systems this reserve area allocation must be not less than 100%.	
			(i) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*.	
			(j) The activity must not be to any historic heritage identified in any district plan or regional plan.	
			(k) The wastewater treatment and land^ application system must be maintained by a manufacturer-approved contractor in accordance with the supplier's specifications or the requirements of the Manual for On-Site Wastewater Systems Design and Management (Horizons Regional Council, 2010), whichever are the more stringent. All records of each maintenance* action must be retained and made available for inspection by the Regional Council or its	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
14-15 Discharges^ of domestic wastewater* not complying with Rules 14-13 and 14-14	The discharge <sup>^</sup> of domestic wastewater <sup>*</sup> onto or into land <sup>^</sup> pursuant to ss15(1) or 15(2A) RMA and any ancillary discharge <sup>^</sup> of contaminants <sup>^</sup> into air pursuant to ss15(1) or 15(2A) RMA from an on-site wastewater treatment and disposal system that does not comply with one or more of the conditions <sup>^</sup> of Rules 14-13 or 14-14.	Restricted Discretionary	agents upon request.  (I) The discharge^ must not cause any offensive or objectionable odour beyond the property* boundary.  (a) The design flow must not exceed 6 m³/d.  (b) The flow allowance used to calculate the system design flow must be no less than 145 litres per person per day where the water^ supply is provided by roof water^ collection, or no less than 180 litres per person per day for other sources of water^ supply.  (c) The discharge^ must consist only of contaminants^ normally associated with domestic sewage and greywater.  (d) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*.  (e) The activity must not be to any historic heritage^ identified in any district plan^ or regional plan^.	Discretion is restricted to:  (a) the volume of wastewater and design of the treatment system  (b) compliance with the Manual for On-Site Wastewater Systems Design and Management (Horizons Regional Council, 2010)  (c) the design of the disposal system, the disposal method, and the rate of land^application  (d) the discharge^ quality, and allowable level of contamination  (e) environmental^ effects^ arising from the location and method of disposal  (f) the reserve application area  (g) duration of consent  (h) review of consent conditions^  (i) compliance monitoring  (j) the matters in Policy 14-9.  Resource consent^ applications under this rule^ will not be notified and written approval of affected persons will not be required (notice of applications need not be served^ on affected persons).



Rule	Activity	Classification	Conditions/Standards/Terms  Control/Discretion Non-Notification
14-16 Human effluent storage and treatment facilities	The discharge^ onto or into land^ of human effluent pursuant to ss15(1) or 15(2A) RMA for the purpose of storing or treating the effluent in ponds and any ancillary discharge^ to air pursuant to s15(2A) RMA.  Advice Note: This rule^ controls sewage treatment and storage ponds but does not control domestic wastewater* treatment and disposal, which is controlled under Rules 14-13, 14-14 and 14-15.	Permitted	<ul> <li>(a) All effluent storage and treatment facilities (including sumps and ponds) must be sealed to restrict seepage of effluent. The permeability of the sealing layer must not exceed 1x10-9 m/s.</li> <li>(b) All effluent storage and treatment facilities (including sumps and ponds) must be located and managed in a manner which ensures at all times that: <ol> <li>(i) effluent run-off from the area into surface water bodies^, artificial watercourses* and the coastal marine area^ is prevented</li> <li>(ii) run-off from the surrounding catchment is prevented from entering the area.</li> <li>(c) The discharge^ must not result in any offensive or objectionable odour beyond the boundary of the subject property*.</li> <li>(d) The discharge^ must comply with the following separation distances: <ol> <li>(i) 150 m from any residential buildings, public places and amenity areas where people congregate, education facilities and public roads</li> <li>(ii) 50 m from rare habitats*, threatened habitats* and at-risk habitats*</li> <li>(iii) 30 m from bores*, surface water bodies^, artificial watercourses* and the coastal marine area^</li> <li>(iv) 50 m from historic heritage^ as identified in any district plan^ or regional plan^.</li> </ol> </li> </ol></li></ul>
14-17 Discharges^ of untreated human effluent* directly into surface water^	The discharge^ of untreated human effluent* directly into a surface water body^ pursuant to s15(1) RMA, except stormwater that is contaminated with sewage as a result of infiltration during rainfall.	Prohibited	



The location of archaeological sites when defined by a single co-ordinate is unlikely to define the true extent of subsurface archaeological evidence. The 50 metre rule should apply from the outer perimeter of the site.

Some discharges in rare habitats\*, threatened habitats\* and at-risk habitats\* are regulated by Rules 13-8 and 13-9. Discharges at other locations are regulated as follows:

- (a) Activities not covered by rules Discharges of sewage pursuant to ss15(1) RMA that are not covered by the rules above are a discretionary activity under Rule 14-30.
- (b) Activities that do not comply Discharges of domestic wastewater\* pursuant to ss15(1) or 15(2A) RMA that do not comply with the permitted activity, controlled activity or restricted discretionary activity rules above, but which are not prohibited, are a discretionary activity under Rule 14-30.



# 14.6 Rules - Stormwater

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
14-18  Discharges^ of stormwater to surface water^ and land^	The discharge <sup>^</sup> of stormwater into surface water <sup>^</sup> pursuant to s15(1) RMA or onto or into land <sup>^</sup> pursuant to ss15(1) or 15(2A) RMA, and any ancillary takes or diversions of stormwater pursuant to s14(2) RMA forming part of the stormwater system.	Permitted	<ul> <li>(a) The discharge^ must not include stormwater from any: <ol> <li>industrial or trade premises^ where hazardous substances* stored or used may be entrained by the stormwater</li> <li>contaminated land^ where the contaminants^ of concern may be entrained by the stormwater</li> <li>operating quarry or mineral^ extraction site* unless there is an interceptor system* in place.</li> </ol> </li> <li>(b) The discharge^ must not cause or exacerbate the flooding of any other property*.</li> <li>(c) The activity must not cause erosion of any land^ or the bed^ of any water body^ beyond the point of discharge^ unless this is not practicably avoidable, in which case any erosion that occurs as a result of the discharge^ must be remedied as soon as practicable.</li> <li>(d) There must be no discharge^ to any rare habitat*, threatened habitat*, at-risk habitat*, or reach of river^ or its bed^ with a Schedule B Value of Natural State.</li> <li>(e) For discharges^ of stormwater onto or into land^: <ol> <li>the discharge^ must be below a rate that would cause flooding outside the design discharge^ soakage area, except in rain events equivalent to or greater than the 10% annual exceedance probability design storm. Any exceedance must go into designated overland flow paths</li> <li>there must not be any overland flow resulting in a discharge^ to a natural surface water body^, except in rain events equivalent to or greater</li> </ol> </li> </ul>	



Rule	Activity	Classification	Conditions/Standards/Terms Control/Discretion Non-Notification
			than the 10% annual exceedance probability design storm  (iii) the discharge^ must not contain concentrations of hazardous substances* that are toxic to aquatic ecosystems, or accumulate in soil.  (f) For discharges^ of stormwater into surface water bodies^ the discharge^ must not cause any permanent reduction of the ability of the receiving water body^ or its bed^ to convey flood flows.  (g) For discharges^ of stormwater into surface water bodies^ the discharge^ must not cause, after reasonable mixing*, any of the following effects^ in the receiving water body^:  (i) the production of conspicuous oil* or grease films, scums or foams, or floatable or suspended materials  (ii) any conspicuous change in the colour or visual clarity of the receiving water^  (iii) any emission of objectionable odour  (iv) the rendering of fresh water^ unsuitable for consumption by farm animals  (v) toxicity to aquatic ecosystems.  (h) The activity must not be to any historic heritage^ identified in any district plan^ or regional plan^.
14-19  Discharges^ of stormwater to surface water^ or land not complying with Rule 14-18	The discharge^ of stormwater into surface water^ pursuant to s15(1) RMA or onto or into land^ pursuant to ss15(1) or 15(2A) RMA, which does not comply with Rule 14-18, and any ancillary takes or diversions of stormwater pursuant to s14(2) RMA forming part of the stormwater system.	Restricted Discretionary	(a) There must be no discharge^ to any rare habitat*, threatened habitat*, at-risk habitat*, or reach of a river^ or its bed^ with a Schedule B Value of Natural State.  Discretion is reserved over:  (a) measures to control flooding and erosion (b) contaminant^ concentrations and loading rates  (c) measures to avoid, remedy or mitigate adverse effects^ on groundwater quality  (d) measures to manage the level of soil



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
				contamination
				(e) measures required to comply with s107(1) RMA
				(f) measures to assist with maintaining or achieving the Schedule E water quality targets* for the relevant Water Management Sub-zones*
				(g) management of odours arising from the stormwater <i>discharge</i> ^
				(h) stormwater system <i>maintenance</i> * requirements
				(i) contingency requirements
				(j) monitoring and information requirements
				(k) duration of consent
				(I) review of consent conditions^
				(m) the matters in Policy 14-9.

- (a) Some discharges in *rare habitats\**, *threatened habitats\** and *at-risk habitats\** are regulated by Rules 13-8 and 13-9.
- (b) Discharges in a reach of a river with a Schedule B Value of Natural State or Sites of Significance Aquatic are regulated by Rule 14-25.

Discharges at other locations are regulated as follows:

- (a) **Activities not covered by rules** Discharges of stormwater pursuant to s15(1) RMA that are not covered by the rules above are a **discretionary activity** under Rule 14-30. Stormwater discharges **into** network utility piped stormwater systems are not regulated by this Plan, however permission may be required from the system owner or operator. The system owner or operator is responsible for the quality of discharges exiting the system into receiving environments.
- (b) Activities that do not comply Discharges of stormwater that do not comply with Rule 14-19 are a discretionary activity under Rule 14-30.



# 14.7 Rules - Dyes and Tracers

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
14-20 Discharges^ of dye and salt tracers	The discharge^ of dye and salt tracer material, excluding radioisotope tracers, into surface water^ pursuant to s15(1) RMA.	Permitted	<ul> <li>(a) The dye or salt tracer material discharged^ must not exceed 20 l of dye in solution, 10 kg of salt, or 100 l of salt solution.</li> <li>(b) The Regional Council and the relevant Territorial Authority^ must be notified in writing of the proposed discharge^ at least 24 hours prior to the discharge^. Such notification must include: <ol> <li>(i) the name and contact details of the person responsible for the discharge^</li> <li>(ii) the purpose and nature of the discharge^</li> <li>(iii) the nature of the tracer including its type, colour, and product name and description</li> <li>(iv) the location, timing and duration of the discharge^.</li> </ol> </li> <li>(c) The dye or salt tracer must not be a hazardous substance in terms of the Hazardous Substances and New Organisms Act 1996.</li> <li>(d) There must be no discharge^ to any rare habitat*, threatened habitat*, at-risk habitat*, or reach of a river^ or its bed^ with a Schedule B Value of Natural State or Sites of Significance - Aquatic.</li> </ul>	

### Rule Guide:

- (a) Some discharges in *rare habitats\**, *threatened habitats\** and *at-risk habitats\** are regulated by Rules 13-8 and 13-9.
- (b) Discharges in a reach of a river with a Schedule B Value of Natural State or Sites of Significance Aquatic are regulated by Rule 14-25.

Discharges at other locations are regulated as follows:



- (a) Activities not covered by rules Discharges of radioisotope tracers and other tracers pursuant to s15(1) RMA that are not covered by the rule above are a discretionary activity under Rule 14-30.
- (b) Activities that do not comply Discharges of dyes and tracers pursuant to s15(1) RMA that do not comply with the permitted activity rule above are a discretionary activity under Rule 14-30.

# 14.8 Rules - Cleanfill Material\*, Composting\*, Landfills\* and Solid Waste\*

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
14-21 Discharges^ of cleanfill material*	The discharge^ of cleanfill material* onto or into land^ pursuant to ss15(1) or 15(2A) RMA and any ancillary discharge^ of contaminants^ into water^ pursuant to s15(1) RMA or air pursuant to ss15(1) or 15(2A) RMA except as regulated by other rules^ in this Plan.  The stockpiling of gravel ancillary to gravel extraction and roading activities is not restricted by this rule^.	Permitted	<ul> <li>(a) The siting, design, installation and management must be in accordance with A Guide to the Management of Cleanfills (Ministry for the Environment, 2002).</li> <li>(b) The rate of cleanfill material* discharge^ must be no more than 2,500 m³/y per property*.</li> <li>(c) The cleanfill material* must not be discharged^ within: <ul> <li>(i) a rare habitat*, threatened habitat* or at-risk habitat*</li> <li>(ii) land^ with a slope* greater than 20°</li> <li>(iii) 50 m from any historic heritage^ identified in any district plan^ or regional plan^.</li> </ul> </li> <li>(d) Records of the source and composition of all cleanfill material* discharged^ at the site* must be maintained and made available to the Regional Council upon request.</li> <li>(e) The discharge^ of the cleanfill material* must be undertaken and maintained in a manner so as to ensure its long-term physical stability.</li> </ul>	
14-22 Composting* activities	The discharge^ of contaminants^ onto or into land^ pursuant to ss15(1) or 15(2A) RMA, or into air pursuant to ss15(1) or 15(2A) RMA arising from a composting* activity.	Permitted	<ul> <li>(a) The material to be composted must be green waste*, and must not contain any hazardous substance* or sewage.</li> <li>(b) The activity must not be located within: <ul> <li>(i) a rare habitat*, threatened habitat* or at-risk habitat*</li> <li>(ii) the bed^ of a river^ or lake^</li> </ul> </li> </ul>	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
			<ul> <li>(iii) land^ with a slope* greater than 20°</li> <li>(iv) 50 m from any historic heritage^ identified in any district plan^ or regional plan^.</li> <li>(c) All areas used for the composting* activity, including areas for storing compost*, must be located and managed in a manner that ensures at all times when such areas are in use: <ul> <li>(i) run-off from the area into surface water^ or an artificial watercourse* is prevented</li> <li>(ii) run-off from the surrounding catchment is prevented from entering the area.</li> </ul> </li> <li>(d) The discharge^ must not cause any offensive or objectionable odour or dust beyond the property* boundary.</li> </ul>	
14-23 Closed landfills*	The discharge <sup>^</sup> of contaminants <sup>^</sup> onto or into land <sup>^</sup> or into water <sup>^</sup> pursuant to ss15(1) or 15(2A) RMA or air pursuant to ss15(1) or 15(2A) RMA from a closed solid waste <sup>*</sup> landfill*.	Controlled		Control is reserved over:  (a) measures to avoid adverse effects^ on groundwater quality  (b) measures to manage the level of soil contamination  (c) measures to assist with maintaining or achieving the Schedule E water quality targets* for the relevant Water Management Sub-zones*  (d) management of odour  (e) stormwater management onto and from the site*  (f) contingency requirements  (g) monitoring and information requirements  (h) duration of consent  (i) review of consent conditions^  (j) the matters in Policy 14-9.



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
				Resource consent <sup>^</sup> applications under this rule <sup>^</sup> will not be notified and written approval of affected persons will not be required (notice of applications need not be served <sup>^</sup> on affected persons).
14-24 Discharges^ of	Any <i>discharge</i> <sup>^</sup> onto or into <i>land</i> <sup>^</sup> pursuant to ss15(1) or 15(2A) RMA, or into <i>water</i> <sup>^</sup>	Non-complying		
persistent and harmful contaminants^	pursuant to s15(1) RMA, other than for discharges <sup>A</sup> of stormwater which are provided for by Rules 14-18 and 14-19, of:			
	(a) wastewater sludge originating from timber treatment processes using copper chromium arsenic (CCA) wood preservatives			
	(b) perchlorethylene-contaminated waste* from dry cleaning activities			
	(c) persistent organochlorine substances			
	(d) polyaromatic hydrocarbons (e) tributyl tin.			

- (a) The location of archaeological sites when defined by a single co-ordinate is unlikely to define the true extent of subsurface archaeological evidence. The 50 metre rule should apply from the outer perimeter of the site.
- (b) Some discharges in *rare habitats\**, *threatened habitats\** and *at-risk habitats\** are regulated by Rules 13-8 and 13-9.

Discharges at other locations are regulated as follows:

- (a) Activities not covered by rules Discharges onto or into land or into water pursuant to s15(1) RMA that are not covered by the rules above are a discretionary activity under Rule 14-30.
- (b) Activities that do not comply Discharges pursuant to ss15(1) or 15(2A) RMA that do not comply with the permitted activity or controlled activity rules above, but which are not non-complying, are a discretionary activity under Rule 14-30.



# 14.9 Rules - Discharges of Contaminants to Natural State Reaches and Sites of Significance - Aquatic

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
14-25 Discharges^ of contaminants^ to a reach of a river^ or its bed^ with Schedule B Values of Natural State and Sites of Significance - Aquatic	Any direct discharge^ of contaminants^ into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA in:  (a) a reach of a river^ or its bed^ with a Schedule B Value of Natural State  (b) a reach of a surface water body^ or its bed^ with a Schedule B Value of Sites of Significance - Aquatic  except the discharge^ of agrichemicals* for the control of pest plants for the purposes of habitat maintenance or enhancement (this activity is regulated by Rule 15-2).	Discretionary		



# 14.10 Rules - Generic Discharge Rules

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification																						
14-26 Discharges^ of contaminants^ to surface water^	Discharges <sup>^</sup> of surface water <sup>^</sup> pursuant to s15(1) RMA, except as regulated by other rules <sup>^</sup> in this		<ul> <li>(a) The rate of discharge^ must be no greater than 50 m³/d.</li> <li>(b) The discharge^ must not contain agricultural waste*, sewage, stormwater, cleanfill material*, contaminants^ from composting* activities, or contaminants^ from landfills*.</li> </ul>																							
			(c) The <i>discharge</i> ^ must not cause or exacerbate the flooding of any other <i>property</i> *.																							
			(d) The discharge^ must not cause any scouring or erosion of any land^ or bed^ of a water body^ beyond the point of discharge^.																							
			(e) The discharge^ must not alter the natural course of any water body^ or its bed^.																							
								(f) There must be no discharge^ to any natural lake^, rare habitat*, threatened habitat*, at-risk habitat*, Site of Significance - Aquatic or reach of a river^ or its bed^ with a Schedule B Value of Natural State.																		
				(g) The discharge^ must not cause, after reasonable mixing*, any of the following effects^ in the receiving water body^:																						
																									(i) the production of conspicuous <i>oil*</i> or grease films, scums or foams, or floatable or suspended materials	
																							(ii) any conspicuous change in the colour or visual clarity of the receiving water^			
				(iii) any emission of offensive or objectionable odour.																						
					(h) The discharge^ must not, after reasonable mixing*, cause the receiving water body^ to breach the water quality standards for that water body^ set out in Schedule E, either from the discharge^ itself or in																					



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification																									
			combination with any other discharges^.																										
14-27 Discharges <sup>^</sup> of	The discharge^ of contaminants^ onto or into land^ that will not enter water^  The discharge^ of contaminants^ onto or into land^ in circumstances that will not result in any contaminant^ entering water^, pursuant to ss15(1)(d) or 15(2A) RMA, except as regulated by other rules^ in this Plan.	Permitted	(a) The rate of discharge^ must be no more than 100 m³/y per property*.																										
contaminants^ onto or into land^ that will			(b) The discharge^ must not contain agricultural waste* (except for run-off from a stock crossing bridge or culvert required under Rules 14-1 to 14-4), sewage, stormwater, cleanfill material*, contaminants^ from composting* activities, or contaminants^ from landfills*.																										
				(c) The discharge^ must not be located within:																									
			(i) any rare habitat*, threatened habitat* or at-risk habitat*																										
			(ii) the bed^ of a river^ or lake^																										
			(iii) land^ with a slope* greater than 20°																										
			(iv) 50 m from any historic heritage <sup>^</sup> identified in any district plan <sup>^</sup> or regional plan <sup>^</sup> .																										
								(d) Records of the source and composition of the discharge^ must be maintained and made available to the Regional Council upon request.																					
								(e) The discharge^ must be undertaken and maintained in a manner so as to ensure its long-term stability, and avoid the risk of erosion.																					
																												(f) The discharge^ must not cause any increase in the concentration of hazardous substances* or pathogenic organisms on or in any land^.	
			With the exception of standard (c)(i) in relation to any <i>rare habitat</i> * or <i>threatened habitat</i> * these standards do not apply to the <i>discharge</i> ^ of live ammunition for weapons training purposes on any defence area (as defined in section 2 of the Defence Act 1990) owned by the Crown where it is undertaken in accordance with that Act.																										



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
Discharges^ of contaminants^ onto or into land^ that may enter water^	The discharge <sup>^</sup> of contaminants <sup>^</sup> onto or into land <sup>^</sup> in circumstances which may result in those contaminants <sup>^</sup> (or any other contaminant <sup>^</sup> emanating as a result of natural processes from those contaminants <sup>^</sup> ) entering water <sup>^</sup> , pursuant to ss15(1)(b) or 15(2A) RMA, except as regulated by other rules <sup>^</sup> in this Plan.	Permitted	<ul> <li>(a) The discharge^ must comply with all of the conditions^ of Rule 14-26.</li> <li>(b) The discharge^ must comply with all of the conditions^ of Rule 14-27, except (a).</li> <li>(c) The discharge^ must be at least 600 mm above the seasonally highest water^ table.</li> <li>(d) The discharge^ must comply with the following separation distances: <ul> <li>(i) at least 30 m from any bore*</li> <li>(ii) at least 20 m from any surface water body^, artificial watercourse* and the coastal marine area^.</li> </ul> </li> <li>(e) The discharge^ must not be located within any rare habitat*, threatened habitat* or at-risk habitat*.</li> <li>(f) There must be no surface ponding in the area of discharge^, or run-off of any contaminant^ into a surface water body^ or its bed^, artificial watercourse* or the coastal marine area^ as a result of the discharge^.</li> <li>(g) The discharge^ must not cause any more than minor reduction in the quality of groundwater.</li> <li>(h) The discharge^ must not result in any airborne liquid contaminant^ being carried beyond the boundary of the property*.</li> <li>With the exception of standard (e) in relation to any rare habitat* or threatened habitat* these standards do not apply to the discharge^ of live ammunition for weapons training purposes on any defence area (as defined in section 2 of the Defence Act 1990) owned by the Crown where it is undertaken in accordance with that Act.</li> </ul>	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
Replacement consents for discharges^ of water^ and contaminants^ to water^ and land^ from existing hydroelectricity schemes	The discharge <sup>^</sup> of water <sup>^</sup> or contaminants <sup>^</sup> into water <sup>^</sup> or onto or into land <sup>^</sup> pursuant to ss15(1) or 15(2A) RMA from existing consented hydroelectricity generation schemes for which replacement consents are sought.	Controlled	<ul> <li>(a) The consent application is to replace existing consents that are expiring and there is no increase to the existing volume of discharge^ or the nature of contaminants^.</li> <li>(b) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*.</li> </ul>	Control is reserved over:  (a) measures to control flooding and erosion (b) contaminant^ concentrations and loading rates  (c) measures required to comply with s107(1) RMA  (d) measures to assist with maintaining or achieving the Schedule E water quality targets* for the relevant Water Management Sub-zones*  (e) measures to avoid, remedy or mitigate any adverse effects^ on the Values of the water body^ at and below the point of discharge  (f) measures to avoid, remedy or mitigate any adverse effects on the instream geomorphical components of the natural character of the waterbody  (g) water levels, flow regime and minimum flows  (h) maintenance and contingency requirements  (i) monitoring and information requirements  (j) measures to avoid, remedy or mitigate adverse effects^ on tangata whenua^ values  (k) duration of consent  (l) review of consent conditions^ (m) compliance monitoring.



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
				will be notified to those parties who are adversely affected in relation to the matters over which control is reserved. This clause does not preclude full public notification at the councils discretion in accordance with the RMA.

- (a) The location of archaeological sites when defined by a single co-ordinate is unlikely to define the true extent of subsurface archaeological evidence. The 50 metre rule should apply from the outer perimeter of the site.
- (b) Some discharges pursuant to s15(1) RMA in rare habitats\*, threatened habitats\* and at-risk habitats\* are regulated by Rules 13-8 and 13-9.
- (c) Discharges pursuant to ss15(1) or 15(2A) RMA in a reach of a river with a Schedule B Value of Natural State or Sites of Significance Aquatic are regulated by Rule 14-25.

Discharges at other locations are regulated as follows:

(a) Discharges pursuant to s15(1) RMA that do not meet the requirements of the generic rules, and are not covered by any other rule in the Plan, are discretionary activities under Rule 14-30.

## 14.11 Rules - Default Discharge Rule

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
14-30  Discharges^ of water^ or contaminants^ to land^ or water^ not covered by other rules^ in this Plan or chapter	The discharge^ of water^ or contaminants^ into surface water^ pursuant to s15(1)(a) RMA or discharge^ of contaminants^ onto or into land^ pursuant to ss15(1)(b), 15(1)(d) or 15(2A) RMA which are not regulated by other rules^ in this Plan, or which do not comply with the permitted activity^, controlled activity^ or restricted discretionary activity^ rules^ in this chapter.	Discretionary		







CHAPTER 15: Discharges to Air

# 15 Discharges to Air

## 15.1 Objective

### Objective 15-1: Air quality

The management of air quality in a manner that has regard to:

- (a) maintaining or enhancing ambient air\* quality in a manner that safeguards the health of the Region's community,
- (b) meeting the regional ambient air\* standards (Table 7.3) and National Environmental Standards^ (Table 7.1),
- (c) managing air quality so that it is not detrimental to amenity values^, and
- (d) managing fine particle ( $PM_{10}^*$ ) levels to ensure that they are reduced in unacceptable airsheds and managed in other areas to ensure compliance with the national *ambient air*\* quality standard for  $PM_{10}^*$ .

#### 15.2 Policies

### Policy 15-1: Consent decision-making for agrichemicals\*

When making decisions on *resource consent*<sup>^</sup> applications and setting consent *conditions*<sup>^</sup> for *discharges*<sup>^</sup> of *agrichemicals*<sup>\*</sup> that fail to meet either Rule 15-1 or Rule 15-2 (and which are therefore *discretionary activities*<sup>^</sup>), the Regional Council will have regard to:

- (a) requiring compliance with Parts 2 and 5 of the NZS 8409:2004 Management of Agrichemicals,
- (b) avoiding effects\(^\) on human health,
- (c) avoiding or mitigating any unreasonable prevention or reduction in access to adjoining *properties\** or *public land\** because of *agrichemical\** spraying,
- (d) avoiding damage to non-target plants or animals, and
- (e) preventing any *discharge*^ that is likely to adversely affect sensitive areas including, but not limited to:
  - (i) residential buildings,
  - (ii) public places and amenity areas where people congregate,
  - (iii) education facilities,



- (iv) public roads\*,
- (v) surface water bodies^,
- (vi) wāhi tapu\*, marae and other sites\* of significance to hapū\* and iwi\*,
- (vii) domestic, commercial and public water supply\* catchments and intakes,
- (viii) rare habitats\*, threatened habitats\* and at-risk habitats\*, and
- (ix) sensitive crops or farming systems (including certified organically farmed *properties*\* and greenhouses),
- (f) the matters in Policy 14-9.

### Policy 15-2: Consent decision-making for other *discharges*^ into air

When making decisions on resource consent<sup>^</sup> applications and setting consent conditions<sup>^</sup> for discharges<sup>^</sup> of contaminants<sup>^</sup> into air, the Regional Council must have regard to:

- (a) the objectives and policies of Chapter 7 including:
  - (i) the degree of consistency with the approach set out in Policy 7-1 for implementing the *National Environmental Standards*^ for *ambient air\** quality,
  - (ii) the degree of compliance with the regional standards for ambient air\* quality set out in Policy 7-2, and
  - (iii) for discharges<sup>\(^\)</sup> of fine particles, the approaches for managing fine particles ( $PM_{10}^*$ ) in Policies 7-5, 7-6 and 7-7, and the likely contribution of the proposed discharge<sup>\(^\)</sup> to cumulative adverse effects<sup>\(^\)</sup> in an unacceptable airshed or degraded area as identified under these policies,
- (b) the guidelines in Section 15.3 for managing noxious, dangerous, offensive and objectionable effects^,
- (c) any *national policy statements*^, national *regulations*^, or nationally-accepted guidelines or codes of practice relevant to the activity, including the matters in Policy 14-9 for activities involving an ancillary discharge,
- (d) the location of the *discharge*^ in relation to, and any associated *effects*^ on, sensitive areas including, but not limited to:
  - (i) residential buildings,
  - (ii) public places and amenity areas where people congregate,
  - (iii) education facilities,
  - (iv) public roads,
  - (v) surface water bodies^,
  - (vi)  $w\bar{a}hi tapu^*$ , marae and other sites\* of significance to  $hap\bar{u}^*$  and  $iwi^*$ ,
  - (vii) domestic, commercial and public water supply\* catchments and intakes,



- (viii) rare habitats\*, threatened habitats\* and at-risk habitats\*, and
- (ix) sensitive crops or farming systems (including certified organically farmed properties\* and greenhouses),
- (e) effects on scenic, landscape, heritage and recreational values,
- (f) the appropriateness of adopting the best practicable option to prevent or minimise adverse effects in circumstances where:
  - (i) numerical guidelines or standards establishing a level of protection for a receiving *environment*^ are not available or cannot easily be established,
  - (ii) insufficient monitoring data is available to establish the existing air quality with sufficient certainty, or
  - (iii) the likely adverse *effects*^ are minor, and the costs associated with adopting the *best practicable option*^ are small in comparison to the costs of investigating the likely *effects*^ on air quality,
- (g) the need for contingency measures to avoid accidental discharges^, including discharges^ arising from mechanical failure, and
- (h) adverse effects^ on aircraft^ safety from high velocity vertical discharges^ to air.

### Policy 15-3: Regional Rules<sup>^</sup> for Air

The Regional Council must regulate *discharges*^ into air through regional *rules*^ in accordance with Objectives 12-1, 12-2 and 15-1 and Policies 12-1 to 12-8.

# 15.3 Guidelines for Managing Noxious, Dangerous, Offensive and Objectionable Effects

Several rules in this section use the terms "noxious", "dangerous", "offensive" and "objectionable". While these terms are included in s17 RMA, they are not defined. These terms are also not defined in the Glossary of this Plan because the assessment of whether an activity is noxious, dangerous, offensive or objectionable is subjective and must take account of case law precedent as it develops.

Definitions of these terms can be found in the dictionary - for example (from the Concise Oxford Dictionary, New Edition, 1978):

- noxious means "harmful, unwholesome"
- dangerous means "causing danger, unsafe"
- **offensive** means "giving or meant to give offence, disgusting, ill-smelling, nauseous, repulsive, unpleasant or disgusting to the senses, causing annoyance or anger, insulting"
- **objectionable** means "undesirable, unpleasant, offensive, disapproved of".



#### Offensive and objectionable

Case law has established that an odour is deemed offensive or objectionable only if a reasonable ordinary person, who is neither sensitive nor insensitive, would be offended or find it objectionable. It is not enough for a neighbour or some other person within the relevant environment to consider the activity or matter to be offensive or objectionable.

In determining whether an odour is offensive or objectionable, a council enforcement officer may consider the following:

- frequency how often an individual is exposed to odour,
- intensity the strength of the odour,
- duration the length of a particular odour event,
- offensiveness/character the character relates to the hedonic tone of the odour, which may be pleasant, neutral or unpleasant,
- location the type of land use and nature of human activities in the vicinity of an odour source,
- the sensitivity of the receiving environment, including reverse sensitivity,
- the Good Practice Guide for Assessing and Managing Odour in New Zealand (Ministry for the Environment, 2003).

In determining whether a discharge is resulting in any objectionable or offensive smoke, water vapour, dust, gases or airborne contaminant, a council enforcement officer may consider the following:

- frequency, intensity, duration, offensiveness/character and location of exposure,
- the Good Practice Guide for Assessing and Managing the Environmental Effects of Dust Emissions (Ministry for the Environment, September 2001),
- the sensitivity of the receiving environment, including reverse sensitivity,
- adverse effects, including effects on road visibility and aircraft flight paths.

## Noxious and dangerous

In determining whether a discharge causes any noxious or dangerous levels of contaminants a council enforcement officer may consider:

- the Workplace Exposure Standards (Occupational Safety and Health Service, 1994 and as updated in January 2002): as a guide the concentration of any contaminant specified in the Workplace Exposure Standards should not exceed one thirtieth of the time-weighted average for the short-term exposure standard on adjacent properties or on public land,
- the Ambient Air Quality Guidelines (Ministry for the Environment, 2002) as they relate to hazardous substances,
- any relevant National Environmental Standards,
- the frequency, intensity, duration, and location of exposure,



- the sensitivity of the receiving environment,
- relevant provisions under the Hazardous Substances and New Organisms Act 1996,
- advice provided by Territorial Authority environmental health officers and district health boards.



# 15.4 Rules - *Agrichemicals*\* (Discharges into Air, Land and Water)

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion, Non-Notification
15-1 Small-scale application of agrichemicals*	The discharge <sup>A</sup> of agrichemicals* into air or onto land <sup>A</sup> from the use of a hand-held appliance* pursuant to ss15(1) or 15(2A) RMA.	Permitted	<ul> <li>(a) The discharge^ must not contravene^ any requirement specified in the agrichemical* manufacturer's instructions.</li> <li>(b) There must be no adverse effects^ from off-target spray drift.</li> <li>(c) There must be no discharge^ into any water body^.</li> <li>(d) There must be no discharge^ within any rare habitat*, threatened habitat* or at-risk habitat*, except for the control of pest plants for the purposes of habitat maintenance or enhancement.</li> <li>(e) Where the agrichemical* is used on public land*, the discharge^ must comply with mandatory requirements set out in Sections 2 and 5 of the NZS 8409:2004 Management of Agrichemicals.</li> </ul>	
15-2 Widespread application of agrichemicals*	The discharge <sup>^</sup> of agrichemicals* into air, onto land <sup>^</sup> , or into water <sup>^</sup> , pursuant to ss15(1) or 15(2A) RMA, except as permitted under Rule 15-1.	Permitted	<ul> <li>(a) The discharge^ must not contravene^ any requirement specified in the agrichemical* manufacturer's instructions.</li> <li>(b) There must be no discharge^ within any rare habitat*, threatened habitat* or at-risk habitat*, except for the control of pest plants for the purposes of habitat maintenance or enhancement.</li> <li>(c) Where the discharge^ is located within 50 m of a sensitive area listed in Policy 15-1(e) the spray plan prepared in accordance with NZS8409:2004 Management of Agrichemicals must be supplied to Manawatu-Wanganui Regional Council upon request.</li> <li>(d) The discharge^ must be undertaken in accordance with all mandatory requirements, including notification requirements, set out in Sections 2 and 5 of the NZS8409:2004 Management of Agrichemicals.</li> </ul>	



Rule	Activity	Classification	Conditions/Standards/Terms Control/Discretion, Non-Notification	
			(e) Every person (other than an agrichemical* contractor) undertaking the ground-based application of agrichemicals* must hold, as a minimum, a current GROWSAFE® Introductory Certificate or be under the direct supervision of a person holding a current GROWSAFE® Applied Certificate.	
			(f) Any agrichemical* contractor undertaking the ground-based application of agrichemicals* must hold, as a minimum, a current GROWSAFE® Registered Chemical Applicator's Certificate; or a current GROWSAFE® Introductory Certificate and be under the direct supervision of a person holding a current GROWSAFE® Registered Chemical Applicator's Certificate.	
			(g) Every pilot undertaking the aerial application of agrichemicals* must hold a Pilot's Agrichemical Rating issued by Civil Aviation Authority.	
			(h) The discharge^ must not result in any agrichemical* being deposited on any roof or other structure^ used as a catchment for water supply other than in accordance with (i).	
			(i) Where the <i>discharge</i> ^ is into <i>water</i> ^ for the purpose of eradicating, modifying or controlling unwanted aquatic plants:	
			(i) only agrichemicals* approved for aquatic use may be used,	
			(ii) the application must not exceed the quantity or concentration required for that purpose,	
			(iii) the discharge^ must not include disposal to water^ of any agrichemical*,	
			(iv) the discharger must notify every person taking water^ for domestic supply within 1 km downstream of the proposed discharge^, and every holder of a resource consent^ for the taking	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion, Non-Notification
			of water^ for public water supply* purposes downstream of the proposed discharge^ at least one week before commencing the discharge^.  (j) For aerial discharges^, reasonable measures must be taken to prevent:  (i) any discharge^ of agrichemicals* within 10 m of the bed^ of a flowing river^, or any lake^, or wetland^ which has an area of 1 ha or greater  (ii) any adverse effects^ on a rare habitat*, threatened habitat* or at-risk habitat*.  Under condition (j) "reasonable measures" may include the use of GPS technology, positive airflow indicators on boundaries or direct boundary supervision by qualified personnel.	
Small-scale and widespread application of vertebrate pest control products*	The discharge of vertebrate pest control products* into air or onto land^ from the use of a hand-held appliance* or by way of hand dispersal and the discharge of vertebrate pest control products* into air or onto land^ by all other means pursuant to s15(2) RMA.	Permitted	For all discharges^:  (a) The discharge^ must not contravene^ any requirement specified in the manufacturer's instructions.  (b) There must be no discharge^ within any rare habitat,* threatened habitat* or at-risk habitat*, except for the control of pest animals.  For all small scale applications from the use of a hand-held appliance* or by way of hand dispersal  (c) There must be no discharge beyond the boundary of the subject property*.  (d) There must be no discharge into any water body*.  For aerial discharges of sodium fluoroacetate (1080) and formulated substances containing 1080  (e) The discharge must comply with the controls under the Hazardous Substances and New Organisms Act 1996, particularly sections 77 and 77A.  For aerial discharges^ other than aerial discharges^ covered by condition (e) above.	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion, Non-Notification
			(f) reasonable measures must be taken to prevent:	
			(i) any discharge^ of vertebrate pest control products* within 10 m of the bed^ of a flowing river^ or any lake^ or wetland^ which has an area of 1 ha or more	
			(ii) any adverse effects <sup>^</sup> on a rare habitat <sup>*</sup> , threatened habitat <sup>*</sup> or at-risk habitat <sup>*</sup> .	
			(g) Where the discharge is located within 50 metres of a sensitive area listed in Policy 15-1(e) notice of the discharge must be provided to adjacent landowners and occupiers at least 1 week and not more than 1 month before application and must include the following information:	
			(i) the period when the application will occur,	
			(ii) the brand name and the chemical name to be used,	
			(iii) method of application,	
			(iv) safety precautions to be taken,	
			<ul><li>(v) the name and contact phone number of those carrying out the application.</li></ul>	
			A record of this notification must be kept and made available to the Manawatu-Wanganui Regional Council upon request.	
			Public signage must be displayed where access to the sensitive area is normally gained.	
			(h) The discharge^ must not result in any vertebrate pest control product* being deposited on any roof or other structure^ used as a catchment for water* supply.	
			Under condition (f) "reasonable measures" may include the use of GPS technology, positive airflow indicators on boundaries or direct boundary supervision by qualified personnel.	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion, Non-Notification
Small scale and widespread application of vertebrate pest control products* not complying with Rule 15-3	The discharge <sup>^</sup> of vertebrate pest control products* into air or onto land <sup>^</sup> from the use of a hand-held-appliance* or by way of hand dispersal and the discharge <sup>^</sup> of vertebrate pest control products* into air or onto land <sup>^</sup> by all other means pursuant to s15(2) RMA.	Restricted Discretionary	(a) There must be no discharge within any rare habitat*, threatened habitat*, or at-risk habitat* except for the control of pest animals.	Discretion is restricted to:  (a) The location, nature, scale, timing and duration of the activity  (b) The nature of the area adjacent to the discharge  (c) Any beneficial effects of the discharge  (d) Any effects on those species which are not the target of the discharge  (e) Any adverse effects or risks to human health or public use of the area  (f) Any relevant national regulations^ or nationally-accepted guidelines or codes of practice  (g) Duration of consent and consent conditions  (h) Compliance monitoring.  Resource Consent^ applications under this rule^ will not be publicly notified
15-5  Discharges* of agrichemicals* not complying with permitted activity* rules* and small scale and widespread application of vertebrate pest control products* not complying with Rule 15-4.	The discharge^ of agrichemicals* into air, onto land^, or into water^ pursuant to ss15(1) or 15(2A) RMA in a manner that does not comply with Rules 15-1 or 15-2 and small scale and widespread application of vertebrate pest control products* not complying with Rule 15-4.	Discretionary		



# 15.5 Rules - Burning

**Advice Note:** 

In 2004 *regulations*^ were introduced controlling various *discharges*^ into air. The title of these *regulations*^ is the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004. One Plan users need to check they comply with the most up-to-date version of these *regulations*^ in addition to the *rules*^ in this Chapter.

Rule	Activity	Classification		Control/Discretion, Non-Notification
Rule 15-6 Small-scale fuel burning	The discharge^ of contaminants^ into air pursuant to ss15(1) or 15(2A) RMA from burning coal, untreated wood*, diesel, kerosene, light fuel oil*, oil* (excluding waste* oil*), methane, biofuels*, or natural or liquefied petroleum gas for the purpose of generating useful heat, steam, power or electricity and burning of green vegetative matter undertaken by New Zealand Police.  This rule^ does not cover fuel burning in moveable sources or residential buildings, which is permitted under the RMA except to the extent that specified mobile sources are regulated under Rule 15-16 and to the extent that woodburners* are regulated under Rule 15-8.	Classification Permitted		
			boundary of the <i>property*</i> .  (g) The sulphur content of coal to be burned must not	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion, Non-Notification
			exceed 1% by weight.  (h) The discharge^ of particulates must be no greater than 250 mg/m³ of non-toxic particulates (corrected to 0°C, 12% CO₂, 1 atmosphere, and a dry gas basis) except that this limit may be exceeded for a maximum of 30 minutes when starting the fuel-burning equipment from cold, providing the opacity of the discharge^ is minimised as far as practicable.  (i) The discharge^ must not cause a reduction in visibility on any designated commercial or military flight path.	
15-7 Outdoor burning*	The discharge^ of contaminants^ into air and any subsequent discharge^ of contaminants^ onto land^ pursuant to ss15(1) or 15(2A) RMA from:  (a) the outdoor burning* of the following materials:  (i) untreated wood* or vegetative matter,  (ii) waste* paper or cardboard,  (iii) food waste*,  (iv) non-halogenated* plastics,  (v) animal carcasses or animal waste* on production land^.  (b) the outdoor burning* of the following materials in circumstances where the burning is for fire training* purposes, or for creating special smoke and fire effects for the purpose of producing films:  (i) untreated wood* or vegetative matter,  (ii) waste* paper or cardboard,	Permitted	<ul> <li>(a) The material to be burned must be sourced only from the property* on which the burning occurs, except for: <ol> <li>(i) untreated wood* or vegetative matter,</li> <li>(ii) materials (including vegetative matter) that are burned in barbeques, hāngi, umu and outdoor fireplaces,</li> <li>(iii) materials (including vegetative matter) that are burned for fire training* purposes or for creating special smoke and fire effects for the purpose of producing films.</li> </ol> </li> <li>(b) The discharge^ must not result in any offensive or objectionable odour, dust, smoke or water^ vapour beyond the boundary of the property*.</li> <li>(c) The discharge^ must not result in any noxious or dangerous levels of gases or particulates beyond the boundary of the property*.</li> <li>(d) The discharge^ must not cause a reduction in visibility on any designated commercial or military flight path.</li> </ul>	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion, Non-Notification
	(iii) food waste*,			
	(iv) non-halogenated* plastics,			
	(v) oil*, (vi) buildings including those			
	containing halogenated* materials.			
15-8				
DELETED (PC 1 2016)				
15-9	The discharge <sup>^</sup> of contaminants <sup>^</sup> to air	Prohibited		
Prohibited burning activities	pursuant to ss15(1) or 15(2A) RMA from the <i>outdoor burning*</i> of:			
	(a) pathological waste*, animal carcasses or other animal waste* except animal carcasses and animal waste* on production land^ which are permitted under Rule 15-7			
	(b) pitch, paint and paint residues on wood or chip board and surface coatings			
	(c) halogenated* plastic and polyvinylchloride (PVC) plastic			
	(d) halogenated* organic chemicals			
	(e) materials containing heavy metals			
	(f) asbestos			
	(g) agrichemicals* and agrichemical* containers containing residues			
	(h) treated timber*			
	(i) rubber			
	(j) hazardous materials from contaminated sites* and buildings			
	(k) components of motor vehicles.			



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion, Non-Notification
15-10 Other burning activities	The discharge^ of contaminants^ into air and any subsequent discharge^ of contaminants^ onto land^ pursuant to ss15(1) or 15(2A) RMA from burning activities which either:  (a) are located on industrial or trade premises^ and are not addressed by any other rule^ in this Plan, or  (b) do not comply with one or more conditions^, standards or terms of a permitted activity^ rule^, but which are not expressly classified as a discretionary activity^, non- complying activity^ or prohibited activity^.	Discretionary		



# 15.6 Rules - Other Discharges to Air

Rule	Activity	Classification	Conditions/Standards/Terms Control/Discretion, Non-Notification	
15-11  Abrasive blasting* within an enclosure	The discharge^ of contaminants^ into air and any subsequent discharge^ onto land^ pursuant to ss15(1) or 15(2A) RMA from abrasive blasting* within a purpose-built enclosure that is not moveable.	Permitted	(a) The blasting enclosure must be fully enclosed and air must be mechanically ventilated to air pollution control equipment that is designed and maintained to achieve a particulate matter concentration of no more than 100 mg/m³ (at 0°C, 1 atmosphere pressure, dry gas basis) at the point of discharge^.	
			(b) There must be no visible discharge^ of dust from the abrasive blasting* enclosure.	
			(c) The discharge^ must not result in noxious or dangerous levels of airborne contaminants^ beyond the property* boundary.	
			(d) Any abrasive media not in use must be covered and protected from <i>water</i> <sup>^</sup> and wind.	
15-12 Wet abrasive blasting* and water^	The discharge <sup>^</sup> of contaminants <sup>^</sup> into air and any subsequent discharge <sup>^</sup> onto land <sup>^</sup> or into water <sup>^</sup> pursuant to ss15(1) or 15(2A)	Permitted	(a) Any sand or other material used for <i>wet abrasive</i> blasting* must contain less than 5% free silica on a dry  weight basis.	
blasting	RMA from wet abrasive blasting* or water^ blasting.		(b) Any discharge <sup>^</sup> of particulate matter must not be offensive or objectionable beyond the property* boundary.	
			(c) Any abrasive media not in use must be kept covered and protected from erosion.	
			(d) All material that is discharged^ to land^ from the blasting must be collected and removed from the site* to the extent practicable after blasting has been completed. The material must be disposed of to a facility that has authorisation to accept the contaminants^ in the material.	
			(e) Measures must be taken to prevent to the extent practicable the <i>discharge</i> ^ of any hazardous particulate matter, or floatable or suspended material	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion, Non-Notification
			to any water body^.	
15-13 Dry abrasive blasting* using a moveable source	The discharge <sup>^</sup> of contaminants <sup>^</sup> into air and any subsequent discharge <sup>^</sup> of contaminants <sup>^</sup> onto land <sup>^</sup> or into water <sup>^</sup> pursuant to ss15(1) or 15(2A) RMA from dry abrasive blasting <sup>*</sup> using a moveable source.	Discretionary		
15-14 Miscellaneous discharges^ into air from industrial or trade premises^	The discharge^ of contaminants^ into air and any subsequent discharge^ of contaminants^ onto land^ or into water^ pursuant to ss15(1) or 15(2A) RMA from the following activities on industrial or trade premises^:  (a) fume cupboards (b) premises discharging steam, water^ vapour, energy and heat (except as a result of fuel combustion)  (c) the retail or wholesale distribution of automotive fuels, oils*, liquefied gases, gases, and fuels used for industrial processing and home heating  (d) funeral parlours, chapels, and stonemasons  (e) the manufacture of household, industrial, electrical and garden equipment and appliances, including the manufacture of cement, rubber goods and processes involving the galvanising of steel  (f) the application of surface coatings, including printing or manufacture of packaging materials, and printing of	Permitted	<ul> <li>(a) The discharge^ must not cause a breach of any of the National Environmental Standards^ for ambient air* quality set out in Table 7.1 (in Chapter 7).</li> <li>(b) The discharge^ must not result in any offensive or objectionable odour, dust, smoke or water^ vapour beyond the boundary of the property*.</li> <li>(c) The discharge^ must not result in any noxious or dangerous levels of gases or particulates beyond the boundary of the property*.</li> <li>(d) The discharge^ must not cause a reduction in visibility on any designated commercial or military flight path.</li> <li>(e) The vertical velocity of the discharge^ must not exceed 4.3 m/s, at 60 m above ground level or the discharge^ must not penetrate the obstacle limitation surface of an aerodrome.</li> <li>(f) The discharge^ of dust from the source at any site* where minerals or aggregates are dried or heated or prepared for the manufacture of hot mix asphalt must not exceed 5 kg/hr.</li> <li>(g) Fixed asphalt plants must be equipped with temperature sensors and aggregate proximity sensors that limit and control operating temperatures within the drum.</li> <li>(h) Air pollution control equipment for fixed asphalt plants must be designed so that the discharge^ of particulates must be no greater than 50 mg/m³ of particulates (corrected to 0°C, 12% CO2,</li> </ul>	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion, Non-Notification
	<ul> <li>paper</li> <li>(g) the manufacture of furnishings, clothing and carpets, but excluding rubber underlay</li> <li>(h) the sale, servicing, or repairs of motor vehicles, trains, trailers, boats or like equipment, including body and engine repairs, panel beating, fibre-glassing, and painting when carried out in a</li> </ul>		1 atmosphere, and a dry gas basis) except that this limit may be exceeded for a maximum of 30 minutes when starting the fuel-burning equipment from cold, providing the opacity of the discharge^ is minimised as far as practicable.	
	booth or enclosure that has been designed to contain any emission of paint overspray			
	(i) joinery, including the manufacture, restoration or finishing of furniture and wood crafts, and cabinet making			
	(j) the <i>operation*</i> of dry-cleaning, dying, laundering and cleaning facilities			
	<ul> <li>(k) the manufacture of beverages, including soft drinks, extraction of fruit juices, fermentation of wine, distillation of spirits and alcoholic beverages</li> </ul>			
	(I) food processing by deep fat frying or oil frying of any animal or vegetable matter where the processes have either singly or together a raw material capacity of less than 5 tonnes/hr			
	<ul> <li>(m) the processing or storage of food including baking, cooking, refrigeration, freezing and canning, but excluding premises used for the production of milk powders using dryers with a water<sup>h</sup> evaporation capacity greater than 300 kg/hr</li> <li>(n) the storage, blending or distribution of</li> </ul>			



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion, Non-Notification
	bulk products including fertiliser*, fertiliser* mixing and the coating of existing fertiliser* product, animal feeds, roading materials, gardening materials, and concrete processing materials			
	(o) yards used to hold cattle or stock and buildings used solely for animal slaughtering			
	(p) the drying of grain or vegetable matter			
	<ul><li>(q) powder coating or spray painting</li><li>(r) sawmilling</li></ul>			
	(s) kiln drying			
	(t) the extraction, processing in fixed plant (crushing and screening), storage, or distribution of aggregates			
	(u) the development, maintenance*, use, upgrade*, or demolition of industrial or trade premises^ and which are not otherwise provided for by rules^ in this Plan, including site* development, subdivision and landscaping, and the installation, construction, maintenance*, use or demolition of roads^, paved areas, buildings, structures^ or equipment			
15-15	(v) fixed asphalt plants.	Controlled	(a) The well testing must be limited to a duration of	Control is reserved over:
Flaring of hydrocarbons	The discharge^ into air pursuant to ss15(1) or 15(2A) RMA of hydrocarbons from flaring on land^ associated with petroleum exploration^ for well-testing operations*.	Controlled	<ul> <li>(a) The well-testing must be limited to a duration of 45 working days.</li> <li>(b) The flare point must comply with the following separation distances:</li> <li>(i) 300 m from residences, marae, education facilities, public buildings and public recreation</li> </ul>	(a) the nature of the contaminants^ to be emitted during flaring and measures to manage effects^ including effects^ on sensitive activities  (b) duration of consent



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion, Non-Notification
			areas  (ii) 300 m from any rare habitats*, threatened habitats* and at-risk habitats*  (iii) 100 m from bores*, surface water bodies^, public roads^ and the coastal marine area^  (iv) 100 m from any historic heritage^ as identified in any district plan^ or regional plan^.  (c) No non-petroleum wellstream product is to be combusted.  (d) There must be no objectionable odour, dust or waste^ drift beyond the property* boundary.  (e) The discharge^ must not cause a reduction in visibility on any designated commercial or military flight path.  (f) The vertical velocity of the discharge^ must not exceed 4.3 m/s at 60 m above ground level or the discharge^ must not penetrate the obstacle limitation surface of an aerodrome.	(c) compliance monitoring.  Resource consent* applications under this rule^ will not be notified and written approval of affected persons will not be required (notice of applications need not be served^ on affected persons).
15-16 Discharges <sup>^</sup> from specified mobile sources	The discharge^ of contaminants^ into air pursuant to ss15(1) or 15(2A) RMA from:  (a) equipment to treat road^ surfaces by heat to remove impaired surfaces except where the burning of bitumen is involved  (b) mobile aggregate crushing and screening plants  (c) mobile asphalt plants  (d) earthmoving or harvesting equipment.	Permitted	<ul> <li>(a) The discharge^ must not result in offensive or objectionable odour, dust, smoke or water^ vapour at the boundary of any sensitive area as defined in Policy 15-2(d).</li> <li>(b) The discharge^ must not result in any noxious or dangerous levels of gases or particulates at the boundary of any sensitive area as defined in Policy 15-2(d).</li> <li>(c) The discharge^ of dust from the source at any site* where minerals^ or aggregates are dried or heated or prepared for the manufacture of hot mix asphalt must not exceed 5 kg/hr.</li> <li>(d) A mobile asphalt plant must not be located at any one site* or property* for more than 24 continuous months.</li> <li>(e) Mobile asphalt plants must be equipped with temperature sensors and aggregate proximity sensors</li> </ul>	



Rule	Activity	Classification	Conditions/Standards/Terms Control/Discretion, Non-Notification
			that limit and control operating temperatures within the drum.  (f) Air pollution control equipment for mobile asphalt plants must be designed so that the <i>discharge</i> ^ of particulates (corrected to 0°C, 12% CO <sub>2</sub> , 1 atmosphere, and a dry gas basis) is no greater than:  (i) 50 mg/m³ for plants established after the date of notification of this Plan (31 May 2007);  (ii) 150 mg/m³ for plants established on or before the date of notification of this Plan (31 May 2007);  except that these limits may be exceeded for a maximum of 30 minutes when starting the fuel-burning equipment from cold, providing the opacity of the <i>discharge</i> ^ is minimised as far as practicable.  (g) The <i>discharge</i> ^ must not cause a reduction in visibility on any designated commercial or military flight path.  (h) The vertical velocity of the <i>discharge</i> ^ must not exceed 4.3 m/s, at 60 m above ground level or the <i>discharge</i> ^ does not penetrate the obstacle limitation surface of an aerodrome.
15-17 Other discharges^	The discharge* of contaminants* into air pursuant to ss15(1) or 15(2A) RMA and any subsequent discharge* of contaminants* onto land* from activities which either:  (a) are located on industrial or trade premises* and are not addressed by any other rule* in this Plan, or  (b) do not comply with one or more conditions*, standards or terms of a permitted activity* rule*, but which are not expressly classified as a controlled activity*, restricted discretionary activity*, discretionary activity*, non-complying activity* or prohibited	Discretionary	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion, Non-Notification
	activity^.  Discharges^ that are covered by this rule^ under (a) include, but are not limited to, those activities listed in the rule^ guide following this rule^ table.			

#### Rule Guide:

Activities covered by Rule 15-17 - Discharges into air that are a discretionary activity under Rule 15-17(a) include but are not limited to discharges from the following industrial or trade premises or processes:

- (i) solid waste\* disposal, excluding farm dumps and offal holes
- (ii) crematoria
- (iii) manufacture of
  - (a) cement
  - (b) fertiliser\*
  - (c) milk powder that is produced with dryers with a water evaporation capacity greater than 300 kg/hr
  - (d) other milk-derived products, or
  - (e) rubber goods
- (iv) manufacture of fibre board, pulp or paper
- (v) mechanical drying of treated timber\*
- (vi) rendering, tanning, fellmongering, skin or hide processing, or pet food processing
- (vii) manufacture of organic or inorganic chemicals, including pharmaceuticals
- (viii) hot dip galvanising
- (ix) manufacture or disposal of radioactive substances
- (x) use of di-isocyanates or organic plasticisers
- (xi) manufacture of aluminium, steel, fibreglass, glass or frit
- (xii) sintering, calcining or roasting of metal ores
- (xiii) smelting of any metal or metal alloy, including scrap metal
- (xiv) carbonisation, gasification, refining, purification, or reforming of natural gas, petroleum oil\*, shale, coal, wood, or other carbonaceous materials
- (xv) smelting or burning of calcium or calcium-magnesium carbonates to produce calcium or magnesium oxides or hydroxides.







CHAPTER 16: Takes, Uses and Diversions of Water, and Bores

# 16 Takes, Uses and Diversions of Water, and *Bores*\*

### 16.1 Objectives

## Objective 16-1: Regulation of takes, uses and diversions of water^

The regulation of takes, uses and diversions of *water*^ in a manner that:

- (a) recognises and provides for the Values and management objectives in Schedule B, and
- (b) provides for the objectives and policies of Chapter 5 as they relate to surface *water*^ and groundwater use and allocation.

#### 16.2 Policies

#### Policy 16-1: Consent decision-making for takes and uses of surface water^ and groundwater

When making decisions on *resource consent*<sup>^</sup> applications under s104-104D RMA, and setting consent *conditions*<sup>^</sup>, for takes and uses of surface *water*<sup>^</sup> or groundwater the Regional Council must:

- (a) seek to avoid any adverse *effects*^ on other lawful activities, particularly on other surface *water*^ takes, including takes allowed by s14(3)(b) of the RMA, and groundwater takes from properly-constructed, efficient and fully-functioning bores (as described in Policies 16-4 and 16-5),
- (b) enable non-consumptive uses of water^ including the use and recycling of water^, and
- (c) have regard to the objectives and policies of Chapters 2, 3, 5, 6, 9 and 12 to the extent that they are relevant to the activity.

#### Policy 16-2: Consideration of alternative water<sup>^</sup> sources

When making decisions on consent applications to take surface *water*<sup>^</sup>, the opportunity to utilise alternative sources such as groundwater, *water*<sup>^</sup> storage, *water*<sup>^</sup> harvesting (including during periods of high flow in a *river*<sup>^</sup>) and the recycling of *water*<sup>^</sup> must be considered.

#### Policy 16-3: Consent decision-making for diversions and drainage

When making decisions on *resource consent* applications, and setting consent *conditions*, for the diversion of *water*, including diversions associated with drainage, the *Regional Council* must:



- (a) manage effects\(^\) on rare habitats\(^\*\), threatened habitats\(^\*\) and at-risk habitats\(^\*\) in accordance with Chapter 6 and the relevant objective and policies in Chapter 13,
- (b) manage effects^ on the natural character of water bodies^ in accordance with Chapter 6,
- (c) seek to avoid any adverse *effects*^ on any other lawful activity, particularly on other surface *water*^ takes, including those allowed by s14(3)(b) of the RMA and groundwater takes from properly-constructed, efficient and fully-functioning bores (as described in Policies 16-4 and 16-5), and
- (d) have regard to the objectives and policies of Chapters 2, 3, 5, 9 and 12 to the extent that they are relevant to the activity.

#### Policy 16-4: Bore\* construction and management

- (a) New *bores*\* must be sited to ensure adequate separation from existing *bores*\*, and to avoid an over-concentration of *bores*\* in a particular area, wherever practicable, to avoid adverse *effects*^ on the reliability of supply from properly-constructed, efficient and fully-functioning existing *bores*\*.
- (b) New *bores*\* must generally be constructed, and *bore*\* logs and other records prepared, in accordance with the NZS 4411:2001 Environmental Standard for Drilling of Soil and Rock.
- (c) New *bores*\* must be designed to ensure a high degree of efficiency with respect to *bore*\* development, *bore*\* depth and diameter, and screen depth and length.
- (d) Bores\* must be used in a manner that prevents:
  - (i) contaminants^ from entering the bore\* from the land^ surface
  - (ii) the wastage of water^ in artesian situations.
- (e) Bores\* that are no longer required must be decommissioned in general accordance with the NZS 4411:2001 Environmental Standard for Drilling of Soil and Rock.

# Policy 16-5: Effects of groundwater takes on other groundwater takes

- (a) Consent applications to take groundwater must include pumping tests and hydrogeological assessments in order to determine the likely impact on existing groundwater takes in the vicinity.
- (b) Consent *conditions*^ restricting the rate and duration of pumping must be imposed on new takes of groundwater where this is necessary to avoid significant drawdown impacts on existing groundwater takes from properly-constructed, efficient and fully-functioning *bores*\* in the vicinity. A groundwater take is considered to be from a properly-constructed, efficient and fully-functioning *bore*\* in circumstances where the *bore*\* penetrates the aquifer from which *water*^ is being drawn at a depth sufficient to enable *water*^ to be drawn all year (ie., the *bore*\* depth is below the range of seasonal fluctuations in groundwater level), the pump and *bore*\* are adequately maintained, the



- bore\* is of sufficient diameter and is screened to reasonably minimise drawdown, and the bore\* has a pump capable of drawing water^ from its base to the land^ surface.
- (c) Consent *conditions*^ specifying short-term restrictions on the rate and duration of pumping may also be imposed on new takes of groundwater where this is necessary to avoid significant drawdown impacts on existing *bores*\* that are not properly-constructed, efficient and fully-functioning, in order to allow sufficient time for such *bores*\* to be *upgraded*\* or replaced.
- (d) The Regional Council may encourage consent *applicants*^ to consider the option of providing *water*^ to neighbouring properties in circumstances where this would be more practical than meeting the requirements of (b) or (c).

#### Policy 16-6: Effects of groundwater takes on surface water bodies^

The effects of groundwater takes on surface water bodies, including wetlands, must be managed in the following manner:

- (a) An appropriate scientific method must be used to calculate the likely degree of connection between the groundwater and surface *water*^ at the location of the groundwater take.
- (b) Subject to (a), the potential adverse *effects*^ of groundwater takes on surface *water*^ depletion must be managed in accordance with Table 16.1.

**Table 16.1** Surface *water*^ depletion

Classification of Surface Water^ Depletion Effect^	Magnitude of Surface Water^ Depletion Effect^	Management Approach
Riparian	Any groundwater take screened within the geologically recent bed strata of a surface <i>water body</i> ^.	The groundwater take is subject to the same restrictions as a surface <i>water</i> ^ take, unless there is clear hydrogeological evidence that demonstrates that the <i>effect</i> ^ of pumping will not impact on the surface <i>water body</i> ^.
High	The surface <i>water</i> ^ depletion <i>effect</i> ^ is calculated as 90% or greater of the groundwater pumping rate after seven days of pumping, or 50% or greater of the average groundwater pumping rate after 100 days of pumping.	The groundwater take is subject to the same restrictions as a surface <i>water</i> ^ abstraction.
Medium	The surface <i>water</i> \(^\) depletion <i>effect</i> \(^\) is calculated as 20\(^\) or greater and less than 50\(^\) of the groundwater pumping rate after 100 days of pumping.	The calculated loss of surface <i>water</i> ^ is included in the surface <i>water</i> ^ allocation regime, but no specific minimum flow restrictions are imposed on the groundwater take.
Low	The surface <i>water</i> \(^\) depletion <i>effect</i> \(^\) is calculated as less than 20\(^\) of the groundwater pumping rate after 100 days of pumping.	The calculated loss of surface <i>water</i> ^ is not included in the surface <i>water</i> ^ allocation regime and no specific minimum flow restrictions are imposed on the groundwater take.



#### Policy 16-7: Saltwater intrusion

Saltwater intrusion along the coastal margins of the Region arising from groundwater takes must be managed by the following measures:

- (a) Consent *applicants*^ wishing to take groundwater within 5 km of the coastal mean high water springs line must be required to carry out pumping tests and hydrogeological assessments in order to determine the level of drawdown at the coast and the likelihood of inducing saltwater intrusion.
- (b) In cases where saltwater intrusion might occur, the consent application may be declined or the amount of *water*<sup>^</sup> that can be taken must be limited to an amount that restricts the likelihood of saltwater intrusion.
- (c) In addition, consents to take groundwater within 5 km of the coastal mean high water springs line must contain *conditions*^ relating to the monitoring of electrical conductivity and the restriction or suspension of takes if specified electrical conductivity thresholds are reached or exceeded. These monitoring requirements and electrical conductivity thresholds will be determined on a case-by-case basis.

#### Policy 16-8: Monitoring requirements of consent holders

Water takes must generally be subject to the following monitoring requirements:

- (a) the installation of a pulse-count capable *water*\(^n\) meter on all *water*\(^n\) takes that are allowed by way of a *resource consent*\(^n\), in order to monitor the amount of *water*\(^n\) taken
- (b) the installation of a Regional Council compatible telemetry system on surface *water*<sup>^</sup> takes greater than 750 m<sup>3</sup>/d, and on groundwater takes greater than 750 m<sup>3</sup>/d where the groundwater is highly interconnected with surface *water*<sup>^</sup>
- (c) the installation of a Regional Council compatible telemetry system on other groundwater takes greater than 4,000 m<sup>3</sup>/d
- (d) Appropriate water quality monitoring, including conductivity monitoring on groundwater takes located within 5 km of the coast, or on a nearby monitoring *bore*\*
- (e) the installation of a Regional Council compatible telemetry system on consented surface *water*^ takes where:
  - (i) the amount of *water*\(^\) taken, when assessed in combination with all other *water*\(^\) takes upstream, exceeds 15\(^\) of the estimated one-day mean annual low flow, or
  - (ii) the amount of *water*^ taken from a *Water Management Sub-zone*\* as identified in Schedule A exceeds 15% of the one-day mean annual low flow for that *Sub-zone*\*.

## Policy 16-9: Transfer of water permits^

On the application of any consent holder, the transfer of a permit to take *water*^ will generally be approved in terms of s136(2)(b)(ii) of the RMA, providing:



- (a) the transferred take is exercised within the same Water Management Zone\* as the original consent,
- (b) the rate and quantity of *water*\(^\) taken are consistent with the provisions of Chapter 5 regarding the need for *water*\(^\) and efficient use of *water*\(^\),
- (c) the transferred take complies with all relevant water allocation requirements of Chapter 5 at the site of transfer, and
- (d) there are no more than minor adverse effects^ on any other take or use of water^.

## 16.3 Rules - Takes and Uses of Water

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
16-1 Minor takes and uses of surface <i>water</i> ^	The take or use of surface water^ pursuant to s14(2) and s14(3)(b) RMA.	Permitted	<ul> <li>(a) The rate of take must not exceed:</li> <li>(i) 400 l/ha per day for animal farming up to a maximum of 30 m³/day per property*</li> <li>(ii) 15 m³/day per property* where the water is for any other use.</li> </ul>	
			The rates of take allowed under (i) and (ii) cannot be added: the maximum allowable rate of take under this rule is 30 m³/day per property*.	
			(b) The rate of take must not exceed 2.0 l/s.	
			(c) An intake screen with a mesh aperture size not exceeding 3 mm in diameter must be used and the intake velocity must not exceed 0.3 m/s.	
			(d) The take must not be from a rare habitat*, threatened habitat* or atrisk habitat*.	
			(e) The water^ must be used on the property*.	
			(f) The Regional Council must be notified in writing of the location of the take, the maximum instantaneous rate of take and the intended use of water^.	
16-2	The take or use of groundwater pursuant	Permitted	(a) The rate of take must not exceed:	
Minor takes and uses of groundwater	to s14(2) and s14(3)(b) RMA.		(i) 400 l/ha per day for animal farming up to a maximum of 50 m³/day per <i>property*</i>	
			(ii) 50 m³/day per <i>property*</i> where the water is for any other use.	
			The rates of take allowed under (i) and (ii) cannot be added: the	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
			<ul> <li>maximum allowable rate of take under this rule^ is 50 m³/day per property*.</li> <li>(b) The take must not be located within 50 m of any other bore* on any other property*.</li> <li>(c) The take must not be located within 100 m of any river^ or lake^, or within 200 m of any wetland^ that is a rare habitat* or threatened habitat*.</li> <li>(d) The take must not be from any rare habitat*, threatened habitat* or at-risk habitat*.</li> <li>(e) The take must not lower the water^ level in any wetland^ that is a rare habitat* or threatened habitat*.</li> <li>(f) There must be a means of controlling the rate of flow where a bore* would otherwise be free-flowing, and water^ must not be allowed to run to waste.</li> <li>(g) The water^ must be used on the property*.</li> <li>(h) The Regional Council must be notified in writing of the location of the take, the maximum instantaneous rate of take and the intended use</li> </ul>	Non-Nonneation
16-3 Use of heat or energy from surface <i>water</i> ^	The use of heat or energy from surface water^ pursuant to s14(2) RMA.	Permitted	of water^.	
16-4 Bore* and groundwater testing	The take and use of groundwater for bore* or groundwater testing purposes pursuant to s14(2) RMA, and any ancillary discharge^ of groundwater or contaminants^ into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA.	Permitted	<ul> <li>(a) The Regional Council must be notified in writing at least 5 working days^ prior to commencement of the test.</li> <li>(b) The rate of take must not exceed 60 l/s.</li> <li>(c) The duration of any single test must not exceed 7 days.</li> <li>(d) The activity must be carried out in accordance with the NZS 4411:2001 Environmental Standard for Drilling of Soil and Rock.</li> <li>(e) The take must not be from any rare habitat*, threatened habitat* or at-risk habitat*.</li> <li>(f) The take must not lower the water^ level in any wetland^ that is a rare habitat* or threatened habitat*.</li> <li>(g) Where the discharge^ is into water^ the discharge^ must not:</li> </ul>	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
16-5	Except as permitted by Rule 16-1, the	Controlled	<ul> <li>(i) change the receiving water<sup>^</sup> temperature by more than 3°C after reasonable mixing*</li> <li>(ii) cause erosion of the bed<sup>^</sup> of the receiving water body<sup>^</sup></li> <li>(iii) alter the natural course of the receiving water body<sup>^</sup></li> <li>(iv) cause visibly noticeable iron flocculation in the receiving water body<sup>^</sup></li> <li>(h) Where the discharge<sup>^</sup> is onto land<sup>^</sup> the discharge<sup>^</sup> must not increase land<sup>^</sup> instability or the risk of erosion.</li> <li>(i) The discharge<sup>^</sup> must not cause or contribute to flooding on any other property*.</li> <li>(j) Following completion of the test, the bore* must be covered and secured as soon as practicable.</li> <li>(k) Records of all pumping and recovery tests must be kept by the owner<sup>^</sup>, including the location of the pumped bore* and any monitoring bores*, the flow rate during pumping, the water<sup>^</sup> level at the pumped bore* and any monitoring bores*, and the time at which all measurements are taken. These records must be forwarded to the Regional Council within 1 month of completion of the tests.</li> <li>(a) Water<sup>^</sup> must only be taken when the river<sup>^</sup> is above its minimum flow,</li> </ul>	Control is reserved over:
Takes and uses of surface water^ complying with core allocations	take or use of surface water^ from a river^ pursuant to s14(2) RMA.  Advice Note: Information regarding the volume of core allocation that is still available may be found on the Regional Council's website.	Controlled	<ul> <li>(a) Water finist only be taken when the river is above its minimum now, as assessed in accordance with Schedule C.</li> <li>(b) The amount of water^ taken, when assessed in combination with all other water^ takes must not exceed the relevant cumulative core allocation limits set out in Schedule C.</li> <li>(c) The amount of water taken from a river^ must not lower the water^ level in any wetland^ that is a rare habitat* or threatened habitat*.</li> <li>(d) The take must not be from any rare habitat*, threatened habitat* or at-risk habitat*.</li> </ul>	(a) the volume and rate of water^ taken, and the timing of the take (b) the location of take (c) intake velocity and screening requirements (d) measures to avoid, remedy or mitigate any adverse effects^ on the Values of the water body^ at and below the point of take (e) effects^ on the natural flow regime, the magnitude of the median flow and the



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
				frequency of flushing flows  (f) the efficiency of water^ use  (g) effects^ on other water^ takes  (h) effects^ on rare habitats*, threatened habitats*, at-risk habitats* and Sites of Significance - Aquatic  (i) compliance with minimum flow requirements  (j) duration of consent  (k) review of consent conditions^ (I) compliance monitoring.  Resource consent^ applications under this rule^ will not be notified and written approval of affected persons will not be required (notice of applications need not be served^ on affected persons).
16-6 Existing essential takes and uses of surface water complying with core allocations taken at or below the minimum flow	Except as regulated by Rule 16-1 or Rule 16-5, the take, use or diversion of surface water^ pursuant to s14(2) RMA at or below the minimum flow by essential takes complying with Policy 5-18(d) (i) existing as at 31 May 2007 provided:  (a) The amount of water taken must not exceed  (i) 250 litres per person per day for domestic needs  (ii) 70 litres per animal per day for	Discretionary		



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	drinking water  (iii) 70 litres per animal per day for existing dairy shed washdown  (b) The take must not be from any rare habitat*, threatened habitat* or at-risk habitat*.  Advice note: the effect of any permitted takes will not be taken into consideration when assessing activities under this rule.			
Replacement consents for takes and uses of surface water^ by existing hydroelectricity schemes	The take, use or diversion of surface water^ pursuant to \$14(2) RMA by existing consented hydroelectricity generation schemes for which replacement consents are sought.	Controlled	<ul> <li>(a) The consent application is to replace existing consents that are expiring and there is no increase to the existing volume or rate of take or diversion.</li> <li>(b) The take must not be from any rare habitat*, threatened habitat* or at-risk habitat*.</li> </ul>	Control is reserved over:  (a) the volume and rate of water^ taken and the timing of the take  (b) the location of take  (c) intake velocity and screening requirements  (d) measures to avoid, remedy or mitigate any adverse effects^ on the Values of the water body^ at and below the point of take  (e) measures to avoid, remedy or mitigate any adverse effects on the instream geomorphological components of natural character of the water body  (f) effects^ on rare habitats*, threatened habitats* and atrisk habitats* and Sites of Significance - Aquatic  (g) compliance with minimum flows



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
				<ul> <li>(h) measures to avoid, remedy or mitigate adverse effects^ on tangata whenua^ matters</li> <li>(i) duration of consent</li> <li>(j) review of consent conditions^</li> <li>(k) compliance monitoring.</li> <li>Resource consent applications under this rule will be notified to those parties who are adversely affected in relation to the matters over which control is reserved. This clause does not preclude full public notification at the council's discretion in accordance with the RMA.</li> </ul>
Takes and uses of surface water^ not complying with core allocations or takes and uses of water^ taken at or below minimum flow	Except as regulated by Rules 16-1, 16-7 or 16-9, the take or use of surface water^ from a river^ pursuant to s14(2) RMA:  (a) which, when assessed in combination with all other water^ takes, exceeds the relevant cumulative core allocation limits set out in Schedule C, or  (b) which is taken at or below the minimum flow (unless the take is a permitted or essential take complying with Rule 16-6)  This rule does not include takes in circumstances where water is only taken when the river flow is greater than the median flow (these are a discretionary	Non-complying		



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	activity under Rule 16-9).			
	Advice Note: Information regarding the volume of cumulative core allocation that is still available may be found on the Regional Council's website.			
16-9 Other takes and uses of water^	The take or use of surface water^n or groundwater pursuant to \$14(2) RMA, which is not regulated by any other rules^n in this chapter or which does not comply with the permitted activity^n or controlled activity^n rules^n in this chapter, or the take or use of groundwater at a rate exceeding 50 m³/day per property*, except takes for bore* or groundwater testing permitted under Rule 16-4.	Discretionary		

# Rule guide:

Takes or uses of water from *rare habitats*\*, *threatened habitats*\* or *at-risk habitats*\* are regulated by Rules 13-8 and 13-9. Takes or uses of water from water storage facilities that are not within a *water body*^ do not require a resource consent.

# 16.4 Rules - Diversions of Water including Drainage

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion
				Non-Notification
16-10 Lawfully established diversions, including existing drainage	The take, diversion or discharge <sup>^</sup> of surface water <sup>^</sup> and any ancillary damming of water <sup>^</sup> , or discharge <sup>^</sup> of sediment or other contaminants <sup>^</sup> in the water <sup>^</sup> into water <sup>^</sup> or onto or into land <sup>^</sup> pursuant to s14(2) and ss15(1) or 15(2A)	Permitted	<ul> <li>(a) The diversion or discharge^ must be to the same Water Management Sub-zone* to which the water^ would naturally flow, except diversions associated with existing land^ drainage.</li> <li>(b) Effects^ on land^ instability, erosion risk, flooding and soil resources (including drained peat soils) must remain the same as or similar in character, intensity and scale to those which existed before this rule^</li> </ul>	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	RMA arising from:  (a) a diversion that was lawfully established as at the date of this rule^ becoming operative^, or  (b) a diversion that has been lawfully established by way of resource consent^ after the operative^ date of this rule^ including diversions ancillary to the operation* of existing drainage networks.  Advice Note:  This rule^ means that, once diversions have been lawfully established, including diversions for land^ drainage purposes, their continued operation* is permitted under this rule^. No ongoing consent is required for the operation* of existing diversions provided the conditions^ of this rule^ are met.		became operative^.  (c) The diversion must not prevent the passage of fish in water bodies^ containing fish.  (d) For diversions lawfully established by way of a resource consent^, the diversion must continue to comply with all conditions^ of the consent.	
16-11 New drainage	The take, diversion or discharge^ of drainage water^, and any ancillary damming of water^, or discharge^ of sediment or other contaminants^ in the drainage water^ into water^ or onto or into land^ pursuant to \$14(2) and \$\$s15(1) or 15(2A) RMA arising from the establishment and operation* of new land^ drainage.	Permitted	<ul> <li>(a) The diversion or discharge^ must not cause or exacerbate the flooding of any property*, unless the flooding is in accordance with an approved Regional Council drainage scheme design.</li> <li>(b) The diversion or discharge^ must not cause any scouring or erosion of any land^ or water body^ beyond the point of discharge^.</li> <li>(c) The diversion or discharge^ must not alter the natural course of any natural water body^.</li> <li>(d) There must be no diversion or discharge^ to or from any natural lake^, rare habitat*, threatened habitat* or at-risk habitat*, or reach of river^ or its bed^ with a Schedule B Value of Natural State.</li> <li>(e) The activity must not result in the lowering of water^ levels in any wetland^ that is a rare habitat* or threatened habitat*.</li> <li>(f) The diversion or discharge^ must be to the same Water</li> </ul>	



Rule	Activity	Classification		Control/Discretion Non-Notification
			<ul> <li>Management Zone* to which the drainage water^ would naturally flow.</li> <li>(g) The diversion or discharge^ must not cause, after reasonable mixing*, any of the following effects^ in the receiving water body^:</li> <li>(i) the production of conspicuous oil* or grease films, scums or foams, or floatable or suspended materials</li> <li>(ii) any conspicuous change in the colour or visual clarity of the receiving water^</li> <li>(iii) any emission of objectionable odour</li> <li>(iv) the rendering of fresh water^ unsuitable for consumption by farm animals</li> <li>(v) the natural temperature of the receiving water^ to change by more than 3°C</li> <li>(vi) toxicity to aquatic ecosystems.</li> <li>(h) The diversion or discharge^ must not, after reasonable mixing*, cause the dissolved oxygen of the receiving water body^ to fall below 80% saturation concentration, unless the dissolved oxygen is already below this limit in which case the discharge^ must not lower it further.</li> </ul>	Non-Notification
16-12 New diversions	The following activities where they are associated with the establishment and operation* of a new diversion, except as expressly provided for by other rules^ within this Plan:  (a) the take, diversion or discharge^ of water^ and any ancillary damming of water^ pursuant to s14(2) and ss15(1) or 15(2A) RMA  (b) any ancillary discharge^ of sediment or other contaminants^ in the water^ into water^ or onto or into land^	Permitted	<ul> <li>(i) The activity must not be to any historic heritage^ identified in any district plan^ or regional plan^.</li> <li>(a) The activity must involve: <ul> <li>(i) a diversion of groundwater,</li> <li>(ii) a diversion from or within an artificial watercourse*,</li> <li>(iii) a diversion from or within an existing drain that is within the RMA definition of "river^", or</li> <li>(iv) a diversion wholly contained within the bed^ of a river^ provided the diversion is no more than two times the bed^ width of the river^ in any 2 km length of river^ in any 12 month period and must not exceed a length of 20 metres.</li> </ul> </li> <li>(b) The activity must not involve the diversion of water^ associated with new drainage which is regulated under Rule 16-11.</li> </ul>	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	pursuant to ss15(1) or 15(2A) RMA  (c) any ancillary excavation or disturbance of the bed^ of a river^ pursuant to ss13(1) and 13(2) RMA.		(c) The diversion must not be located within 200 m of any wetland^ that is a rare habitat* or threatened habitat* and must not lower the water^ level in any wetland^ that is a rare habitat* or threatened habitat*.	
	p		(d) The diversion must not be to or from any rare habitat*, threatened habitat* or at-risk habitat*.	
			(e) The diversion must not increase <i>land</i> ^ instability or the risk of erosion.	
			(f) The diversion must not cause or contribute to flooding on any other property*.	
			(g) The diversion must not adversely affect any lawfully established water <sup>A</sup> take or use which existed at the time that the diversion commenced.	
			(h) The diversion must not prevent the passage of fish in water bodies^ containing fish.	
			(i) The diversion must not be undertaken where any <i>infrastructure</i> ^ is located in, on, under or over the <i>bed</i> ^ within 1 km upstream or downstream of the diversion.	
			(j) Any realigned bed^ must have at least the same capacity as the original bed^ to carry the diverted flow.	
			(k) For diversions of surface water^ from an artificial watercourse* or drain, the diverted water^ must not cause a reduction in the water^ quality of any downstream water body^.	
			(I) Any discharge <sup>*</sup> of sediment ancillary to the activity must not, after reasonable mixing <sup>*</sup> , cause a conspicuous change in the colour or visual clarity of the receiving water <sup>*</sup> .	
			(m) The construction of a new diversion located within a <i>river</i> <sup>^</sup> must comply with the general <i>conditions</i> <sup>^</sup> listed in Section 17.3 Table 17.2.	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
16-13 Diversions that do not comply with permitted activity^ and controlled activity^ rules^	Any diversion pursuant to s14(2) RMA that does not comply with one or more conditions <sup>^</sup> , standards or terms of a permitted activity <sup>^</sup> or controlled activity <sup>^</sup> rule <sup>^</sup> in this chapter, but which is not expressly classified as a discretionary activity <sup>^</sup> , or prohibited activity <sup>^</sup> .	Discretionary	(a) The diversion must not be to or from any rare habitat*, threatened habitat* or at-risk habitat*.	

#### Rule Guide:

Diversions in rare habitats\*, threatened habitats\* and at-risk habitats\* are regulated by Rules 13-8 and 13-9.

Diversions of surface water allocated to existing consented hydroelectricity generation schemes are dealt with in Rule 16-7.

# 16.5 Rules - Bore\* Drilling and Bore\* Sealing

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion
16-14 The drilling, construction or alteration of any bore* and any ancillary discharge^ of water^ or contaminants^	The drilling, construction or alteration of any bore* pursuant to s9(2) RMA that extends below the seasonally highest groundwater level and any ancillary discharge^ of water^ or contaminants^ into water^ or onto land^ pursuant to ss15(1) or 15(2A) RMA.	Controlled	(a) The activity must not be within any rare habitat*, threatened habitat* or at-risk habitat*.	Non-Notification  Control is reserved over:  (a) compliance with the NZS 4411:2001 Environmental Standard for Drilling of Soil and Rock and any other relevant standard  (b) bore* location, size (including diameter of the bore* casing) and depth  (c) bore* screening depth and type  (d) backflow prevention  (e) information requirements including bore* logs, piezometric levels,



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
				groundwater tests, and bore* construction details
				(f) duration of consent
				(g) review of consent conditions^
				(h) compliance monitoring
				(i) the matters in Policy 14-9.
				Resource consent applications under this rule will not be notified and written approval of affected persons will not be required (notice of applications need not be served^ on affected persons).
16-15	Pursuant to ss9(2), 14(2), 15(1) or 15(2A)	Prohibited		
Unsealed bores*	RMA any <i>bore</i> * that:  (a) is no longer used and is unsealed, or			
	(b) is in use and is constructed in a manner that allows <i>contaminants</i> ^ to enter the <i>bore</i> * from the <i>land</i> ^ surface, or allows the wastage of <i>water</i> ^ in artesian situations.			

The drilling, construction or alteration of any bore\* and any ancillary discharge^ of water^ or contaminants^ in rare habitats\*, threatened habitats\* and at-risk habitats\* is regulated by Rules 13-8 and 13-9.





CHAPTER 17:
Activities in Artificial
Watercourses, Beds of Rivers
and Lakes, and Damming

## 17 Activities in *Artificial Watercourses\**, Beds of Rivers and Lakes, and Damming

## 17.1 Objectives

# Objective 17-1: Regulation of structures<sup>^</sup> and activities in artificial watercourses<sup>\*</sup> and in the beds<sup>^</sup> of rivers<sup>^</sup> and lakes<sup>^</sup>, and damming

The regulation of *structures*^ and activities in *artificial watercourses*\* and in the *beds*^ of *rivers*^ and *lakes*^, and damming, in a manner that:

- (a) safeguards life supporting capacity, and recognises and provides for the Values and management objectives in Schedule B, and
- (b) has regard to the objectives and policies of Chapter 5 that relate to structures^ and activities in artificial watercourses\* and in the beds^ of rivers^ and lakes^, and damming.

#### 17.2 Policies

## Policy 17-1: Consent decision-making for activities in, on, under or over the beds<sup>^</sup> of rivers<sup>^</sup> and lakes<sup>^</sup> (including modified watercourses but excluding artificial watercourses<sup>\*</sup>)

When making decisions on *resource consent*^ applications, and setting consent *conditions*^, for activities in, on, under or over the *bed*^ of a *river*^ or *lake*^ (including modified watercourses but excluding *artificial watercourses*\*) the Regional Council must:

- (a) have regard to the extent to which the activity is consistent with best management practices,
- (b) seek to avoid where reasonably practicable any adverse *effects*^ on any other lawful activity in, on, under or over the *bed*^ of the *river*^ or *lake*^, including existing *structures*^,
- (c) have regard to whether the activity is of a temporary nature or is associated with necessary maintenance\* work,
- (d) have regard to the objectives and policies of Chapters 2, 3, 5, 6, 9 and 12 to the extent that they are relevant to the activity, and
- (e) have regard to the matters in Policy 14-9.

## Policy 17-2: Consent decision-making for activities in artificial watercourses\*

When making decisions on *resource consent*^ applications, and setting consent *conditions*^, for activities on *land*^ in an *artificial watercourse*\* the *Regional Council* must:



- (a) have regard to the purpose for which the artificial watercourse\* was established,
- (b) in circumstances where the *artificial watercourse*\* joins a *river*^ or *lake*^, have regard to the policies relating to the *beds*^ of *rivers*^ and *lakes*^ in Section 5.4.4.
- (c) seek to avoid, remedy or mitigate adverse effects on any significant ecosystems intrinsic to the artificial watercourse\*,
- (d) manage the activity in accordance with (a), (c) and (d) of Policy 17-1, and
- (e) have regard to the matters in Policy 14-9.

### **Policy 17-3: Gravel extraction**

Having regard to Policies 5-22 to 5-25, activities in, on, under or over the *beds*^ of *rivers*^ and *lakes*^ that enable gravel extraction will generally be allowed provided that:

- (a) The long term average annual volume of gravel available for extraction from those *rivers*^ and *river*^ reaches listed in Table 17.1 must be limited to the quantities stated in the table, unless:
  - (i) there is a demonstrable *river*^ management need to increase or decrease this volume, or
  - (ii) the gravel extraction is necessary to decrease the risk of flooding or damage to structures^, or
  - (iii) future information establishes that actual sustainable rates of gravel extraction are higher or lower than those in Table 17.1 taking into account the cumulative volumes being extracted, the natural rates of replenishment and the *effects*^, including cumulative effects, of extraction.
- (b) For any *river*^ or *river*^ reach not specified in Table 17.1, the *effects*^ of the cumulative volume of gravel being extracted on an annual basis in the *river*^ reaches must be considered, including matters in relation to:
  - (i) the natural rates of gravel replenishment,
  - (ii) the effects^, including cumulative effects^, of the gravel extraction,
  - (iii) demonstrable river^ management needs, and
  - (iv) the need to decrease the risk of flooding or damage to *structures*^.
- (c) For the purposes of this policy "annual" is defined as 1 July to 30 June the following year.



 Table 17.1
 Long term average annual allocable volumes of gravel

River or Reach	Volume (m³)
Kawhatau River	20,000
Makino Stream	3,000
Makuriiti Stream	3,000
Manawatu River	
From 1 km upstream of Ngawapurua Bridge to source	20,000
1 km upstream to 2.5 km downstream of Ngawapurua Bridge	No extraction
2.5 km downstream of Ngawapurua Bridge to Ballance Bridge	15,000
Manawatu Gorge to Karere Rd	2,500
Karere Rd to Hamilton's Line	15,000
Hamilton's Line to Oroua confluence [2007 to 2009]	20,000
Hamilton's Line to Oroua confluence [2009 onwards] the 2 km aggrading reach between 39 Miles (NZMS 260 S24:212-832) and Benchmark 643 (NZMS 260 S24:226-830)	17,500
Hamilton's Line to Oroua confluence [2009 onwards] the 2 km aggrading reach between BM 604 (NZMS 260 S24:206-833) and BM 622 (NZMS 260 S24:207-826)	35,000
Mangahao River	15,000
Mangatainoka River	15,000
Ohau River	
Upstream of a point 1 km above SH 1 bridge	5,000
Downstream of a point 1 km above SH 1 bridge	10,000
Oroua River	
Upstream of Menzies Ford	10,000
Downstream of Menzies Ford	55,000
Pohangina River	25,000
Rangitikei River	
Makahikatoa Stream to Mangarere Road bridge	15,000
Mangarere Road bridge to Rewa	25,000
Rewa to 7 km downstream of SH 1 bridge	30,000



River or Reach	Volume (m³)
7 km downstream of SH 1 bridge to mouth	100,000
South East Ruahine Streams	
Kumeti	3,000
Mangaatua	5,000
Mangapapa	2,000
Mangatera	500
Mangatewaiiti	2,000
Mangatewainui	4,000
Oruakeretaki	5,000
Otamaraho	2,000
Otamarahu	1,000
Rokaiwhana	10,000
Raparapawai	3,000
Tamaki	20,000
Turakina River	3,000
Whangaehu River	8,000
Whanganui River	7,000

## 17.3 General Conditions for Permitted Activities and Controlled Activities involving the Beds of Rivers and Lakes

The table below sets out general conditions for activities involving the beds of rivers and lakes. These general conditions are referred to in a number of the permitted activity and controlled activity rules in this chapter. The table sets out general conditions for all rivers and lakes under the Value of Life-supporting Capacity (this Value applies to all rivers and lakes as shown in Schedule B). It then sets out additional conditions for other Values that apply to specific reaches of rivers, as listed in Schedule B. Schedule B must be referred to in order to identify the locations of the *Water Management Sub-zones\** to which these other Values apply, and whether they are therefore relevant to a particular activity.



Table 17.2 General conditions^ for permitted activities^ and controlled activities^ involving the beds^ of rivers^ and lakes^

Value	Condition
Life-supporting Capacity conditions^ which apply to all water bodies^ and	(a) The activity must not adversely reduce the ability of the <i>water body</i> ^ or its <i>bed</i> ^ to convey flood flows, floating debris or sediment, except for a period of not more than 12 consecutive hours during construction.
their beds^	(b) There must be no <i>discharge</i> ^ of <i>contaminants</i> ^, other than sediment and other <i>contaminants</i> ^ inherent to the <i>water</i> ^ or <i>bed</i> ^, into the <i>river</i> ^ or <i>lake</i> ^ except where the <i>discharge</i> ^ is explicitly allowed by the activity description of a <i>rule</i> ^ in this chapter.
	(c) Any discharge^ of sediment into water^ directly caused by the activity, that causes the visual clarity standards in Schedule E to be breached, must not be undertaken for more than 24 hours in total across 5 consecutive days. There must be no more than one activity per river^ per property* in any 12 month period.
	(d) Any discharge^ of sediment into water^ under (c) must not, after reasonable mixing*, cause any conspicuous change in the colour of water^ in the receiving water^ or any change in horizontal visibility greater than the target set in the visual clarity % change column of Schedule E, more than 12 hours after completion of the activity.
	(e) Any materials used must be necessary for the activity and must not be toxic to aquatic ecosystems.
	(f) Any materials no longer required as part of the activity, including any temporary <i>structures</i> ^, must not be stored in or on the <i>bed</i> ^ of any <i>river</i> ^ or <i>lake</i> ^ and must be removed after completion of the activity.
	(g) Refuelling of machinery must not take place in any area where spills may enter surface water^.
	(h) The activity must be undertaken in a manner that provides for the safe passage of fish both upstream and downstream, including past any <i>structure</i> ^.
	(i) Any diversion of <i>water</i> ^ required for works ancillary to a <i>structure</i> ^ must be temporary, must be within the <i>bed</i> ^ of the <i>river</i> ^, must not exceed 100 m in length, must not be between catchments, must not involve a <i>lake</i> ^, and the diversion channel must have sufficient capacity to carry the same flow as the original channel.
	(j) Upon completion of any channel bank works, the banks must be reinstated to a natural contour and revegetated.
	(k) Any straightening or channelling of a <i>river</i> ^ must not exceed a length equal to two times the <i>bed</i> ^ width of the <i>river</i> ^ in any 2 km length of <i>river</i> ^ in any 12 month period.
	(I) There must be no removal of instream woody debris less than 2 m³ in size unless this is required to reduce the risk of flooding or erosion.
Riparian (applies to all reaches in water	(m) For the purpose of minimising disturbance to nesting dotterels 1August to 31 December (inclusive), gravel extraction and bed^disturbance on gravel beaches must only take place:
bodies^ and their beds^ with a	(i) within 7 days following a flood of the area of beach that is the subject of the activity, or
Schedule B Value of Sites of Significance - Riparian)	(ii) where the extraction or disturbance commenced at the same location prior to 1 August and has not been interrupted for more than 7 days.



Value	Condition
Inanga Spawning (applies to all reaches in water bodies^ and their beds^ with a Schedule B Value of Inanga Spawning)	(n) The use of mobile machinery in or on the bed\(^\) of a river\(^\) or lake\(^\) in a manner that disturbs the bed\(^\) must not take place 1 February to 1 May (inclusive).
Whitebait* Migration (applies to all reaches in water bodies^ and their beds^ with a Schedule B Value of Whitebait* Migration)	<ul> <li>(o) The use of mobile machinery in or on the bed^ of a river^ or lake^ in a manner that disturbs the bed^ of the active flowing channel must not take place</li> <li>15 August to 30 November (inclusive).</li> </ul>
Trout Spawning (applies to all surface water management zones and their beds^ with a Schedule B reach Value of Trout Spawning for this provision)	(p) The use of mobile machinery in or on the bed\(^\) of a river\(^\) or lake\(^\) in a manner that disturbs the bed\(^\) of the active flowing channel must not take place 1 May to 30 September (inclusive).
Trout Fishery (applies to all reaches in water bodies^ and their beds^ with a Schedule B Value of Trout Fishery)	(q) Activities must not result in suspended sediment that causes the visual clarity standards in Schedule E to breached during Saturdays, Sundays and public holidays 1 December to 28 February (inclusive).
Contact Recreation	(r) Existing public access to or along a <i>river</i> ^ or <i>lake</i> ^ must not be rendered unsafe by the activity.
(applies to all reaches in water bodies^ and their beds^ with a	(s) Existing public access to or along a <i>river</i> ^ or <i>lake</i> ^ may be rendered unavailable where this is necessary for public safety or for the purpose of undertaking the activity, provided the public access is re-opened as soon as practicable.
Schedule B Value of Contact Recreation)	(t) Activities must not result in suspended sediment that causes the visual clarity standards in Schedule E to be breached at reaches with a Schedule B Value of Contact Recreation, during Saturdays, Sundays and public holidays 1 December to 28 February (inclusive).
Existing Infrastructure <sup>^</sup>	(u) Excavation, drilling, tunnelling or other disturbance of the <i>bed</i> <sup>^</sup> of a <i>river</i> <sup>^</sup> must not take place within 500 m upstream or downstream of any flow-recording site. <sup>1</sup>
	(v) Excavation, drilling, tunnelling or other disturbance of the <i>bed</i> ^ of a <i>river</i> ^ must not take place within 20 m upstream or downstream of a high pressure gas transmission pipeline identified by a <i>district plan</i> ^ or <i>regional plan</i> ^ or by a marker² on the bank of the <i>river</i> ^.

Further information on the location of flow-recording sites can be obtained by either visiting the Regional Council's website (www.horizons.govt.nz) or by contacting the Regional Council's Hydrology Department.

High pressure transmission gas pipelines are normally indicated by white triangle marker posts or yellow pipeline warning signs. If you are unsure about a pipeline being present, please contact your Territorial Authority.



## 17.4 Rules - Special Rivers and Lakes

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
17-1 Damming of protected <i>rivers</i> ^	The erection or placement of a dam structure <sup>^</sup> pursuant to s13(1) RMA in or on the bed <sup>^</sup> of the following rivers <sup>^</sup> , and any ancillary damming of water <sup>^</sup> pursuant to s14(2) RMA:	Prohibited		
	(a) the Manganui o te Ao River and its tributaries, the Makatote River, the Mangaturuturu River, the Waimarino Stream and the Orautoha Stream			
	(b) the Rangitikei River itself and all its tributaries above the confluence of the Makahikatoa Stream, the Rangitikei River itself from the confluence of the Makahikatoa Stream to the Mangarere Bridge, the Whakaurekau River and all its tributaries and the Kawhatau River and all its tributaries, namely the Pouranaki River and the Mangakokeke Stream			
	(c) the Hautapu River above its confluence with the Oraukura Stream and its tributaries, the Irirangi Stream and the Waiouru Stream			
	(d) the main stem of the Makuri River and the Makuri-iti Stream			
	(e) the Mangatainoka River and its tributaries, the Makakahi River (and its Bruce Stream tributary), the Mangaroa, Mangamaire, Makotukutuku and Mangaraupiu Streams, and an unnamed tributary entering the Mangatainoka River at map reference NZMS 260 T25:368-654			
	(f) the main stem of the Whanganui River from its source at map reference NZMS 260 T19:383-286 to the boundary of the coastal			



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	marine area, and the main stem of the Whakapapa River and the main stems of its tributaries the Whakapapaiti and Whakapapanui Streams  (g) the main stem of the Manawatu River through the Manawatu Gorge from the Ballance Bridge to the confluence of the Pohangina and Manawatu Rivers  (h) the main stem of the Pohangina River from its source to its confluence with the Manawatu River near the Manawatu Gorge  (i) the main stem of the Oroua River from its source to its confluence with the Mangoira Stream at map reference NZMS 260 T22:578-378.			
17-2 Reclamation and drainage of regionally significant	Any reclamation or drainage of the bed^ of the following lakes^ pursuant to s13(1) RMA, excluding any existing (as at 31 May 2007) reclamations and drainage:	Non- complying		
lakes^	(a) Lake Horowhenua			
	(b) Lake Papaitonga (c) Pukepuke Lagoon			
	(c) Pukepuke Lagoon and any ancillary:			
	(i) excavation, drilling, tunnelling or other disturbance of the <i>bed</i> <sup>A</sup> pursuant to s13(1) RMA			
	(ii) damming or diversion of water^ pursuant to s14(2) RMA			
	(iii) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA			
	(iv) deposition of substances in or on the bed^ pursuant to s13(1).			



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
Rule  17-3  Structures^ and disturbances involving a reach of river^ or its bed^ with Schedule B  Values of Natural State, Sites of Significance - Aquatic and Sites of Significance - Cultural	Except as prohibited by Rule 17-1, any of the following activities pursuant to s13(1) RMA within:  (a) a reach of river^ or its bed^ with a Schedule B Value of Natural State  (i) The erection, placement or extension of any structure^ in, on, under or over the bed^ except for lines, cables and ropeways that are suspended above the water^ and do not require a support structure^ in, on, over or under the bed^ of the river^  (ii) Any excavation, drilling, tunnelling or other disturbance of the bed^ including gravel extraction  and any ancillary:  (i) damming or diversion of water^ pursuant to s14(2) RMA  (ii) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to	Classification Discretionary	Conditions/Standards/Terms	
	ss15(1) or 15(2A) RMA  (iii) deposition of substances in or on the bed^ pursuant to s13(1).  (b) Sites of Significance - Aquatic and Sites of Significance - Cultural  (i) The erection, placement or extension of any structure^ in, on, under or over the bed^, except for lines, cables and ropeways that are suspended above the water^ and do not require a support structure^ in, on, over or under the bed^ and except for those activities regulated by Rule 17-14  (ii) Any excavation, drilling, tunnelling or			



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	other disturbance of the <i>bed</i> ^, except for those activities regulated by Rules 17-5 and 17-14			
	and any ancillary:			
	(i) damming or diversion of water <sup>A</sup> pursuant to s14(2) RMA			
	(ii) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA			
	(iii) deposition of substances in or on the bed^ pursuant to s13(1).			



## 17.5 Rules - Use, Maintenance\*, Upgrade\*, Removal and Demolition of Structures

Rule	Activity	Classification	Conditions /Standards/Terms	Control/Discretion Non-Notification
17-4 Use of structures^	The use of a structure^ located in, on, under or over the bed^ of a river^ or lake^ pursuant to s13(1) RMA, and any ancillary:  (a) damming or diversion of water^ pursuant to s14(2) RMA, excluding the damming of water^ associated with dam structures^ (which is regulated by the rules^ in Section 17.6)  (b) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA.  Advice Note:  For the avoidance of doubt, this rule^ includes the "use" of a dam structure^, but excludes the damming of water^ by a dam structure^ (under	Permitted		
17-5  Maintenance* and upgrade* of structures^, and ancillary removal of bed^ material and plants	s14(2) RMA).  (a) Structures^ - The maintenance* or upgrade* of a structure^ located in, on, under or over the bed^ of a river^ or lake^ pursuant to s13(1) RMA, and any ancillary:  (i) excavation, drilling, tunnelling or other disturbance of the river^ or lake^ bed^ pursuant to s13(1) RMA  (ii) damming or diversion of water^ pursuant to s14(2) RMA  (iii) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to s15(1) or 15(2A) RMA  (iv) deposition of substances in or on the bed^ of the river^ or lake^ pursuant to	Permitted	<ul> <li>(a) The activity must comply with the general <i>conditions</i>^ listed in Section 17.3.</li> <li>(b) Any <i>discharge</i>^ of removed <i>bed</i>^ material or plants onto or into <i>land</i>^ must comply with the <i>conditions</i>^ of Rule 14-27, except for condition 14-27(c)(ii) and condition 14-27(b) with regard to <i>cleanfill material</i>*.</li> </ul>	



Rule	Activity	Classification	Conditions /Standards/Terms	Control/Discretion Non-Notification
	s13(1).  (b) Ancillary removal of bed^ material and plants - The removal or other disturbance of bed^ material pursuant to s13(1) or the disturbance, removal, damage, or destruction of plants pursuant to s13(2) RMA for the purpose of maintaining the functional integrity of a structure^ located in, on, under or over the bed^ of a river^ or lake^, including flushing accumulated bed^ material, and any ancillary:  (i) damming or diversion of water^ pursuant to s14(2) RMA  (ii) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to s15(1) or 15(2A) RMA  (iii) deposition of removed bed^ material or plants in or on the bed^ pursuant to s13(1) RMA  (iv) discharge^ of removed bed^ material or plants into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA  (v) deposition of substances in or on the bed^ of the river^ or lake^ pursuant to s13(1).			



Rule	Activity	Classification	Conditions /Standards/Terms	Control/Discretion Non-Notification
17-6 Removal and demolition of structures^	Except as regulated by Rule 17-15, the removal or demolition of a structure^\ located in, on, under or over the bed^\ of a river^\ or lake^\ pursuant to s13(1) RMA, and any ancillary:  (a) excavation, drilling, tunnelling or other disturbance of the river^\ or lake^\ bed^\ pursuant to s13(1) RMA  (b) damming or diversion of water^\ pursuant to s14(2) RMA  (c) discharge^\ of water^\ or sediment into water^\ or onto or into land^\ pursuant to ss15(1) or 15(2A) RMA  (d) deposition of substances in or on the bed^\ of the river^\ or lake^\ pursuant to s13(1).	Permitted	<ul> <li>(a) The activity must comply with the general conditions^ listed in Section 17.3.</li> <li>(b) The Regional Council must be informed in writing of the removal or demolition of any of the following structures^, at least 10 working days^ prior to the commencement of the removal or demolition: <ul> <li>(i) access structures^ in or on the bed^ of a river^ or lake^, including bridges (other than temporary bridges for military training purposes), culverts and fords, where the catchment above the structure^ is greater than 50 ha</li> <li>(ii) structures^ occupying more than 5 m² of the bed^ of a river^ or lake^</li> <li>(iii) any device for the purpose of monitoring or recording river^ levels or quality.</li> </ul> </li> <li>(c) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*.</li> </ul>	

Use, maintenance\* and upgrade\* - The rules above permit the ongoing use, maintenance\* and upgrade\* of structures once they are established (subject to conditions in the case of maintenance\* and upgrade\* activities). For structures requiring a consent to be established, this means that consents can be granted for a short duration. The rules are intended to avoid the need for resource users to hold long-term consents enabling the use or upkeep of structures once they are established.

The discharge of contaminants into water or into or onto land, other than contaminants specifically identified in the rules, is regulated by the rules in Chapter 14.



## 17.6 Rules - Dams and Damming

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
17-7 New and existing small dams	All of the following activities, to the extent that they are relevant, for new and existing dam structures^ and associated damming within rivers^, within artificial watercourses* and on land^:  (a) the erection, placement or extension of a dam in, on, under or over the bed^ of a river^ or within an artificial watercourse* or on land^ pursuant to ss9(2) or 13(1) RMA  (b) the damming of water^ and any ancillary take, diversion or discharge^ of water^ that is part of the normal operation* of a dam, pursuant to ss14(2) and 15(1) RMA  (c) any ancillary excavation, drilling, tunnelling or other disturbance of the bed^ of a river^ pursuant to s13(1) RMA  (d) any ancillary discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA  (e) any deposition of substances in or on the bed^ of the river^ or lake^ pursuant to s13(1).  Advice Note:  For the avoidance of doubt, any proposal to take water^ that is impounded behind a dam structure^ for any use other than that provided for in (b) must comply with the rules^ set out in Chapter 16 of this Plan.	Permitted	<ul> <li>(a) Any new dam must not be located in a <i>river</i>^ prohibited by Rule 17-1 or regulated under Rule 17-3.</li> <li>(b) For a dam in a <i>river</i>^, the catchment area above the dam must be no greater than 50 ha.</li> <li>(c) The maximum <i>water</i>^ depth must be less than 3 m (measured from the natural ground level at the upstream toe of the dam <i>structure</i>^).</li> <li>(d) A spillway must be constructed to enable the passage of a 200 year flood without the dam being overtopped.</li> <li>(e) <i>Water</i>^ impounded by the dam must not encroach onto adjoining <i>properties</i>*.</li> <li>(f) Dams in permanently flowing <i>rivers</i>^ and <i>artificial watercourses</i>* must maintain a residual flow out of the dam at all times including during filling of the dam.</li> <li>(g) For a dam located in a <i>river</i>^, the activity must comply with the general <i>conditions</i>^ listed in Section 17.3.</li> <li>(h) For a dam located in an <i>artificial watercourse</i>*, the activity must comply with general conditions (a) to (k) in Section 17.3 as if these <i>conditions</i>^ applied to an <i>artificial watercourse</i>*.</li> <li>(i) The activity must not take place in any <i>rare habitat</i>*, <i>threatened habitat</i>* or at-risk habitat*.</li> </ul>	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
17-8 Replacement consents for existing damming of water^	Any lawfully established damming of water^\ within a river^ within an artificial watercourse* or on land^\text{ for which replacement consents are sought and any ancillary:  (a) take, diversion or discharge^\text{ of water^\text{ that}} is associated with the existence of the dam structure, pursuant to s14(2) or s15(1) or 15(2A) RMA, except as permitted by Rule 17-7  (b) discharge^\text{ of water^\text{ or sediment into water^\text{ or onto or into land^\text{ pursuant to ss15(1) or} 15(2A) RMA  (c) deposition of substances in or on the bed^\text{ of the river^\text{ or lake^\text{ pursuant to s13(1).}}  Advice Note: For the avoidance of doubt, any proposal to take water^\text{ that is impounded behind a dam structure^\text{ must comply with the rules^\text{ set out in}}	Controlled	Conditions/Standards/Terms	Control is reserved over:  (a) fish passage  (b) water^ levels, flow regimes and minimum flows  (c) measures to manage land^ stability and erosion  (d) measures to assist with maintaining or achieving the Schedule E water^ quality targets for the Water Management Subzones*  (e) measures to avoid, remedy, or mitigate any adverse effects^ on the Values of the water body^ at and below the point of discharge dam  (f) measures to avoid, remedy or mitigate any adverse effects on the instream geomorphological
	Chapter 16.			components of natural character of the water body^  (g) management of dam failure  (h) effects^ on rare habitats*, threatened habitats* and at-risk habitats* and Sites of Significance - Aquatic  (i) measures to avoid, remedy, or mitigate adverse effects^ on tangata whenua^ values  (j) duration of consent  (k) review of consent conditions^  (l) compliance monitoring



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
				(m) the matters in Policy 14-9.
				Resource consent applications under this rule will be notified to those parties who are adversely affected in relation to the matters over which control is reserved. This clause does not preclude full public notification of the Regional Council's discretion in accordance with the RMA.

All new and existing small dams are authorised if they comply with the conditions of Rule 17-7. The erection or placement of new large dams requires consent under Rule 17-23. These large dams also require a building consent from the Regional Council under the Building Act 2004. The damming of water by existing large dams requires ongoing authorisation under s14(2) RMA. Rule 17-8 regulates the replacement of existing consents for the damming of water when those consents expire. The use, maintenance\* and upgrade\* of all dam structures, once they are established, are permitted by rules 17-4 (use) and 17-5 (maintenance\* and upgrade\*). The authorised use (Rule17-4) specifically excludes damming regulated under s14(2) RMA as that is covered by Rules 17-7 and 17-8. This means that the Regional Council has decided to accept the presence of existing dam structures (and has declined to give itself the discretion as to whether an existing dam structure should remain). However, for replacement consents for large dams, the Regional Council does retain control over the effects of damming water on fish passage, residual flow etc. in relation to the continued operation of the dam under Rule 14-29 (discharges) and Rules 16-5 and 16-6 (takes), and in relation to the existence of the dam itself as listed in Rule 17-8 (damming). These are the effects of concern to the Council.

The discharge of contaminants into water or into or onto land, other than contaminants specifically identified in the rules, is regulated by the rules in Chapter 14.

The erection and placement of new dams and the damming of water within rare habitats\*, threatened habitats\* or at-risk habitats\* is regulated under Rules 13-8 and 13-9.



## 17.7 Rules - Other Structures

Rule	Activity	Classification	Conditions/Standards/Terms Control/Discretion Non-Notification
17-9 Lines, cables, pipelines and ropeways	The erection, placement, or extension of a line, cable, pipeline or ropeway in, on, under or over the bed^ of a river^ or lake^ pursuant to s13(1) RMA, and any ancillary:  (a) excavation, drilling, tunnelling or other disturbance of the bed^ of a river^ or lake^ pursuant to s13(1) RMA  (b) damming or diversion of water^ pursuant to s14(2) RMA  (c) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA  (d) deposition of substances in or on the bed^ of the river^ or lake^ pursuant to s13(1).	Permitted	<ul> <li>(a) The activity and any ancillary support structures^ must either: <ul> <li>(i) be wholly located over or under the bed^, or</li> <li>(ii) occupy no more than 20 m² of the bed^.</li> </ul> </li> <li>(b) The activity must not take place in, on, under or over a reach of a river^ with a Schedule B Value of Natural State except for lines, cables and ropeways that are suspended over the water^ and do not require a support structure^ in, on, over or under the bed^ of the river^.</li> <li>(c) The activity must comply with the general conditions^ listed in Section 17.3.</li> <li>(d) The activity must not take place in any rare habitat* or threatened habitat*.</li> </ul>
17-10 Culverts	The erection, placement, or extension of a culvert in, on, under or over the bed^ of a river^ or lake^ pursuant to s13(1) RMA and any ancillary:  (a) excavation, drilling, tunnelling or other disturbance of the river^ or lake^ bed^ pursuant to s13(1) RMA  (b) damming or diversion of water^ pursuant to s14(2) RMA  (c) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA  (d) deposition of substances in or on the bed^ of the river^ or lake^ pursuant to s13(1).	Permitted	<ul> <li>(a) A new culvert must not be erected or placed in: <ul> <li>(i) a river^ or lake^ regulated under Rule 17-3</li> <li>(ii) a reach of a river^ with a Schedule B Value of Flood Control and Drainage, unless the work is undertaken by or on behalf of the Regional Council.</li> </ul> </li> <li>(b) Where multiple culverts are placed side by side, the total cross-sectional area of the multiple culverts must not be less than that of a single culvert which complies with this rule^.</li> <li>(c) The culvert, associated fill and culvert placement must comply with the following dimensions: <ul> <li>(i) a maximum culvert length of 20 m</li> <li>(ii) for circular culverts a culvert diameter of 0.3 m to 1.2 m (inclusive)</li> <li>(iii) for non-circular culverts a width and height of 0.3 m to</li> </ul> </li> </ul>



Rule	Activity	Classification	Conditions/Standards/Terms Control/Discretion Non-Notification
			1.2 m each (inclusive)  (iv) a maximum fill height of 2 m above the top of the culvert unless a spillway is constructed to enable the passage of a 200 year flood without the fill being overtopped
			(v) a minimum culvert installation depth below the <i>bed</i> ^ of 20% of the width of the culvert.
			(d) The culvert must be positioned so that its alignment and gradient are the same as the <i>river</i> ^.
			(e) The culvert must be constructed to allow:
			(i) the flow from a 5% annual exceedance probability (20 year return period) flood event without overtopping, unless the overtopping flows to a specifically designed spillway
			(ii) the flow from a 2 year return period flood event without any flow impediment.
			(f) The culvert inlet and outlet must be protected against erosion.
			(g) All practicable steps must be used to minimise the release of sediment during construction.
			(h) The culvert must be constructed and maintained to avoid any aggradation or erosion of the bed^.
			(i) The culvert must be kept clear of accumulated debris.
			(j) The activity must comply with the general <i>conditions</i> ^ listed in Section 17.3.
			(k) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*.
17-11	The erection, placement, or extension of any	Permitted	(a) A new structure^ must not be erected or placed in:
Other structures^	structure <sup>^</sup> that is not regulated by any other rule <sup>^</sup> in this chapter in, on, under or over the bed <sup>^</sup> of a		(i) a <i>river</i> ^ or <i>lake</i> ^ regulated under Rule 17-3
including bridges, fords and other access structures^	river^ or lake^ pursuant to s13(1) RMA and any ancillary:		(ii) a reach of a <i>river</i> ^ with a Schedule B Value of Flood Control and Drainage, unless the work is undertaken by or on behalf of the Regional Council.



Rule	Activity	Classification	Conditions/Standards/Terms Control/Discretion Non-Notification
	<ul> <li>(a) excavation, drilling, tunnelling or other disturbance of the <i>river</i>^ or <i>lake</i>^ bed pursuant to s13(1) RMA</li> <li>(b) damming or diversion of <i>water</i>^ pursuant to s14(2) RMA</li> <li>(c) <i>discharge</i>^ of <i>water</i>^ or sediment into <i>water</i>^ or onto or into <i>land</i>^ pursuant to ss15(1) or 15(2A) RMA</li> <li>(d) deposition of substances in or on the <i>bed</i>^ of the <i>river</i>^ or <i>lake</i>^ pursuant to s13(1).</li> <li>Advice Note: For the avoidance of doubt, this <i>rule</i>^ excludes the erection, reconstruction, placement, alteration, or extension of any dam in, on, under or over the <i>bed</i>^ of any <i>river</i>^ or <i>lake</i>^, within an <i>artificial watercourse</i>* or on <i>land</i>^. Dams are regulated by Rules 17-1, 17-3, 17-4, 17-5, 17-7 and 17-23.</li> </ul>		<ul> <li>(b) For bridges and other access structures^, except fords and temporary bridges for military training purposes that are removed within 2 weeks of their erection, located in, on, under or over the bed^ of a river^ or lake^, the catchment area above the structure^ must be no greater than 200 ha.</li> <li>(c) For all structures^ located in, on, under or over the bed^ of a river^ or lake^, the structure^ must occupy a bed^ area no greater than 20 m² except for: <ol> <li>(i) whitebait* and maimai structures^ which must not exceed 5 m²</li> <li>(ii) fords which must occupy a bed^ area no greater than 40 m²</li> <li>(iii) temporary bridges for military training purposes that are removed within 2 weeks of their erection.</li> <li>(d) The structure^ must be constructed and maintained to avoid any aggradation or scouring of the bed^ that may inhibit fish passage.</li> <li>(e) The activity must comply with the general conditions^ listed in Section 17.3.</li> <li>(f) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*.</li> </ol> </li> </ul>
17-12 Recording sites*	The erection, placement or extension of a device for the purposes of monitoring or recording <i>river</i> ^\ levels or quality in, on, under or over the <i>bed</i> ^\ of a <i>river</i> ^\ or <i>lake</i> ^\ pursuant to s13(1) RMA and any ancillary:  (a) excavation, drilling, tunnelling or other disturbance of the <i>river</i> ^\ or <i>lake</i> ^\ bed^\ pursuant to s13(1) RMA  (b) damming or diversion of <i>water</i> ^\ pursuant to s14(2) RMA	Permitted	<ul> <li>(a) The device must occupy a bed<sup>h</sup> area no greater than 20 m<sup>2</sup>.</li> <li>(b) The device must be constructed and maintained* to avoid any aggradation or scouring of the bed<sup>h</sup> that may inhibit fish passage.</li> <li>(c) The device may divert up to 30 m³ of water<sup>h</sup> per day for the purpose of measuring water<sup>h</sup> quality or quantity, provided the water<sup>h</sup> is returned to the water body<sup>h</sup> within 50 m of the diversion point.</li> <li>(d) The activity must comply with the general conditions<sup>h</sup> listed in Section 17.3.</li> </ul>
	(c) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or		(e) The Regional Council must be informed in writing at least 10 working days^ prior to the commencement of the activity



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
17-13	15(2A) RMA  (d) deposition of substances in or on the <i>bed</i> ^ of the <i>river</i> ^ or <i>lake</i> ^ pursuant to s13(1).  The erection, placement or extension of a culvert	Controlled	taking place.  (f) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*.  (a) The proposed activity is required in order to comply with	Control is reserved over:
Bridges and culverts constructed to comply with Rules 14-1 to 14-4	or bridge in, on, under or over the bed^ of a river^ or lake^ pursuant to s13 RMA in order to comply with Rules 14-1 to 14-4 and any ancillary:  (a) excavation, drilling, tunnelling or other disturbance of the river^ or lake^ bed^ pursuant to s13(1) RMA  (b) damming or diversion of water^ pursuant to s14(2) RMA  (c) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to s15(1) or 15(2A) RMA  (d) deposition of substances in or on the bed^ of the river^ or lake^ pursuant to s13(1).	Controlled	<ul> <li>(a) The proposed activity is required in order to comply with Rules 14-1 to 14-4 but is unable to meet one or more of the conditions<sup>^</sup> of Rules 17-5, 17-10 or 17-11.</li> <li>(b) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*.</li> </ul>	(a) measures to avoid, remedy or mitigate the effects^ of any non-compliance with the conditions^ of Rules 17-5, 17-10 or 17-11 (b) duration of consent (c) review of consent conditions^ (d) compliance monitoring (e) the matters in Policy 14-9.

The discharge of contaminants into water or into or onto land, other than contaminants specifically identified in the rules, is regulated by the rules in Chapter 14. Activities within *rare habitats\**, *threatened habitats\** or *at-risk habitats\** are regulated by Rules 13-8 and 13-9.



## 17.8 Rules - Activities Within Rivers with a Schedule B Value of Flood Control and Drainage

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
Rule 17-14 Activities undertaken by or on behalf of the Regional Council in rivers^ with a Schedule B Value of Flood Control and Drainage	The following activities within a reach of a <i>river</i> <sup>^</sup> with a Schedule B Value of Flood Control and Drainage, where they are undertaken by or on behalf of the Regional Council:  (a) the erection, placement, or extension of any structure in, on, under or over the bed of a river pursuant to 13(1) RMA  (b) the excavation, drilling, tunnelling or other disturbance (including gravel extraction) of the bed of a river pursuant to s13(1) RMA  (c) any damming or diversion of water pursuant to s14(2) RMA  (d) any discharge or deposition of plants, removed bed material, rock, shingle, earth, cleanfill material*, water or sediment into water or onto or into land pursuant to s13(1), 15(1) or 15(2A) RMA  (e) the damage, destruction, disturbance or removal of plants or parts of plants pursuant to s13(2) RMA.	Permitted	<ul> <li>(a) The activity must be undertaken in accordance with the Environmental Code of Practice for River Works (Horizons Regional Council, June 2010).</li> <li>(b) The activity must not involve: <ul> <li>(i) an activity prohibited under Rule 17-1</li> <li>(ii) an activity regulated under Rule 17-3, except to the extent that the activities may be carried out in specified Sites of Significance - Aquatic and Sites of Significance - Cultural in accordance with (a).</li> </ul> </li> </ul>	
17-15 Activities affecting Schedule B Value of Flood Control and Drainage	Except as regulated by Rule 17-5, the following activities pursuant to ss 9(2) and 13(1) RMA in, on or under an artificial watercourse* or a reach of a river^ with a Schedule B Value of Flood Control and Drainage or adjacent land^ as defined in (j) to (m):  (a) the planting of a tree or shrub  (b) the erection, placement or extension of any building or other structure^ (including accessways)	Discretionary		



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	(c) the erection, placement or extension of a fence perpendicular to a <i>river</i> ^ or <i>artificial</i> watercourse*			
	(d) the erection, placement or extension of a fence greater than 1.2 m high parallel to a river^ or artificial watercourse*			
	(e) the deposition of any rock, shingle, earth, debris or other <i>cleanfill material*</i>			
	(f) any excavation, drilling, tunnelling or other disturbance likely to undermine the functional integrity of a stopbank or river^ control structure^			
	<ul> <li>(g) any land disturbance* that impedes access required for maintenance* of a river^ or drainage scheme</li> </ul>			
	(h) the upgrade*, reconstruction, alteration, extension, removal or demolition of any structure^ that is maintained by the Regional Council for the purposes of flood control or erosion protection or drainage			
	and any ancillary:			
	(i) excavation, drilling, tunnelling or other disturbance of the <i>river</i> ^ or <i>lake</i> ^ <i>bed</i> ^ pursuant to s13(1) RMA			
	(ii) damming or diversion of <i>water</i> ^ pursuant to s14(2) RMA			
	(iii) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA			
	<ul><li>(iv) deposition of substances in or on the bed<sup>^</sup> of the river<sup>^</sup> or lake<sup>^</sup> pursuant to s13(1)</li></ul>			
	(v) land disturbance* pursuant to s9(2) RMA			



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	where the activities listed in (a) to (h) are undertaken in any of the following areas:			
	(i) within the bed^ of a river^ or within an artificial watercourse*			
	(j) on a stopbank			
	(k) on any strip of <i>land</i> ^ between <i>an artificial</i> watercourse* or bed^ of a river^ and 8 m inland of the landward toe of a stopbank			
	(I) for areas without stopbanks, anywhere within 10 m of an artificial watercourse* or the bed^ of a river^			
	(m) Only land^ use activities described under (f) and (g) are controlled under this rule^ on land^ described under (j) and (k) on and adjacent to the Manawatu River secondary stopbank located between Ruahine Street at Fitzroy Bend and Ruamahanga Crescent. The other listed land^ use activities are not controlled in that area.			
	This <i>rule</i> ^ does not apply to activities undertaken by or on behalf of the Regional Council.			

The discharge of contaminants into water or into or onto land, other than contaminants specifically identified in the rules, is regulated by the rules in Chapter 14.



## 17.9 Rules - Gravel Extraction, Bed Disturbances and Plants

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
17-16 Small-scale gravel extraction	The excavation or other disturbance of the bed^ of a river^ or lake^ for the purpose of extracting gravel and other bed^ material, pursuant to s13(1) RMA and any ancillary:  (a) damming or diversion of water^ pursuant to s14(2) RMA  (b) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA  (c) deposition of substances in or on the bed^ of the river^ or lake^ pursuant to s13(1).	Permitted	<ul> <li>(a) The activity must not take place in a river^ or lake^ regulated under Rule 17-3.</li> <li>(b) The amount of gravel and bed^ material extracted must not exceed 50 m³ in any 12 month period.</li> <li>(c) The gravel or other material must only be extracted from an area of river^ bed^ that is not covered by flowing water^ at the time of extraction.</li> <li>(d) The activity must comply with the general conditions^ listed in Section 17.3.</li> <li>(e) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*.</li> </ul>	
17-17 Other gravel extraction	Except as regulated by Rules 17-3 and 17-16, the excavation or other disturbance of the bed^ of a river^ or lake^ for the purpose of extracting gravel and other bed^ material, pursuant to s13(1) RMA and including any ancillary:  (a) damming or diversion of water^ pursuant to s14(2) RMA  (b) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA  (c) deposition of substances in or on the bed^ of the river^ or lake^ pursuant to s13(1)  (d) discharges^ to air pursuant to s15(2A) RMA.	Discretionary	(a) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*.	
17-18 Other minor bed^ disturbances	Except as regulated by other <i>rules</i> ^ in this chapter, the excavation, drilling, tunnelling or other disturbance of the <i>bed</i> ^ of a <i>river</i> ^ pursuant to s13(1) RMA and any ancillary:  (a) damming or diversion of <i>water</i> ^ pursuant to	Permitted	<ul> <li>(a) The activity must not take place in a <i>river</i>^ regulated under Rule 17-3.</li> <li>(b) The activity must comply with the general <i>conditions</i>^ listed in Section 17.3.</li> <li>(c) The activity must not take place in any <i>rare habitat</i>*,</li> </ul>	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	s14(2) RMA  (b) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA  (c) deposition of substances in or on the bed^ of the river^ or lake^ pursuant to s13(1).  Advice Note: For the avoidance of doubt, this rule^ does not include gravel extraction.		threatened habitat* or at-risk habitat*.	
17-19 Plants	Except as regulated by other <i>rules</i> ^ in this chapter, the introduction, planting, removal or destruction of a plant in or on the <i>bed</i> ^ of a <i>river</i> ^ or <i>lake</i> ^ pursuant to s13(1) or s13(2) RMA, and any ancillary:  (a) excavation, drilling, tunnelling or other disturbance of the <i>bed</i> ^ of a <i>river</i> ^ or <i>lake</i> ^ pursuant to s13(1) RMA  (b) damming or diversion of <i>water</i> ^ pursuant to s14(2) RMA  (c) <i>discharge</i> ^ of <i>water</i> ^ or sediment into <i>water</i> ^ or onto or into <i>land</i> ^ pursuant to ss15(1) or 15(2A) RMA  (d) deposition of substances in or on the <i>bed</i> ^ of the <i>river</i> ^ or <i>lake</i> ^ pursuant to s13(1).	Permitted	<ul> <li>(a) A pest plant, as listed in the Regional Pest Plant Management Strategy, must not be introduced or planted.</li> <li>(b) The activity must not involve the planting of a tree or shrub in a reach of a <i>river</i><sup>^</sup> with a Schedule B Value of Flood Control and Drainage, as regulated by Rule 17-15.</li> <li>(c) The activity must not involve the removal or destruction of plants in Lake Papaitonga, Pukepuke Lagoon or Lake Horowhenua except for a radius of 500 m from the Lake Horowhenua outlet weir (which is permitted by this <i>rule</i>^^).</li> <li>(d) The activity must comply with the general <i>conditions</i>^ listed in Section 17.3.</li> <li>(e) The activity must not take place in any <i>rare habitat</i>*, <i>threatened habitat</i>* or <i>at-risk habitat</i>*.</li> </ul>	

Gravel extraction that cannot meet the conditions set out in Rule 17-17 is a discretionary activity under Rule 17-23.

The discharge of contaminants into water or into or onto land, other than contaminants specifically identified in the rules, is regulated by the rules in Chapter 14.

Activities undertaken in rare habitats\*, threatened habitats\* or at-risk habitats\* are regulated under Rules 13-8 and 13-9.



## 17.10 Rules - Activities in Artificial Watercourses\* and Non-natural Lakes

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
Minor activities involving artificial watercourses*	<ul> <li>(a) damming or diversion of water^ pursuant to s14(2) RMA</li> <li>(b) discharge^ of water^, sediment, artificial watercourse* material or plants into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA</li> <li>associated with any of the following activities within an artificial watercourse*:</li> <li>(c) the maintenance*, upgrade*, or extension of a structure^ or part of a structure^ in, on, under or over land^ within an artificial watercourse*</li> <li>(d) the removal of artificial watercourse* material or plants for the purpose of maintaining the functional integrity of a structure^, including flushing accumulated material</li> <li>(e) the discharge^ of removed artificial watercourse* material or plants onto or into land^</li> <li>(f) the excavation, drilling, tunneling, or other disturbance of the land^ within an artificial watercourse*</li> <li>(g) the introduction, planting, removal or destruction of a plant in or on land^ within an artificial watercourse*</li> <li>(h) the deposition of any substance in or on land^ within an artificial watercourse*.</li> <li>This rule^ does not include the damming of an</li> </ul>	Permitted	<ul> <li>(a) The activity must comply with the general conditions (a) to (k) and (u), (v) and (q) in Section 17.3 as if these conditions^ applied to an artificial watercourse*.</li> <li>(b) The activity must not involve an activity restricted by Rule 17-15.</li> <li>(c) Any discharge^ of removed material or plants onto or into land^ (being land^ that is not within an artificial watercourse*) must comply with the conditions^ of Rule 14-27, except for conditions 14-27(a) and 14-27(c)(ii).</li> <li>(d) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*.</li> <li>(e) All reasonable steps shall be taken to return any stranded fish back into the artificial watercourse*.</li> </ul>	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	artificial watercourse* pursuant to s14(2) RMA. That activity is addressed by the rules^ in Section 17.6.			
17-21  Bed^ disturbance of non-natural lakes^ to maintain their function	Except as permitted by other <i>rules</i> ^ in this chapter, the disturbance or removal of <i>bed</i> ^ material or plants for the purpose of maintaining the functional integrity of a non-natural <i>lake</i> ^, pursuant to ss13(1) or 13(2) RMA and any ancillary:  (a) excavation, drilling, tunnelling or other disturbance of the <i>bed</i> ^ pursuant to s13(1) RMA  (b) damming or diversion of <i>water</i> ^ pursuant to s14(2) RMA  (c) <i>discharge</i> ^ of <i>water</i> ^ or sediment into <i>water</i> ^ or onto or into <i>land</i> ^ pursuant to ss15(1) or 15(2A) RMA  (d) deposition of removed <i>bed</i> ^ material or plants in or on the <i>bed</i> ^ pursuant to s13(1) RMA  (e) <i>discharge</i> ^ of removed <i>bed</i> ^ material or plants onto or into <i>land</i> ^ or into <i>water</i> ^ pursuant to ss15(1) or 15(2A) RMA.	Controlled	<ul> <li>(a) The activity must comply with the general conditions (a) to (k) and (u), (v) and (q) in Section 17.3.</li> <li>(b) Any discharge^ of removed bed^ material or plants onto or into land^ must comply with the conditions^ of Rule 14-27 except condition 14-27(c)(ii).</li> <li>(c) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*.</li> </ul>	Control is reserved over:  (a) effects^ on water^ quality  (b) effects^ on inflow rates of sediment  (c) effects^ on aquatic habitats  (d) the nature, scale, timing and duration of the activity undertaken  (e) duration of consent  (f) review of consent conditions^  (g) compliance monitoring  (h) the matters in Policy 14-9.

The discharge of contaminants into water or into or onto land, other than contaminants specifically identified in the rules, is regulated by the rules in Chapter 14. Activities within *rare habitats\**, *threatened habitats\** or *at-risk habitats\** are regulated by Rules 13-8 and 13-9.



17.11 Rules - Activities that do not Comply with Permitted Activity, Controlled Activity or Restricted Discretionary Activity Rules and all other s13(1) RMA Activities Not Covered by this Chapter

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
17-22 Activities that do not comply with permitted activity^ rule^ general conditions^	Any activity that does not comply with Rule 17-5 condition (a), Rule 17-6 condition (a), Rule 17-7 condition (g), Rule 17-9 condition (c), Rule 17-10 condition (j), Rule 17-11 condition (e), Rule 17-12 condition (d), Rule 17-16 condition (d), Rule 17-18 condition (b), Rule 17-19 condition (d), including any ancillary:  (a) excavation, drilling tunnelling or other disturbance of the bed^ pursuant to s13(1) RMA  (b) damming or diversion of water^ pursuant to s14(2) RMA  (c) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to s15(1) or 15(2A) RMA  (d) deposition of substances in or on the bed^ of the river^ or lake^ pursuant to s13(1).	Restricted Discretionary	The activity must comply with all other conditions, standards and terms of the applicable permitted activity^rule^.	Discretion is restricted to:  (a) measures to avoid, remedy or mitigate the effects^ of the activity in relation to any non-compliance with the matters listed in Section 17.3  (b) duration of consent  (c) review of consent conditions^  (d) compliance monitoring  (e) the matters in Policy 14-9.
Activities that do not comply with permitted activity^, controlled activity^ or restricted discretionary activity^ rules^ and all other s13(1) RMA activities not covered by this chapter	Any activity that does not comply with one or more conditions^, standards or terms of a permitted activity^, controlled activity^ or restricted discretionary activity^ rule^ in this chapter, but which is not expressly classified as a discretionary activity^, non-complying activity^ or prohibited activity^ or is a s13(1) RMA activity not covered by this chapter, including any ancillary:  (a) excavation, drilling, tunnelling or other disturbance of the bed^ pursuant to s13(1) RMA	Discretionary		



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	(b) damming or diversion of <i>water</i> <sup>A</sup> pursuant to s14(2) RMA			
	(c) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA			
	(d) deposition of substances in or on the bed^ of the river^ or lake^ pursuant to s13(1).			

The discharge of contaminants into water or into or onto land, other than contaminants specifically identified in the rules, is regulated by the rules in Chapter 14.







# CHAPTER 18: Activities in the Coastal Marine Area

## 18 Activities in the Coastal Marine Area

**Important note:** For the purposes of the RMA, the Regional Coastal Plan comprises Chapter 18 and Schedule I as well as Chapters 11, 12 and 19 and the relevant definitions in the Glossary. The *coastal marine area*<sup>^</sup> (CMA) is as defined in the RMA.

#### In this chapter:

- (a) MHWS means mean high water springs.
- (b) NZCPS means any New Zealand Coastal Policy Statement.
- (c) NZCPS 1994 means the document "New Zealand Coastal Policy Statement 1994".

## Objective 18-1: Activities in the CMA

The regulation of activities in the CMA in a manner that enables or restricts activities within the Port, Protection, or General Activity Management Areas or Aquaculture Management Areas, in a way that reflects the Table I.1 characteristics of the Areas.

## Objective 18-2: Water^ quality in the CMA

Water<sup>^</sup> quality in the CMA is managed in a manner that sustains its life-supporting capacity and has regard to the Values, management objectives and the water<sup>^</sup> quality targets set out in Schedule I: Part C.

## Policy 18-1: Regional rules<sup>^</sup> for the CMA

The Regional Council must regulate activities in the CMA through *regional rules*<sup>^</sup> in accordance with Objectives 12-1, 12-2, 18-1 and 18-2 and Policies 12-1 to 12-8.

### 18.1 General Conditions for Permitted Activities and Controlled Activities in the CMA

The table below sets out general conditions referred to in a number of the permitted activities and controlled activities in the CMA. These general conditions are referred to in a number of the permitted activity and controlled activity rules in this chapter.



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**Table 18.1:** General conditions^ for permitted activities^ and controlled activities^ in the CMA

Value	dition	
Life-supporting Capacity	The activity must not reduce the ability of the <i>river</i> ^ or estuarine area to convey flood flows or floating debris.	
(applies to the entire CMA)	There must be no <i>discharge</i> ^ of <i>contaminants</i> ^, other than sediment and other <i>contaminants</i> ^ inherent to the <i>water</i> ^ or <i>bed</i> ^, into the CMA except where the <i>discharge</i> ^ is explicitly allowed by the activity description of a <i>rule</i> ^ in this chapter.	
	Any discharge <sup>^</sup> of sediment into water <sup>^</sup> directly caused by the activity must not be undertaken for more than 5 consecutive days and for more than 12 hours on an one of those 5 days. There must be no more than one activity in any 12 month period.	y
	Any discharge <sup>^</sup> of sediment into water <sup>^</sup> under (c) must not, after reasonable mixing, cause any conspicuous change in the colour of water <sup>^</sup> in the receiving water <sup>^</sup> or any change in horizontal visibility of greater than the target set in the visual clarity % change column of Tables I.5 and I.7, more than 24 hours after completion of the activity.	
	Any materials used must be necessary for the activity and must not be toxic to marine ecosystems.	
	Any materials no longer required as part of the activity, including any temporary structures, must not be stored in or on any <i>foreshore</i> ^ area and must be removed from the CMA upon completion of the activity.	
	Refueling of machinery (other than boats) must not take place in any area where spills may enter the CMA.	
	Upon completion of any channel bank works, the banks must be reinstated to a natural contour and revegetated.	
Historic Heritage <sup>^</sup>	The activity must not disturb any historic heritage^ identified in the Regional Coastal Plan.	
(additional value to those in Schedule I - applies to the entire CMA)	In the event of an archaeological artefact or $k\bar{o}iwi^*$ being discovered or disturbed while undertaking the activity, the activity must cease and the Regional Council must be notified as soon as practicable to enable the Council to provide advice regarding the appropriate authorities to be contacted. The activity must not be recommenced without the approval of the Regional Council.	
Whitebait* Migration (applies as shown in Schedule I)	The use of mobile machinery in or on the <i>foreshore</i> ^ in a manner that disturbs the <i>foreshore</i> ^ or a <i>whitebait</i> * fishery must not take place in estuarine areas 15 August to 30 November (inclusive), unless the use of the machinery is solely for the <i>maintenance</i> * of <i>infrastructure</i> ^ and other physical resources of regional or national importance as outlined in Policy 3-1.	
Inanga Spawning (applies as shown in Schedule I)	The use of mobile machinery in or on the <i>foreshore</i> ^ in a manner that disturbs the <i>foreshore</i> ^ or inanga spawning grounds must not take place in estuarine areas. February to 1 May (inclusive), unless the use of the machinery is solely for the <i>maintenance</i> * of <i>infrastructure</i> ^ and other physical resources of regional or national importance as outlined in Policy 3-1.	
Amenity	Existing public access to or along the <i>foreshore</i> ^ must not be rendered unsafe by the activity.	
(applies to the entire CMA)	Existing public access to or along the <i>foreshore</i> ^ may be rendered unavailable where this is necessary for public safety or for the purpose of undertaking the activity provided the public access is re-opened as soon as practicable.	ty,



One Plan - 2014 18-2

## 18.2 Occupation

#### 18.2.1 Policies

## Policy 18-2: Occupation of space by aquaculture

The allocation of *space*<sup>^</sup> for aquaculture must be established through a plan *change*<sup>^</sup>, and regard must be had to the following matters when evaluating a proposed *change*<sup>^</sup>:

- giving effect to the Regional Policy Statement, particularly all the objectives and policies of Chapters 2 and 8, Objective 3-1 and Policies 3-1, 3-2, 3-3, 3-6 and 3-7, Objective 6-2 and Policy 6-6 and any relevant policies in the NZCPS;
- (b) the impact of the proposed activity on neighbouring uses, the Protection Activity Management Areas set out in Schedule I and the ecological carrying capacity of the area;
- (c) the type and location of any *land*^ use facilities that would be required;
- (d) the effects^ on navigation safety, public access, natural character and marine ecosystems; and
- (e) available alternatives to the applicant's proposal and the applicant's reason for making the proposed choice.

## Policy 18-3: Consent decision-making for *occupation*<sup>^</sup> of *space*<sup>^</sup> by activities other than aquaculture

When making decisions on *resource consent*<sup>^</sup> applications and setting consent *conditions*<sup>^</sup> for the allocation of *space*<sup>^</sup> for activities (excluding aquaculture), the Regional Council must have regard to:

- the Regional Policy Statement, particularly all the objectives and policies of Chapters 2 and 8, Objectives 3-1 and 3-2 and Policies 3-1, 3-2, 3-3, 3-6 and 3-7, Objective 6-2 and Policy 6-6 and any relevant policies in the NZCPS;
- (b) enabling *occupation* where it is a functional necessity of an activity covered by another *rule* in this chapter;
- requiring efficient use of *space*^ in the CMA by using the smallest amount of *space*^ reasonably practicable for the activity and limiting the adverse *effects*^ on public access to the *space*^;
- (d) the effects^ on navigation safety, natural character and marine ecosystems;
- (e) requiring a plan *change*^ pursuant to s165D of the RMA where there is demand for use of the same *space*^ or different *spaces*^ in close proximity by more than one party and a first-in-first-served consent process will not adequately manage the cumulative *effects*^ of the proposed activities; and
- (f) available alternatives to the applicant's proposal and the applicant's reason for making the proposed choice.



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## Policy 18-4: Decision-making for occupation<sup>^</sup> charges

In accordance with s64A RMA the Regional Council, after having regard to:

- (a) the extent to which public benefits from the CMA are lost or gained; and
- (b) the extent to which private benefit is obtained from the occupation^ of the CMA,

has decided that a coastal occupation charging regime should not be applied to persons who occupy any part of the CMA.

## 18.2.2 Rules

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
18-1 Occupation^ by existing structures^	The occupation <sup>^</sup> of space <sup>^</sup> in the CMA pursuant to s12(2) RMA by any existing structure <sup>^</sup> and any ancillary damming or diversion of water <sup>^</sup> in the CMA pursuant to s14(1) or s14(2) RMA.	Permitted		
18-2 Temporary occupation^	The temporary and exclusive occupation^ of space^ in the CMA pursuant to s12(2) RMA for the purposes of a special event, and any ancillary surface water^ activity.  For the purposes of this rule^:  (a) "temporary" means not more than 3 days.  (b) a "special event" means an event organised by a person or group of people where, for commercial, safety, cultural or conservation purposes, controls need to be placed on public access.	Permitted	<ul> <li>(a) Where public access is restricted, a public notice^ must be lodged in a local newspaper at least 7 days before the event and signage must be erected on-site, both of which advertise the reasons for, extent and timing of the restrictions.</li> <li>(b) The temporary and exclusive occupation^ must not disturb any nesting, roosting or breeding birds within any Protection Activity Management Area identified in Schedule I.</li> </ul>	
18-3 Occupation^ of space^ by aquaculture	The occupation^ of space^ in the CMA pursuant to s12(2) RMA by any aquaculture activity^ which is not otherwise restricted by Rule 18-4.	Controlled	(a) The aquaculture activity^ must occur within an operative Aquaculture Management Area established in accordance with Policy 18-2.	Control is reserved over:  (a) effects^ on navigation safety.  (b) effects^ on public access.  (c) effects^ on natural character.  (d) effects^ on historic heritage^.  (e) efficient use of the CMA.  (f) duration of consent.



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
				<ul><li>(g) review of consent conditions^.</li><li>(h) compliance monitoring.</li></ul>
18-4 Exclusive occupation^	<ul> <li>Any activity involving occupation^ of space^ in the CMA pursuant to s12(2) RMA which:</li> <li>(a) would exclude or effectively exclude public access from an area over 10 ha (except where such exclusion is required in commercial port areas for reasons of public safety or security).</li> <li>(b) would effectively exclude the public from more than 316 m along the length of the foreshore^.</li> <li>(c) would involve occupation^ or use of an area greater than 50 ha of the CMA and such occupation^ or use would restrict public access to or through such an area.</li> </ul>	Discretionary		
18-5 Occupation <sup>^</sup> of space <sup>^</sup> in Protection Activity Management Areas	The occupation <sup>^</sup> of space <sup>^</sup> pursuant to s12(2) RMA in any Protection Activity Management Area as shown in Schedule I other than as provided for by Rules 18-1, 18-2, 18-4, 18-8, 18-11, 18-24, 18-26, 18-27 and 18-31.	Non- complying		

#### Rule Guide:

- Any occupation of the CMA that is not specifically regulated by any of the rules in this chapter or that does not comply with one or more conditions, standards or terms of a permitted or controlled activity rule, but which is not expressly classified as a discretionary, non-complying or prohibited activity is a **discretionary activity** under Rule 18-44.
- (b) Any occupation relating to or impacting on safe navigation must also have approval from Maritime New Zealand.
- (c) For any Aquaculture Management Areas reference should be made to the Guidelines for Aquaculture Management Areas and Marine Farms, Maritime New Zealand, 2005.
- (d) Any activity covered by Rule 18-2 must also comply with relevant navigation safety requirements set out in The Manawatu River and Tributaries Navigation and Safety Bylaws 2010 or Part 91 of the Maritime Rules under the Maritime Transport Act 1994.



#### 18.3 Structures

#### 18.3.1 Policies

## Policy 18-5: Consent decision-making for new structures^

When making decisions on *resource consent*<sup>^</sup> applications and setting consent *conditions*<sup>^</sup> for *structures*<sup>^</sup> in the CMA, the Regional Council must have regard to:

- the Regional Policy Statement, particularly all the objectives and policies of Chapters 2 and 8, Objective 3-1 and Policies 3-1, 3-2, 3-3, 3-6 and 3-7, Objective 6-2 and Policy 6-6, Objective 9-1 and Policies 9-3 to 9-5 and any relevant policies in the NZCPS;
- (b) the functional necessity for locating the *structure*^ in the CMA;
- (c) the provisions for public access and safety, including navigation safety;
- the avoidance, where practicable, of any adverse *effects*^ on natural character and landscape, *tikanga Māori*^, *historic heritage*^, indigenous flora and fauna, and the stability of *river*^ banks and the *foreshore*^. Where avoidance is not reasonably practicable, the adverse *effects*^ must be remedied or mitigated;
- (e) whether the *structure*^ is of a suitable scale for the surrounding area, and uses the *space*^ in the CMA efficiently;
- (f) whether the *structure*^ is to be built and maintained in a manner to withstand coastal processes and *natural hazards*^, including any potential *effects*^ of *climate change*^ and *sea level rise*\*;
- (g) any consequential adverse *effects*<sup>^</sup> on other parts of the coast including whether the *structure*<sup>^</sup> may affect sediment transport or exacerbate erosion or the risk of inundation; and
- (h) whether the *structure*^ contributes to any cumulative adverse *effects*^ in the vicinity of the proposed *structure*^.

## Policy 18-6: Consent decision-making for new structures<sup>^</sup> in the Protection Activity Management Areas

In addition to the provisions in Policy 18-5, when making decisions on *resource consent*^ applications and setting consent *conditions*^ for new *structures*^ in the Protection Activity Management Areas set out in Schedule I, the Regional Council must recognise and provide for:

(a) navigation safety, amenity, marine and estuarine ecosystems, and preservation of natural character.

And have particular regard to:

(b) available alternatives to the applicant's proposal and the applicant's reason for making the proposed choice.



## Policy 18-7: Consent decision-making for existing structures^

When making decisions on *resource consent*<sup>^</sup> applications and setting consent *conditions*<sup>^</sup> for activities involving existing *structures*<sup>^</sup> in the CMA, the Regional Council must have regard to:

- the Regional Policy Statement, particularly all the objectives and policies of Chapters 2 and 8, Objective 3-1 and Policies 3-1, 3-2, 3-3, 3-6 and 3-7, Objectives 6-2 and 6-3, and Policies 6-6 and 6-11, Objective 9-1 and Policies 9-3 to 9-5 and any relevant policies in the NZCPS;
- (b) the extent to which existing structures^ have adverse effects^ on natural character, amenity values^ and public access;
- ensuring that any alteration is of a similar scale and character to the existing *structure*^, avoids as far as reasonably practicable any adverse *effects*^ on ecological values or physical processes, and provides for public access and safety;
- (d) the matters set out in Policy 18-5 where there is a proposed extension to an existing structure^; and
- (e) the need to remove derelict or redundant *structures*^, and any excess material from *structures*^ being replaced or maintained, unless such removal is likely to result in more significant adverse *effects*^ than leaving the *structure*^ or material in place.

#### 18.3.2 Rules

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
18-6 Maintenance* of structures^	<ul> <li>(a) Structures^: The maintenance* (excluding removal or demolition) of any lawfully established structure^ located in, on, under or over the foreshore^ or seabed pursuant to s12(1) RMA and any ancillary: (i) disturbance of the foreshore^ or seabed pursuant to s12(1) RMA.</li> <li>(ii) deposition of natural marine substances on the foreshore^ or seabed pursuant to s12(1) RMA.</li> <li>(iii) discharge^ of water^ or contaminants^ into the CMA pursuant to s15(1) RMA.</li> <li>(iv) damming or diversion of water^ in the CMA pursuant to s14(1) or s14(2) RMA.</li> </ul>	Permitted	<ul> <li>(a) The activity must not increase the area of the foreshore<sup>^</sup> or seabed, or the volume of the water<sup>^</sup> column, occupied by the existing structure<sup>^</sup>.</li> <li>(b) The activity must comply with the conditions<sup>^</sup> listed in Table 18.1 for the relevant Value, other than condition 18-1(h).</li> </ul>	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	(b) Associated removal of foreshore^ or seabed material and plants: The removal of foreshore^ or seabed material or plants for the purpose of maintaining the functional integrity of a structure^ located in, on, under or over the foreshore^ or seabed (pursuant to s12(1) or s12(2) RMA), including flushing accumulated sediment, and any ancillary:			
	(i) damming or diversion of water^ in the CMA pursuant to s14(1) or s14(2) RMA.			
	(ii) discharge^ of water^ or sediment into the CMA pursuant to s15(1) RMA.			
	(iii) deposition of removed material or plants in or on the <i>bed</i> ^ pursuant to s12(1) RMA.			
	(iv) discharge^ of removed foreshore^ or seabed material or plants onto or into land^ in the CMA pursuant to s15(1) RMA.			



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
18-7 Removal or demolition of structures^	The removal or demolition of a structure^ or any part of a structure^ located in, on, under or over the foreshore^ or seabed pursuant to s12(1) RMA and any ancillary:  (a) disturbance of the foreshore^ or seabed pursuant to s12(1) RMA.  (b) deposition of natural marine substances on the foreshore^ or seabed pursuant to s12(1) RMA.  (c) discharge^ of water^ or contaminants^ into the CMA pursuant to s15(1) RMA.  (d) damming or diversion of water^ in the CMA pursuant to s14(1) or s14(2) RMA.	Permitted	<ul> <li>(a) The activity must comply with the <i>conditions</i>^ listed in Table 18.1 for the relevant Value.</li> <li>(b) The Regional Council must be informed in writing of the removal or demolition of any of the following <i>structures</i>^, at least 10 working days prior to the commencement of the removal or demolition: <ul> <li>(i) access <i>structures</i>^ in or on the <i>foreshore</i>^ or seabed, including bridges, culverts and fords;</li> <li>(ii) <i>structures</i>^ occupying more than 5 m² of the <i>foreshore</i>^ or seabed.</li> </ul> </li> </ul>	
18-8 Navigation aids, lines, cables, pipelines and ropeways, whitebait* stands and maimai	The erection, reconstruction, placement, alteration or extension of any navigation aid, line, cable, pipeline, ropeway (but excluding any such structure^ used for aquaculture purposes), whitebait* stand, or maimai pursuant to s12(1) RMA and any ancillary:  (a) occupation^ of the foreshore^ or seabed, pursuant to s12(2) RMA.  (b) disturbance of the foreshore^ or seabed pursuant to s12(1) RMA.  (c) deposition of natural marine substances on the foreshore^ or seabed pursuant to s12(1) RMA.  (d) discharge^ of water^ or contaminants^ into the CMA pursuant to s15(1) RMA.  (e) damming or diversion of water^ in the CMA pursuant to s14(1) or s14(2) RMA.	Permitted	<ul> <li>(a) Any whitebait* stand or maimai must not be located within the Port Activity Management Area.</li> <li>(b) Any navigation aid must meet the requirements set out by Maritime NZ in New Zealand's System of Buoys and Beacons (2005).</li> <li>(c) The floor area of any whitebait* or maimai structure^ must not exceed 5 m².</li> <li>(d) The activity must comply with conditions (a), (e), (g), (i), (j), (l) and (m) listed in Table 18.1 for the relevant Value.</li> </ul>	
18-9 Structures^ in the Port Activity	The erection, reconstruction, placement, or alteration of any boat ramp, jetty, pontoon, or boat mooring <i>structure</i> ^ located within the Port	Controlled	(a) The erection, reconstruction, placement or alteration must have the prior written approval of the relevant manager of the port company operating within the	Control is reserved over:  (a) efficient use of space^ in the CMA.



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
Management Area	Activity Management Area as shown in Schedule I pursuant to s12(1) RMA and any ancillary:  (a) occupation^ of the foreshore^ or seabed, pursuant to s12(2) RMA.  (b) disturbance of the foreshore^ or seabed pursuant to s12(1) RMA.  (c) deposition of natural marine substances on the foreshore^ or seabed pursuant to s12(1) RMA.  (d) discharge^ of water^ or contaminants^ into the CMA pursuant to s15(1) RMA.  (e) damming or diversion of water^ in the CMA pursuant to s14(1) or s14(2) RMA.		Port Activity Management Area or the manager of the marina operating in the Port Activity Management Area.  (b) Any activity related to the marina must not extend beyond the existing area occupied as at 31 May 2007.  (c) The activity must comply with the <i>conditions</i> ^ listed in Table 18.1 for the relevant Value.	<ul> <li>(b) effects^ on water^ quality.</li> <li>(c) extent of disturbance to the foreshore^ or seabed.</li> <li>(d) the material to be used for the structure^.</li> <li>(e) duration of consent.</li> <li>(f) review of consent conditions^.</li> <li>(g) compliance monitoring.</li> </ul>
18-10 Wharf extension in the Port Activity Management Area	The erection, reconstruction, placement, alteration, or extension of any wharf structure^pursuant to s12(1) RMA located within the Port Activity Management Area as shown in Schedule I, and any ancillary:  (a) occupation^ of the foreshore^ or seabed pursuant to s12(2) RMA.  (b) disturbance of the foreshore^ or seabed pursuant to s12(1) RMA.  (c) deposition of natural marine substances on the foreshore^ or seabed pursuant to s12(1) RMA.  (d) discharge^ of water^ or contaminants^ into the CMA pursuant to s15(1) RMA.  (e) damming or diversion of water^ in the CMA pursuant to s14(1) or 14(2) RMA.	Permitted	<ul> <li>(a) The activity must comply with the <i>conditions</i>^ listed in Table 18.1 for the relevant Value other than conditions 18.1(h) and (k).</li> <li>(b) Any extension in length to the wharf must not be greater than 10% of the existing length of 570 m.</li> <li>(c) There must be no extension in width to the existing wharf.</li> <li>(d) The width of any extension referred to in (b) must be the same or a lesser width as the existing wharf.</li> <li>(e) The design and materials used must be similar in nature and scale of <i>effects</i>^ to those used for the existing wharf <i>structure</i>^.</li> <li>(f) The <i>structure</i>^ must be designed to withstand the <i>effects</i>^ of <i>climate change</i>^ and <i>sea level rise</i>*.</li> <li>(g) The Regional Council must be notified at least 10 <i>working days</i>^ prior to commencement of any work.</li> </ul>	
18-11 Structures^ for	Except as otherwise regulated by Rule 18-13, the erection, reconstruction, placement, alteration or extension of any public walkway or	Restricted Discretionary		Discretion is restricted to: (a) public access and safety.



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
public access	foot accessway structure^ pursuant to s12(1) RMA, and any ancillary:  (a) occupation^ of space^ in the CMA pursuant to s12(2) RMA.  (b) disturbance of the foreshore^ or seabed pursuant to s12(1) RMA.  (c) deposition of natural marine substances on the foreshore^ or seabed pursuant to s12(1) RMA.  (d) discharge^ of water^ or contaminants^ into the CMA pursuant to s15(1) RMA.  (e) damming or diversion of water^ in the CMA pursuant to s14(1) or s14(2) RMA.			<ul> <li>(b) effects on aesthetic values, amenity values^, natural character, indigenous flora and fauna and historic heritage^.</li> <li>(c) the method of undertaking the activity.</li> <li>(d) the timing and staging of the activity.</li> <li>(e) duration of consent.</li> <li>(f) review of consent conditions^.</li> <li>(g) compliance monitoring.</li> </ul>
18-12 Aquaculture structures^	The erection, reconstruction, placement, alteration or extension of any structure^ for the purpose of aquaculture pursuant to s12(1) RMA and any ancillary:  (a) occupation^ of space^ in the CMA pursuant to s12(2) RMA.  (b) disturbance of the foreshore^ or seabed pursuant to s12(1) RMA.  (c) deposition of natural marine substances on the foreshore^ or seabed pursuant to s12(1) RMA.  (d) damming or diversion of water^ in the CMA pursuant to s14(1) or s14(2) RMA.  (e) discharge^ of water^ or contaminants^ into the CMA pursuant to s15(1) RMA.	Controlled	<ul> <li>(a) The activity must occur only within an operative Aquaculture Management Area established in accordance with Policy 18-2.</li> <li>(b) The activity must comply with the conditions^ listed in Table 18.1 for the relevant Value.</li> </ul>	Control is reserved over:  (a) the type, quantity and frequency of any discharges^.  (b) any effects^ on navigation safety.  (c) the method of undertaking the activity.  (d) the timing and staging of the activity.  (e) duration of consent.  (f) review of consent conditions^.  (g) compliance monitoring.
18-13 Large structures^ which impound the CMA, are parallel to shore, or are oblique	Except as prohibited by Rule 18-16, the erection of any <i>structure</i> ^ pursuant to s12(1) RMA which:  (a) will impound or effectively contain 4 ha or more of the CMA; or	Discretionary		



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
or perpendicular to shore	<ul> <li>(b) is solid (or presents a significant barrier to water^ or sediment movement), and when established on the foreshore^ or seabed would extend 300 m or more in length more or less parallel to the line of MHWS including separate structures^ which total 300 m or more contiguously; or</li> <li>(c) is solid (or presents a significant barrier to water^ or sediment movement), is sited obliquely or perpendicularly in horizontal projection to the line of MHWS in the CMA, and in horizontal projection is 100 m or more in length, including separate structures^ which total 100 m or more contiguously.</li> <li>For the avoidance of doubt this rule^ does not include submarine or sub-aqueous cables.</li> </ul>			
18-14 Petroleum and chemical storage	Except as prohibited by Rule 18-16, any activity involving the erection of a <i>structure</i> ^ pursuant to s12(1) RMA for the storage or containment of any petroleum, petroleum products, or <i>contaminants</i> ^, in quantities greater than 50,000 litres.	Discretionary		
18-15 Energy generation structures^ in a Protection Activity Management Area	Any activity within a Protection Activity Management Area shown in Schedule I, which involves the erection of any energy generation structures^ pursuant to s12(1) RMA.	Non- complying		
18-16 Structures^ in a Protection Activity Management Area	Any activity within a Protection Activity Management Area shown in Schedule I, which involves the erection of any of the following structures^ pursuant to s12(1) RMA:  (a) a structure^ for the storage or containment of petroleum products or contaminants^.	Prohibited		



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion
				Non-Notification
	(b) a structure^ which will impound or effectively contain 4 ha or more of the CMA.			
	(c) a wharf, marina, boat shed, aquaculture structure^.			

#### Rule Guide:

- (a) **Use and maintenance of structures:** the above rules permit the on-going use and maintenance of structures once they are established (subject to any stated conditions). For structures requiring a consent, this means that consents can be granted for a short duration. The rules are intended to avoid the need for resource users to hold long-term consents enabling the use or upkeep of structures once they are established.
- (b) Structures under s12 RMA that are not specifically covered by a rule in this chapter are a **discretionary activity** under Rule 18-44.
- (c) Structures under s12 RMA that do not comply with the permitted or controlled rules and are not otherwise discretionary or prohibited are a **discretionary activity** under Rule 18-44.
- (d) Structures may also require a building consent under the Building Act 2004.
- (e) Any structure relating to or impacting on safe navigation must also have approval from Maritime New Zealand.
- (f) For any aquaculture structure, reference should be made to the Guidelines for Aquaculture Management Areas and Marine Farms, Maritime New Zealand, 2005.



## 18.4 Reclamations and Drainage

#### 18.4.1 Policies

## Policy 18-8: Consent decision-making for reclamation and drainage

When making decisions on *resource consent*^ applications and setting consent *conditions*^ for activities involving reclamation or drainage of the *foreshore*^ or seabed, the Regional Council must have regard to:

- the Regional Policy Statement, particularly all the objectives and policies of Chapters 2 and 8, Objective 3-1 and Policies 3-1, 3-2, 3-3, 3-6 and 3-7, Objectives 6-2 and 6-3, Policies 6-6 and 6-11, Objective 9-1 and Policies 9-3 to 9-5 and any relevant policies in the NZCPS;
- (b) the functional necessity for locating the activity in the CMA;
- (c) the efficient use of any area to be reclaimed or drained by minimising the area used to the extent reasonable:
- (d) avoiding any restrictions on public access, other than for commercial, safety, cultural or conservation purposes, or to ensure a level of security appropriate for activities authorised by a *resource consent*^;
- (e) ensuring that material used in any reclamation is uncontaminated by:
  - (i) substances which when subjected to biological, chemical or physical breakdown would degrade water^ quality; or
  - (ii) pest plant material which could propagate or proliferate within or beyond the *site*\*.
- (f) ensuring that any reclamation or drainage is not sited where there are existing significant areas of indigenous flora or fauna feeding, breeding, spawning, nesting or roosting areas;
- (g) avoiding any adverse effects<sup>^</sup> on tikanga Māori<sup>^</sup> or historic heritage<sup>^</sup>, and avoiding, remedying or mitigating any adverse effects<sup>^</sup> on natural character and any characteristic identified within any Protection Activity Management Area set out in Table I.1;
- (h) requiring proof that a reclamation has been designed and approved by a registered engineer with experience in coastal processes and construction, and has taken into account the *effects*^ of future sea level rise\* and potential storm surges;
- (i) ensuring that any drainage of the *foreshore*^ will not result in instability of the beach, estuarine substrate or *river*^ bank areas, or adversely impact on *water*^ quality at the *discharge*^ *sites*\*; and
- (j) available alternatives to the applicant's proposal and the applicant's reason for making the proposed choice.



## 18.4.2 Rules

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
18-17 Drainage	Any drainage of the <i>foreshore</i> ^ or seabed pursuant to s12(1) RMA.	Discretionary		
18-18 Small reclamations except in Protection Activity Management Areas	The reclamation of any area of the <i>foreshore</i> ^ or seabed pursuant to s12(1) RMA, except as otherwise covered by Rule 18-19 and excluding those areas identified as Protection Activity Management Areas set out in Schedule I.	Discretionary	<ul> <li>(a) Either: <ul> <li>(i) the reclamation must be less than 1 ha; or</li> <li>(ii) the reclamation must extend less than 100 m in all directions.</li> </ul> </li> <li>(b) In the case of an incremental reclamation connected to or part of another reclamation which was commenced or which received a resource consent^ after 5 May 1994, the sum of the existing and proposed reclamations must not exceed the dimensions specified in condition (a).</li> </ul>	
18-19 Small reclamation within the Port Activity Management Area	The reclamation of any area of the <i>foreshore</i> ^ or seabed pursuant to s12(1) RMA, in the Port Activity Management Area as shown on Figure I.10, and any ancillary:  (a) occupation^ of space^ in the CMA pursuant to s12(2) RMA.  (b) structure^ pursuant to s12(1).  (c) disturbance of the <i>foreshore</i> ^ or seabed pursuant to s12(1) RMA.  (d) discharge^ of water^ or contaminants^ into the CMA pursuant to s15(1) RMA.	Restricted Discretionary	<ul> <li>(a) Either: <ul> <li>(i) the reclamation must be less than 1 ha; or</li> <li>(ii) the reclamation must extend less than 100 m in all directions.</li> </ul> </li> <li>(b) In the case of an incremental reclamation connected to or part of another reclamation which was commenced or which received a resource consent^after 5 May 1994, the sum of the existing and proposed reclamations must not exceed the size dimensions specified in condition (a).</li> </ul>	Discretion is restricted to:  (a) the functional necessity for the reclamation.  (b) the material used as fill for the reclamation.  (c) the visual amenity of the activity.  (d) any hydrodynamic impacts on the neighbouring shoreline, including existing significant areas of indigenous flora or fauna breeding or nesting areas.  (e) effects^ on historic heritage^.  (f) the timing of the activity.  (g) the design parameters of the activity to address the effects^ of sea level rise* and storm surge.  (h) review of consent conditions^.



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
18-20 Large reclamations except in Protection Activity Management Areas	The reclamation of any area of the <i>foreshore</i> ^ or seabed pursuant to s12(1) RMA, excluding those areas identified as Protection Activity Management Areas in Schedule I, which does not comply with Rule 18-18.	Discretionary		
18-21 Small reclamations in Protection Activity Management Areas	The reclamation of any area of the <i>foreshore</i> ^ or seabed pursuant to s12(1) RMA within any Protection Activity Management Area shown in Schedule I.	Non- complying	<ul> <li>(a) Either: <ul> <li>(i) the reclamation must be less than 1 ha; or</li> <li>(ii) the reclamation must extend less than 100 m in all directions.</li> </ul> </li> <li>(b) In the case of an incremental reclamation connected to or part of another reclamation which was commenced or which received a resource consent<sup>A</sup> after 5 May 1994, the sum of the existing and proposed reclamations must not exceed the dimensions specified in condition (a).</li> </ul>	
18-22 Large reclamations in Protection Activity Management Areas	The reclamation of any area of the <i>foreshore</i> ^ or seabed pursuant to s12(1) RMA, within any Protection Activity Management Area shown in Schedule I, which does not comply with Rule 18-21.	Non- complying		

## Rule Guide:

(a) Any reclamation relating to or impacting on safe navigation must also have approval from Maritime New Zealand.



## 18.5 Disturbances, Removal and Deposition

#### 18.5.1 Policies

## Policy 18-9: Consent decision-making for activities involving disturbance, removal or deposition

When making decisions on *resource consent*^ applications and setting consent *conditions*^ for activities involving the disturbance of the *foreshore*^ or seabed, the deposition of substances in, on or under the *foreshore*^ or seabed, or the removal of any sand, shell, shingle or other natural materials from the CMA, the Regional Council must have regard to:

- the Regional Policy Statement, particularly all the objectives and policies of Chapters 2 and 8, Objective 3-1 and Policies 3-1, 3-2, 3-3, 3-6 and 3-7, Objectives 6-2 and 6-3, and Policies 6-6 and 6-11, Objective 9-1 and Policies 9-3 to 9-5 and any relevant policies in the NZCPS:
- (b) the applicable Water Management Zone\* or Sub-zone\* and the relevant water^ quality Values and targets in Schedule I;
- (c) avoiding any restrictions on public access, other than for commercial, safety, cultural or conservation purposes, or to ensure a level of security appropriate for activities authorised by a *resource consent*^, and any adverse *effects*^ on natural character and any known and publicly used shellfish beds;
- (d) any *effects*<sup>^</sup> on any feeding, breeding, spawning, nesting or roosting areas;
- (e) avoiding as far as reasonably practicable, any resultant adverse *effects*^ on coastal erosion, the risk of inundation, the stability of banks or *foreshore*^, or flood control *structures*^;
- (f) avoiding any adverse *effects*<sup>^</sup> on *tikanga Māori*<sup>^</sup> or on *historic heritage*<sup>^</sup>, and avoiding, remedying or mitigating any adverse *effects*<sup>^</sup> on any characteristic identified within any Protection Activity Management Area set out in Table I.1;
- (g) mitigating any adverse effects\(^\) on recreational and amenity values\(^\);
- (h) ensuring, where non-marine material is being deposited within the CMA, that it is does not contain any *hazardous substances\** or commercial or household *wastes\**; and
- (i) where the removal of sand, shingle, shell or other natural materials is for commercial purposes, the available alternatives to the applicant's proposal and the applicant's reason for making the proposed choice.



## 18.5.2 Rules

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
18-23 Removal of minor quantities of material	<ul> <li>The removal of sand, shingle, shell, driftwood or dead seaweed pursuant to s12(2) RMA and any ancillary:</li> <li>(a) disturbance of the <i>foreshore</i>^ or seabed pursuant to s12(1) RMA.</li> <li>(b) deposition of natural marine substances on the <i>foreshore</i>^ or seabed pursuant to s12(1) RMA.</li> <li>(c) discharge^ of water^ or contaminants^ into the CMA pursuant to s15(1) RMA.</li> <li>(d) damming or diversion of water^ in the CMA pursuant to s14(1) or s14(2) RMA.</li> </ul>	Permitted	<ul> <li>(a) The sand, shingle, shell, driftwood or dead seaweed must be for private use only and not for sale or exchange.</li> <li>(b) The sand, shingle, shell, driftwood or dead seaweed must only be removed by hand or by using a handheld non-mechanical device.</li> <li>(c) Any sand or shingle must not be removed from within 20 m of any seawall, groyne (or similar structure^) or the seaward toe of any sand dune.</li> <li>(d) The activity must comply with conditions (i) and (j) in Table 18.1.</li> </ul>	
18-24 Minor disturbances, removal and deposition	Except as otherwise regulated by the <i>rules</i> ^ in Section 18.3.2, any disturbance, removal or deposition of material on the <i>foreshore</i> ^ or seabed pursuant to s12(1) or s12(2) RMA ancillary to the following activities:  (a) installation of permanent anchors;  (b) burial of stock and marine fauna found dead in the CMA;  (c) clearing sediment from blocked <i>river</i> ^ mouths, outfall <i>structures</i> ^, intake <i>structures</i> ^ and culverts;  (d) public recreational activities;  (e) beach grooming; and any ancillary:  (i) <i>occupation</i> ^ of <i>space</i> ^ in the CMA pursuant to s12(2) RMA.  (ii) <i>discharge</i> ^ of <i>water</i> ^ or sediments into	Permitted	<ul> <li>(a) The clearing of sediment from blocked <i>river</i>^ mouths must only be undertaken by a local authority or its authorised contractors.</li> <li>(b) Any burial of dead stock and marine fauna found in the CMA must not disturb any plant communities in a Protection Activity Management Area and must comply with conditions (f), (g), (i), (j), and (l)-(n) listed in Table 18.1 for the relevant Value.</li> <li>(c) The installation of permanent anchors must comply with conditions (a)-(g) and (i)-(n) listed in Table 18.1 for the relevant Value.</li> <li>(d) Clearing sediment from outfall <i>structures</i>^, intake <i>structures</i>^ and culverts must comply with conditions (a)-(g) and (i)-(n) listed in Table 18.1 for the relevant Value.</li> <li>(e) Any public recreational activities or beach grooming must comply with conditions (e)-(g), (i) and (j) listed in Table 18.1 for the relevant Value.</li> </ul>	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	the CMA pursuant to s15(1) RMA.  (iii) damming or diversion of water^ in the CMA pursuant to s14(1) or s14(2) RMA.			
18-25 Minor disturbances from drilling	Any disturbance, removal or deposition of material on the <i>foreshore</i> ^ or seabed pursuant to s12(1) or s12(2) RMA associated with the exploration or drilling of the seabed occurring more than 1 km seaward from MHWS on the open coast and any ancillary:  (i) occupation^ of space^ in the CMA pursuant to s12(2) RMA  (ii) discharge^ of water^ into the CMA pursuant to s15(1) RMA  (iii) discharge^ of drilling muds, cuttings, and inert drilling fluids into the CMA pursuant to s15(1) RMA  (iv) discharge^ to air from combustion involving the flaring of hydrocarbons from petroleum exploration or wellhead production flows into the CMA pursuant to s15(1) RMA.	Permitted	<ul> <li>(a) The bore* or drilling must be for the purposes of investigating water^, oil*, gas or seabed resources.</li> <li>(b) The diameter of any bore* or drill hole must be 1.5 metres or less.</li> <li>(c) The bore* must be cased and sealed to prevent leakage from: <ul> <li>(i) groundwater to coastal water^; and</li> <li>(ii) coastal water^ to groundwater.</li> </ul> </li> <li>(d) Any drilling must not involve the use of explosives, except for down-hole activities.</li> <li>(e) Any flare point must occur more than 1 km seaward from MHWS on the open coast.</li> <li>(f) No non-petroleum wellstream product can be combusted.</li> </ul>	
18-26 Shellfish enhancement	Any disturbance of the <i>foreshore</i> ^ or seabed, pursuant to s12(1) RMA for the purposes of noncommercial shellfish enhancement, and any ancillary:  (a) occupation^ of space^ in the CMA pursuant to s12(2) RMA.	Permitted	<ul> <li>(a) The shellfish enhancement must occur only in the same location as existing shellfish beds.</li> <li>(b) Any shellfish spat used must be from the same species as naturally resides in the same area.</li> <li>(c) The activity must comply with conditions (b), (e)-(g) and (i)-(k) listed in Table 18.1 for the relevant Value.</li> </ul>	
18-27 Beach nourishment	Any disturbance, removal or deposition of natural marine substances on the <i>foreshore</i> ^ or seabed pursuant to s12(1) or s12(2) RMA for the purposes of beach nourishment, and any ancillary:  (a) occupation^ of space^ in the CMA pursuant to s12(2) RMA.	Controlled	<ul> <li>(a) Any material to be deposited must not contain any contaminants<sup>^</sup> that are not already present in natural materials at the site<sup>*</sup>.</li> <li>(b) Any material to be removed must not result in accelerated erosion<sup>*</sup> of the foreshore<sup>^</sup>.</li> <li>(c) The activity must comply with conditions (b), (e)-(g)</li> </ul>	Control is reserved over:  (a) the particle size and composition.  (b) the timing of the activity.  (c) duration, fees and charges, reviews and monitoring.



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	(b) discharge^ of water^ or contaminants^ into the CMA pursuant to s15(1) RMA.		and (i)-(k) listed in Table 18.1 for the relevant Value.	
Port Activity Management Area and Whanganui River maintenance dredging	Any disturbance or removal of the <i>foreshore</i> ^ or seabed, pursuant to s12(1) or s12(2) RMA and cl4 Resource Management (Marine Pollution) Regulations 1998, arising from maintenance dredging within the Port Activity Management Area or the Whanganui River maintenance dredging areas shown in Schedule I Figure I:10 as Dredging Area 1 and Dredging Area 2, and any ancillary deposition of dredged material in the CMA pursuant to s12(1) RMA and cl4 of those Regulations.	Discretionary	<ul> <li>(a) The dredging must be for the purpose of maintaining water<sup>A</sup> depths and access to and within the Port Activity Management Area.</li> <li>(b) In any 12-month period, the quantity of material dredged or deposited within the CMA must not exceed 240,000 m³.</li> <li>(c) The dredging must occur within the Dredging Areas identified in Schedule I Figure I: 10.</li> <li>(d) The disposal of any dredged material must occur within the Discharge Areas identified in Schedule I Figure I: 10.</li> <li>(e) The disposal of any dredged material must only occur on the outgoing tide.</li> <li>(f) The location of the dredged material must be monitored in accordance with conditions<sup>A</sup> set by the Regional Council.</li> <li>(g) Any application must include information specified in Part I of Schedule 3 of the Resource Management (Marine Pollution) Regulations 1998.</li> </ul>	
18-29 Port and General Activity Management Areas: Large-scale disturbances, removal and deposition	Any activity involving, in any 12-month period, the disturbance, removal or deposition of material within the CMA pursuant to s12(1) or s12(2) RMA and which is not otherwise regulated by Rule 18-28 where:  (a) the quantity of material involved is greater than 50,000 m³; or  (b) the area involved is equal to or greater than 4 ha; or  (c) the length of <i>foreshore</i> ^ or seabed involved is equal to or greater than 1,000 metres.	Discretionary		



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
18-30 Protection Activity Management Areas: Small-scale to medium-scale disturbances, removal and deposition	Any activity involving, in any 12-month period, the disturbance, removal or deposition of material pursuant to s12(1) or s12(2) RMA within a Protection Activity Management Area, which is not otherwise covered by the <i>rules</i> ^ in Section 18.3.2, Rules 18-23, 18-24, 18-26, 18-27 or 18-31.	Non- complying		
18-31 Protection Activity Management Areas: Large-scale disturbances, removal and deposition	Any activity involving, in any 12-month period, the disturbance, removal or deposition of material pursuant to s12(1) or s12(2) RMA within a Protection Activity Management Area where:  (a) the quantity of material involved is greater than 50,000 m³; or  (b) the area involved is equal to or greater than 4 ha; or  (c) the length of <i>foreshore</i> ^ or seabed involved is equal to or greater than 1,000 m.	Non- complying		

#### Rule Guide:

- Deposits, disturbances and removal in the CMA that are not specifically covered by a rule in this chapter are a discretionary activity under Rule 18-44.
- (a) (b) Deposits, disturbances and removal in the CMA that do not comply with a permitted or controlled activity rule and are not otherwise discretionary, non-complying or prohibited are a discretionary activity under Rule 18-44.



## 18.6 Water Takes, Uses, Damming and Diversions

#### 18.6.1 Policies

## Policy 18-10: Consent decision-making for take or use of water<sup>^</sup> in the CMA

When making decisions on *resource consent*<sup>^</sup> applications and setting consent *conditions*<sup>^</sup> for the take or use of *water*<sup>^</sup> from the CMA, the Regional Council must have regard to:

- the Regional Policy Statement, particularly all the objectives and policies of Chapters 2 and 8, Objective 3-1 and Policies 3-1, 3-2, 3-3, 3-6 and 3-7 and any relevant policies in the NZCPS; and
- (b) ensuring any intake pipe is located and screened such that the "intake" of marine fauna (including at spawning stages) is avoided, and any scouring of the *foreshore*^ or seabed is avoided.

## Policy 18-11: Consent decision-making for damming and diversions in the CMA

When making decisions on *resource consent*^ applications and setting consent *conditions*^ for any activity in the CMA involving the damming or diversion of *water*^, the Regional Council must have regard to:

- the Regional Policy Statement, particularly all the objectives and policies of Chapters 2 and 8, Objective 3-1 and Policies 3-1, 3-2, 3-3, 3-6 and 3-7, Objective 6-2 and Policy 6-6, Objective 9-1 and Policies 9-3 to 9-5 and any relevant policies in the NZCPS;
- (b) the applicable Water Management Zone\* or Sub-zone\* and the relevant water^ quality Values and targets in Schedule I;
- (c) the functional necessity for locating the activity in the CMA;
- (d) avoiding any adverse *effects*^ on fish spawning and bird feeding, breeding, nesting, or roosting areas;
- (e) ensuring that any adverse effects^ on water^ clarity are not visibly noticeable within 24 hours of the activity being completed;
- (f) ensuring that any adverse *effects*^ on *river*^ bank stability or coastal sediment processes do not contribute to erosion elsewhere or exacerbate the risk from *natural hazards*^; and
- (g) ensuring that public access is not unreasonably restricted.



#### 18.6.2 Rules

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
18-32 Take and use of	Any take or use of water <sup>A</sup> from the CMA.	Permitted	(a) The activity must comply with conditions (i) and (j) in Table 18.1.	
water^			(b) An intake screen with a mesh aperture size not exceeding 3 mm in diameter must be used and the intake velocity must not exceed 0.3 m/s.	
18-33 Drainage and diversions of water^ in the CMA	Any activity which is authorised by Rules 16-9, 16-10 or 16-11 of this Plan and which results in any drainage or diversions of <i>water</i> ^ into the CMA.	Permitted	(a) The activity must comply with all conditions of Rules 16-9, 16-10 and 16-11, as if those conditions apply to the CMA.	

#### Rule Guide:

- Water takes and uses in the CMA that do not comply with a permitted activity rule are a **discretionary activity** under Rule 18-44.

  Any damming or diversion of water in the CMA that is not specifically regulated by any other rule in this chapter is a **discretionary activity** under Rule 18-44.



## 18.7 Discharges

#### 18.7.1 Policies

## Policy 18-12: Consent decision-making for discharges<sup>^</sup> into the CMA

When making decisions on *resource consent*^ applications and setting consent *conditions*^ for *discharges*^ into the CMA, the Regional Council must have regard to:

- the Regional Policy Statement, particularly all the objectives and policies of Chapters 2 and 8, Objective 3-1 and Policies 3-1, 3-2, 3-3, 3-6 and 3-7, Objective 6-2 and Policy 6-6, Objective 9-1 and Policies 9-3 to 9-5 and any relevant policies in the NZCPS;
- (b) the applicable Water Management Zone\* or Sub-zone\* and the relevant water^ quality Values and targets in Schedule I;
- restricting the use of *hazardous substances*\* in any estuary or *river*^ (including stream) in the CMA to those necessary to control pest plants or marine fauna identified pursuant to a pest management strategy prepared under the Biosecurity Act 1993;
- (d) tikanga Māori^, amenity values^, recreational values and public health and safety, and ensuring any adverse effects^ are avoided as far as reasonably practicable. Where avoidance is not reasonably practicable, the adverse effects^ must be remedied or mitigated; and
- (e) ensuring that any *discharge*^, after reasonable mixing, must not result in:
  - (i) the production of any conspicuous *oil\** or grease films, scums or foams;
  - (ii) floatable or suspended materials;
  - (iii) any conspicuous change in the colour or visual clarity of water^ in the coastal marine area^; or
  - (iv) any emission of objectionable odour, or any significant adverse effects^ on aquatic life.

## Policy 18-13: Consent decision-making for sewage discharges<sup>^</sup>

When making decisions on *resource consent*^ applications and setting consent *conditions*^ for sewage *discharges*^ into the CMA, the Regional Council must have regard to:

- the Regional Policy Statement, particularly all the objectives and policies of Chapters 2 and 8, Objective 3-1 and Policies 3-1, 3-2, 3-3, 3-6 and 3-7, Objective 6-2 and Policy 6-6, Objective 9-1 and Policies 9-3 to 9-5 and any relevant policies in the NZCPS;
- (b) the applicable *Water Management Zone\** or *Sub-zone\** and the relevant *water*^ quality targets in Schedule I;
- (c) avoiding any *discharge*^ within any *river*^ (including stream) or estuary in the CMA or within any Protection Activity Management Area identified in Schedule I;



- (d) the extent to which any alternatives have been considered, including discharging to land^; and
- (e) considering the views and concerns of *tangata whenua*^ in the decision-making process.

#### 18.7.2 Rules

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
18-34  Discharges^ into water^ from ships^, boats, fire-fighting and oil* spills	<ul> <li>Any discharge<sup>^</sup> (excluding sewage) into the CMA pursuant to s15 RMA:</li> <li>(a) ancillary to the normal operation<sup>1</sup> of a ship<sup>^</sup> or boat; or</li> <li>(b) for the purposes of fire-fighting or training for fire-fighting; or</li> <li>(c) for the purposes of managing an oil* spill.</li> </ul>	Permitted	<ul> <li>(a) There must be no discharge<sup>^</sup> of non-biodegradable matter.</li> <li>(b) Any substance used as an oil* dispersant must be approved in accordance with the Marine Protection Rules Part 132: Dispersants and Demulsifiers (1998).</li> </ul>	
18-35  Discharges* of stormwater	The discharge^ of stormwater into the CMA, pursuant to s15 RMA.	Permitted	<ul> <li>(a) The discharge^ must not contain any sewage.</li> <li>(b) The discharge^ must not include stormwater from any: <ul> <li>(i) industrial or trade premises^ where hazardous substances* are stored or used,</li> <li>(ii) contaminated land^,</li> <li>(iii) operating quarry or mineral extraction site*, unless there is an interceptor system* in place.</li> </ul> </li> <li>(c) For discharges^ that include stormwater from any industrial or trade premises^, or from land^ zoned as industrial, commercial or residential, the catchment area of the discharge^ must not exceed 2 ha.</li> <li>(d) The activity must not cause erosion of any bank or foreshore^ beyond the point of discharge^, unless this is not practicably avoidable, in which case any erosion that occurs as a result of the discharge^</li> </ul>	

Normal operation – For the purpose of this *rule*^ "normal operation" includes *ship*^ propulsion, cooling water, washdown water from cleaning and bilge water containing less than 15 ppm of *oil*\*. In the context of this *rule*^ any *discharge*^ or *contaminants*^ resulting from hull cleaning or anti fouling or painting of vessels must be collected and removed from the *coastal marine area*^.



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
			must be remedied as soon as practicable.  (e) For discharges^ of stormwater into the CMA the discharge^ must not cause, after reasonable mixing, any of the following effects^ in the receiving water^:  (i) the production of conspicuous oil* or grease films, scums or foams, or floatable or suspended materials;  (ii) any conspicuous change in the colour or visual clarity of the receiving water^;  (iii) any emission of objectionable odour;  (iv) toxicity to marine ecosystems.  (f) The discharge^ must not be to any historic heritage^ identified in the Regional Coastal Plan.	
18-36  Discharges^ of stormwater not complying with Rule 18-35	The discharge^ of stormwater into the CMA, pursuant to s15 RMA, that:  (i) does not comply with Rule 18-35; or  (ii) is lawfully in existence at the time this rule^ comes into effect, but does not comply with Rule 18-35.	Controlled	<ul> <li>(a) The discharge^ must not include sewage.</li> <li>(b) The discharge^ must not include stormwater from any: <ul> <li>(i) industrial or trade premises^ where hazardous substances* are stored or used,</li> <li>(ii) contaminated land^,</li> <li>(iii) operating quarry or mineral extraction site*, unless there is an interceptor system* in place.</li> </ul> </li> <li>(c) The discharge^ must not be toxic to marine ecosystems after reasonable mixing.</li> </ul>	Control is reserved over:  (a) measures to control flooding and erosion.  (b) contaminant^ concentrations and loading rates.  (c) measures required to comply with s107(1) RMA.  (d) measures required to comply with the water^ quality targets for the relevant Water Management Zone* or Subzone*.  (e) odour management.  (f) stormwater system maintenance requirements.  (g) contingency requirements.  (h) monitoring and information requirements.  (i) duration of consent.  (ii) review of consent conditions^.



Rule	Activity	Classification	Conditions/Standards/Terms Control/Discretion Non-Notification
18-37  Discharges^ of dye and salt tracers	The discharge^ of dye and salt tracer material into the CMA, pursuant to s15 RMA, excluding radioisotope tracers.	Permitted	<ul> <li>(a) The dye or salt tracer material discharged must not exceed 20 l of dye in solution, 10 kg of salt, or 100 l of salt solution.</li> <li>(b) The Regional Council must be notified in writing of the proposed discharge^ at least 24 hours prior to the discharge^. Such notification must include: <ol> <li>(i) the name and contact details of the person responsible for the discharge^.</li> <li>(ii) the purpose and nature of the discharge^.</li> <li>(iii) the nature of the tracer including its type, colour, and product name and description.</li> <li>(iv) the location, timing and duration of the discharge^.</li> </ol> </li> <li>(c) The dye or salt tracer must not be a hazardous</li> </ul>
			(c) The dye or salt tracer must not be a hazardous substance* in terms of the Hazardous Substances and New Organisms Act 1996.
18-38 Application of agrichemicals*	The discharge^ of agrichemicals* into air, onto land^, or into water^, in the CMA, pursuant to s15 RMA.	Permitted	(a) The target species must be identified as a pest plant or pest animal in the Regional Council's Regional Pest Plant Management Strategy or the Council's Regional Pest Animal Management Strategy.
			(b) The discharge^ must not contravene any requirement specified in the agrichemical* manufacturer's instructions.
			(c) The discharge^ must be undertaken in accordance with all mandatory requirements set out in NZS 8409:2004 Management of Agrichemicals.
			(d) There must be no measurable adverse <i>effect</i> ^ on non-target species.
			(e) Where the <i>discharge</i> ^ is into <i>water</i> ^ for the purpose of eradicating, modifying or controlling unwanted marine plants:
			(i) only agrichemicals* approved for aquatic use can be used.



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
18-39 Application of agrichemicals* not complying with Rule 18-38	The discharge^ of agrichemicals* into air, onto land^, or into water^, in the CMA, pursuant to s15 RMA, that does not comply with Rule 18-38.	Controlled	<ul> <li>(ii) the application must not exceed the quantity or concentration required for that purpose.</li> <li>(f) The discharge^ must not include dumping^ of agrichemical* waste* or surplus product to water^.</li> <li>(g) The discharger must notify the Regional Council five working days prior to application.</li> <li>(a) The discharge^ must not contravene any requirement specified in the agrichemical* manufacturer's instructions.</li> <li>(b) The discharge^ must be undertaken in accordance with all mandatory requirements set out in NZS 8409:2004 Management of Agrichemicals.</li> <li>(c) There must be no measurable adverse effect^ on non-target species.</li> <li>(d) Where the discharge^ is into water^ for the purpose of eradicating, modifying or controlling unwanted marine plants: <ol> <li>(i) only agrichemicals* approved for aquatic use can be used.</li> <li>(ii) the application must not exceed the quantity or concentration required for that purpose.</li> <li>(iii) the discharge^ must not include dumping^ of agrichemical* waste* or surplus product to water^.</li> </ol> </li> </ul>	Control is reserved over:  (a) qualification required of persons carrying out the activity.  (b) method, rate and timing of application.  (c) the provision of information to the public.  (d) duration, fees and charges, reviews, monitoring.
18-40	Pursuant to Schedule 1 NZCPS 1994:	Discretionary		
Sewage and s107(2) RMA discharges <sup>^</sup>	(a) any discharge^ of human sewage which has not passed through soil or wetland^, and which is not otherwise provided for by the Resource Management (Marine Pollution) Regulations 1998 and Amendment Regulations 2002; or			



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	(b) any discharge^ for which the discharger wishes to rely on exceptional circumstances to justify the granting of consent under s107(2)(a) RMA; and which is not otherwise prohibited by Rule 18-41 of this chapter.			
18-41 Dumping^ of hazardous substances*	The dumping^ or disposal of any hazardous substances* in the CMA, not otherwise controlled by the Resource Management (Marine Pollution) Regulations 1998 and Amendment Regulations 2002, or otherwise provided for by Rule 18-38.	Prohibited		

#### Rule Guide:

- (a) Discharges under s15 RMA that are specifically covered by a rule above, or do not comply with the permitted or controlled rules and are not otherwise prohibited are discretionary under General Rule 18-44.
- (b) Refer also to rules under Sections 18.3 (Structures) and 18.5 (Disturbances, Removal and Deposition) which permit some discharges associated with other minor activities.
- (c) Refer to ss15A, 15B and 15C of the RMA and the Resource Management (Marine Pollution) Regulations 1998 and Amendment Regulations 2002, for full details and consent status and controls relating to:
  - dumping of waste or other matter from any ship, aircraft or offshore installation, prohibited except for the following matters which are deemed to be discretionary: dredge material, sewage sludge, fish processing waste from an onshore facility, ships and platforms or other man-made structures at sea, inert organic geological material, organic materials of natural origins, bulky items consisting mainly of iron, steel and concrete.
  - (ii) incineration of waste (prohibited).
  - (iii) substances to avoid, remedy, or mitigate an oil\* spill (permitted subject to the Maritime Transport Act 1994).
  - (iv) discharge of oil from ship or offshore platforms (permitted).
  - (v) discharge of noxious liquid substances from a ship (permitted).
  - (vi) discharge of sewage from any ship or offshore installation (prohibited within 500 m of MHWS, or within 500 m of a marine farm, or within 200 m of a marine reserve, or within 500 m of a maataitai reserve).
  - (vii) discharge of plastics, dunnage, lining and packaging materials from any ship (prohibited).
  - (viii) discharge of garbage from a ship (permitted subject to conditions).
  - (ix) discharge of garbage from an offshore installation (prohibited).
  - (x) discharge of ballast water from any ship or offshore installation (permitted subject to any requirements of the Biosecurity Act 1993).
  - (xi) discharges as a part of normal operations of ships (permitted).
  - (xii) store or dump radioactive wastes (prohibited).



## 18.8 Noise and Discharges into Air

#### 18.8.1 Policies

## Policy 18-14: Consent decision-making for any *noise*^ and *discharges*^ into air

When making decisions on *resource consent*^ applications and setting consent *conditions*^ for activities involving *noise*^ or *discharges*^ into air in the CMA, the Regional Council must have regard to:

- the Regional Policy Statement, particularly all the objectives and policies of Chapters 2 and 8, Objective 3-1 and Policies 3-1, 3-2, 3-3, 3-6 and 3-7, Objective 7-1 and Policy 7-1 and any relevant policies in the NZCPS; and
- (b) adopting the *best practicable option*^ to ensure that emissions of *noise*^ do not exceed a reasonable level for all other activities, including minimising *effects*^ on coastal birds and *amenity values*^ for people.

#### 18.8.2 Rules

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion
				Non-Notification
18-42 Noise <sup>A</sup> emissions	Any <i>noise</i> ^ in the CMA, pursuant to s12(3) RMA relating to the normal operation of boats, <i>ships</i> ^ or <i>offshore installations</i> ^, or from seismic exploration.	Permitted	<ul> <li>(a) Any seismic exploration must be located at least 1 km away from any Protection Activity Management Area as shown in Schedule I.</li> <li>(b) Any seismic exploration must be undertaken in accordance with the Department of Conservation's Guidelines for Minimising Acoustic Disturbance to Marine Mammals from Seismic Survey Operations (February 2006).</li> </ul>	

#### Rule Guide:

- (a) Noise emissions in the CMA that do not comply with the conditions of the permitted activity rule above or that are not specifically permitted by the rule above or by existing use provisions in s20A RMA are a **discretionary activity** under Rule 18-44.
- (b) Discharges into air restricted by s15(1) RMA in the CMA are a **discretionary activity** under Rule 18-44.
- (c) Reference should also be made to the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004.



#### 18.9 Exotic and Introduced Plants

#### 18.9.1 Policies

## Policy 18-15: Consent decision-making for the introduction of exotic and introduced plants

When making decisions on *resource consent*^ applications and setting consent *conditions*^ for activities involving the introduction of exotic and introduced plants in the CMA, the Regional Council must have regard to:

- the Regional Policy Statement, particularly all the objectives and policies of Chapters 2 and 8, Objective 3-1 and Policies 3-2 and 3-6, and any relevant policies in the NZCPS;
- (b) avoiding the introduction of exotic or introduced plant species into the CMA, unless there is a compelling reason for doing so and any future potential adverse *effects*^ are identified and can be avoided; and
- (c) imposing *conditions*<sup>^</sup> to avoid any risk of adverse *effects*<sup>^</sup> on indigenous flora in any Protection Activity Management Area or on fish or bird feeding grounds.

#### 18.9.2 Rules

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion
				Non-Notification
18-43	Pursuant to s12(1) RMA and Schedule I NZCPS	Discretionary		
Exotic and	1994, the introduction or planting of any exotic			
introduced plants	or introduced plant species within the CMA,			
	which is not already present in an area.			

#### Rule Guide:

(a) The introduction or planting of an exotic or introduced plant species in the CMA that is not specifically covered by the rule above is a **discretionary activity** under General Rule 18-44.



# 18.10 Rules - Activities that are not Covered by other Rules, or which do not Comply with Permitted Activity and Controlled Activity Rules

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
18-44	Any activity that either:	Discretionary		
Activities that are not covered by any other rule^, or which do not comply with permitted activity^ and controlled activity^ rules^	<ul> <li>(a) is subject to s12(1), s12(2), s14(1), s14(2), s15(1) or s15(2) RMA and is not addressed by any other rule^ in this chapter; or</li> <li>(b) does not comply with one or more conditions^, standards or terms of a permitted activity^ or controlled activity^ rule^ in this chapter, and which is not expressly classified as a discretionary activity^, non-complying activity^ or prohibited activity^.</li> </ul>			





## CHAPTER 19: Financial Contributions

## 19 Financial Contributions

## 19.1 Scope and Background

Where the Regional Council grants a resource consent, it may impose a condition requiring that a financial contribution be made. The term "financial contribution" is defined in s108(9) of the RMA to mean a contribution of:

- (a) money;
- (b) land, including an esplanade reserve or esplanade strip (other than in relation to a subdivision consent), but excluding Māori land within the meaning of the Maori Land Act 1993 unless that Act provides otherwise; or
- (c) a combination of money and land.

Under s108(10) of the RMA 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 or proposed 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 or proposed plan.

Prior to this Plan, the Regional Council had provisions in former regional plans enabling the imposition of financial contributions on activities in the coastal marine area (CMA) and on activities in the beds of rivers and lakes. At the time of writing this Plan, however, the Regional Council had never imposed a financial contribution on any consent.

To date, financial contributions have largely been used by Territorial Authorities as a mechanism for funding the infrastructure required as a consequence of land development (for example, roads, drainage, *public water supply\** and parking). By contrast, financial contributions have only been used to a very limited extent by Regional Councils. This is not surprising as Regional Councils are usually able to impose other types of consent conditions to adequately avoid, remedy or mitigate adverse effects of those activities that they control. The need for a separate financial contribution does not usually arise.

The Regional Council envisages making only limited use of financial contributions in the future. The policies that follow provide the Regional Council with the option of imposing financial contributions, should this be appropriate, on some resource consents. The policies below satisfy the requirements of the RMA regarding financial contributions, setting out:

- (a) situations when financial contributions may be required and the purpose of financial contributions,
- (b) the manner in which the level of contribution will be determined, and
- (c) matters to be considered by the Regional Council when deciding whether to impose a financial contribution, and how to use any financial contributions that are collected.



#### 19.2 Policies

## Policy 19-1: Situations when financial contributions may be required and the purpose of financial contributions

A financial contribution may be imposed as a *condition*^ of consent for the following types of activities and for the following purposes:

- (a) Infrastructure^ A financial contribution may be imposed as a condition^ of consent for the establishment, maintenance\*, alteration, upgrading\*, or expansion of infrastructure^ and other physical resources of regional or national importance. The purpose must be to offset significant adverse effects^ on the environment^ by funding positive effects^ of an equivalent or similar character, nature and scale as the adverse effects^.
- (b) Aquatic ecosystems and rivers^ A financial contribution may be imposed as a condition^ of consent for any type of activity that has significant adverse effects^ on aquatic ecosystems, fish passage, river^ bank erosion, flow regimes or riparian vegetation, in circumstances where such adverse effects^ will not be adequately avoided, remedied or mitigated. The purpose of the financial contribution must be to offset the adverse effects^ by providing for the restoration or enhancement of aquatic ecosystems, fish passage, river^ bank stability, flow regime or riparian vegetation in the general area affected by the activity or, where this is not practicable or desirable, in another location.
- (c) Indigenous Biological Diversity^ A financial contribution may be imposed as a condition^ of consent for any type of activity that has significant adverse effects^ on indigenous biological diversity^ in circumstances where such adverse effects^ will not be adequately avoided, remedied or mitigated. The purpose of the financial contribution must be to offset the adverse effects^ by providing for the protection, restoration or enhancement of indigenous biological diversity^ in a location with similar indigenous biological diversity^ values.
- (d) Public access to and along the coastal marine area^ (CMA), lakes^ and rivers^ A financial contribution may be imposed as a condition^ of consent for any type of activity that will restrict or prevent existing legal or lawful public access to or along the CMA, a lake^ or a river^, except in circumstances where such restrictions are necessary for public safety or are in accordance with the Environmental Code of Practice for River Works (Horizons Regional Council, June 2010). The purpose of the financial contribution must be to provide for alternative public access in the vicinity of the activity or at another similar location.

#### Policy 19-2: Amount of contribution

The amount of contribution must be an amount determined on a case-by-case basis by the Regional Council to be fair and reasonable. The amount must not exceed the reasonable cost of funding positive environmental *effects*^ required to offset the net adverse *effects*^ caused directly by the activity. For the purposes of this policy and Policy 19-3, the "net adverse *effects*^" means a reasonable assessment of the level of adverse *effects*^ after taking into account:

- (a) the extent to which significant adverse *effects*^ will be avoided, remedied or mitigated by other consent *conditions*^,
- (b) the extent to which there will be positive environmental effects^ of the activity which may offset any or all adverse effects^, and
- (c) the extent to which other environmental compensation is offered as part of the activity which may offset any or all adverse *effects*^.



### Policy 19-3: Matters to be considered for financial contributions

The Regional Council must take into account the following matters when making decisions about the imposition and use of financial contributions.

- (a) The Council must place primary emphasis on requiring the adverse effects^ of an activity to be adequately avoided, remedied or mitigated by way of other types of consent conditions^. Financial contributions, designed to offset or compensate for adverse effects^, must for most applications only be considered as a secondary measure.
- (b) Financial contributions must not be used where the *effects*^ of activities are generally consistent with the purpose of the RMA and the resource management objectives and policies in this Plan.
- (c) Financial contributions must be used where granting a consent subject to a financial contribution would be more effective in achieving the purpose of the RMA (including recognition of the social, economic and cultural benefits of the activity) and the resource management objectives and policies of this Plan, as opposed to declining consent or granting a consent without requiring a financial contribution.
- (d) Financial contributions must not be used where a more suitable revenue collection power is available to the Regional Council.
- (e) The Council must take into account any financial contribution levied by a *Territorial Authority*^ for the activity requiring consent and the purposes to which that *Territorial Authority*^ contribution will be put, in order to avoid the Regional Council and the *Territorial Authority*^ collecting financial contributions for duplicate purposes.
- (f) The Council must take into account cumulative *effects*<sup>^</sup> in the financial contribution assessments under Policies 19-1 and 19-2.
- (g) The Council must generally ensure that a financial contribution is used to fund measures as close as possible to the *site\** where the adverse *effects\** occur, or at one or more *sites\** similar to that where the adverse *effects\** occur, having regard to the location of any affected community.
- (h) The Council does not intend that all net adverse *effects*^ as defined in Policy 19-2 above must be fully offset in every case by way of a financial contribution.









Part III: Annexes

Glossary

# **Glossary**

A term or expression that is defined in this glossary is marked with the symbol \* when used in the Plan.

A term or expression that is defined in the Resource Management Act 1991 (RMA) and used in the Plan, but which is not included in this glossary, has the same meaning as in the RMA. Definitions provided in the RMA are not repeated in this glossary. A term or expression that is defined in the RMA is marked with the symbol ^ when used in the objectives, policies or rules of the Plan, this glossary and the schedules to the Plan, other than Schedules F, G and I.

#### When:

- \* is not used to identify a term anywhere in the Plan, or
- ^ is not used to identify a term in the objectives, policies or rules of the Plan, this glossary or the schedules to the Plan

the term has its ordinary meaning.

**Abrasive blasting** means the cleaning, smoothing, roughening, cutting or removing of part of the surface or any article by the use of a jet of sand, metal shot, grit or any other abrasive material propelled by a blast of compressed air or mechanically via a rotary wheel, impeller or other means.

**Abundant** means, for the purposes of Schedule F and this glossary, species that contribute more than most other species to the composition of an area of interest, but are not the *dominant\** species. This is a measure of the contribution to an area of interest (eg., the same habitat type or forest tier) of a species in relation to other species in the same area, and is not simply a frequency count as both biomass and density of a given species are considered.

**Accelerated erosion** means erosion which is caused or accelerated by human activity.

**Active bed** means the *bed*^ of a *river*^ that is intermittently flowing and where the *bed*^ is predominantly unvegetated and comprises sand, gravel, boulders or similar material.

**Agrichemical** means 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. For the purposes of this Plan, it includes agricultural compounds but excludes *fertilisers\**, *vertebrate pest control products\** and oral nutrition compounds.

**Ambient air** means air outside buildings or *structures*<sup>^</sup>. This does not refer to indoor air, air in a workplace, or discharges of contaminants to air that are authorised by a resource consent.

**Animal effluent** means faeces and urine from animals other than humans, including associated process water, washdown water, contaminants and sludge, excluding *poultry farm litter\** or *pig farm litter\**.

**Artificial watercourse** means a continually or intermittently flowing body of fresh *water*<sup>^</sup> that does not meet the definition of *river*<sup>^</sup> in s2 of the RMA. For the purposes of this Plan, it includes an irrigation canal, *water*<sup>^</sup> supply race, canal for the supply of *water*<sup>^</sup> for hydroelectricity power generation and farm drainage canal; but excludes a non-natural *lake*<sup>^</sup>.



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**Association** means, for the purposes of Schedule F, a species, or group of species, landform or soil type occurring in space together. Associations can be observed in geographical pattern across the landscape, or in distinctive community groupings.

**At-risk habitat** means an area determined to be an at-risk habitat in accordance with Schedule F and, for the avoidance of doubt, excludes any area in Table F.2(b).

**Basel Convention** means the Convention of the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, held at Basel on 22 March 1989.

**Biofuels** means fuel consisting of a range of biological material derived from plant or animal sources including fats, oils and their derivatives, animal manure, *waste\** plant material, wood *waste\**, and *waste\** treatment plant solids.

**Biosolids** means a sewage or sewage sludge, derived from a sewage treatment plant, that does not include *animal effluent\** or products derived from industrial wastewater treatment plants, and that has been treated or stabilised to the extent that it is able to be safely and beneficially applied to *land*^.

Bore means any hole, regardless of the method of formation, that:

- (a) is created for the purpose of accessing groundwater, oil\* or gas; or
- (b) is created for the purpose of exploring *water*^, *oil*\* or gas resources excluding piezometers installed for monitoring purposes.

**Boulderfield** means, for the purposes of Schedule F, *land*^ in which the area of unconsolidated bare boulders (greater than 200 mm diameter) exceeds the area covered by any one class of plant growth form. Boulderfields are named from the leading plant species when plant cover is 1% or greater.

**Broadleaved** means, for the purposes of Schedule F, woody *tree\** and *shrub\** species which flower, excluding the beech species. Common examples of species referred to as broadleaved include, but are not limited to, kamahi, titoki, fuchsia, maire, hinau, tawa, mahoe, and *Coprosma* species. Broadleaved includes the term "broadleaf", which is specific and refers to *Griselina littoralis* or *Griselina lucida*.

**Canopy** means the highest level of foliage within an area of habitat type excluding any emergent individuals. The height of the canopy layer will vary with the structure of the vegetation.

**Chimney** means any *structure*^ or opening designed for venting the airborne products of combustion.

Cleanfill means a landfill\* that accepts only cleanfill material\*.

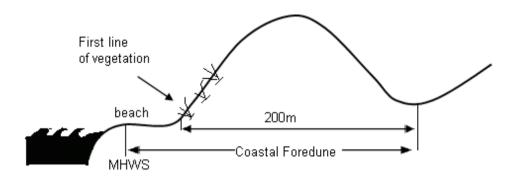
**Cleanfill material** means materials such as clay, soil and rock, and other inert materials such as concrete or brick that are free of:

- (a) combustible, putrescible (except that *cleanfill material*\* may contain up to 5% by weight putrescible matter), degradable or leachable components
- (b) hazardous substances\*
- (c) products or materials derived from *hazardous waste\** treatment, *hazardous waste\** stabilisation or *hazardous waste\** disposal practices
- (d) materials that may present a risk to human health
- (e) liquid waste\*.



**Coastal foredune** means the strip of *land*^ between the *coastal marine area*^ and a line roughly parallel with the beach, extending 200 metres inland of the first line of vegetation.

## COASTAL FOREDUNE AREA



**Commercial vegetable growing** means using an area of land greater than 4 ha for producing vegetable crops for human consumption. It includes the whole rotational cycle, being the period of time that is required for the full sequence of crops, including any pasture phase in the rotation. Fruit crops, vegetables that are perennial, dry field peas or beans are not included.

**Common** means, for the purposes of Schedule F and this glossary, species that contribute more to the composition of an area of interest than species that are *scattered\** or *occasional\**, but less than species that are *abundant\** or *dominant\**. This is a measure of the contribution to an area of interest (eg., the same habitat type or forest tier) of a species in relation to other species in the same area, and is not simply a frequency count as both biomass and density of a given species are considered.

**Common catchment expiry or review date** means the date set in Table 12.1 when all consents within a *Water Management Zone*\* are to be reviewed or to expire.

**Composting (or compost)** means the biological treatment or decomposition of organic material under controlled conditions to produce a stabilised product which is potentially beneficial to plant growth with compost as the resulting material.

**Continuous** means, for the purposes of Schedule F and this glossary, that an area of habitat type has no interruption of continuity or conspicuous gaps, allowing for small, infrequent *canopy*\* gaps (eg., *tree*\* fall gaps).

**Critical infrastructure** means *infrastructure*^ necessary to provide services which, if interrupted, would have a serious *effect*^ on the people within the Region or a wider population, and which would require immediate reinstatement. *Critical infrastructure*\* includes *infrastructure*^ for:

- (a) electricity substations
- (b) the treatment and storage of *water* for public supply (excluding the distribution network)
- (c) the management of human sewage treatment (excluding the reticulation system)
- (d) strategic road and rail networks (as defined in the Regional Land Transport Strategy)



(e) health care institutions including hospitals.

**Cropping** means using an area of land in excess of 20 ha to grow crops. A "crop" is defined as cereal, coarse grains, oilseed, peanuts, lupins, dry field peas or dry field beans. This definition does not include crops fed to animals or grazed on by animals on the same property.

**Cultivation** means preparing *land*<sup>^</sup> for growing pasture or a crop and the planting, tending and harvesting of that pasture or crop, but excludes:

- (a) direct drilling of seed
- (b) no-tillage practices
- (c) recontouring land^
- (d) forestry\*
- (e) the clearance of woody vegetation\* and new tracking\* in a Hill Country Erosion Management Area\*.

**Cumulative nitrogen leaching maximum** means the total kilograms of nitrogen leached per hectare per year for the total area of a farm (including any *land*^ not used for grazing) and is calculated using the values for each *land use capability class\** specified in Table 14.2.

**Cushionfield** means, for the purposes of Schedule F, an area of vegetation in which the cover of cushion plants in the *canopy\** is 20-100% and in which the cushion plant cover exceeds that of any other growth form or bare ground. Cushion plants include *herbaceous\**, semi-woody and woody plants with short densely-packed branches and closely-spaced leaves that together form dense hemispherical cushions. The growth form occurs in all species of *Donatia*, *Gaimardia*, *Hectorella*, *Oreobolus*, and *Phyllachne* as well as in some species of *Achiphylla*, *Celmisia*, *Centrolepis*, *Chionohebe*, *Colobanthus*, *Dracophyllum*, *Kelleria*, *Haastia*, *Leucogenes*, *Luzula*, *Myosotis*, *Poa*, *Raoulia*, and *Scleranthus*.

**Dairy farming** means using any area of *land*^ greater than 4 ha for the farming of dairy cattle for milk production. This includes *land*^ used as a dairy cattle grazing runoff but excludes any dairy grazing arrangement. A dairy grazing arrangement is a third party commercial arrangement between the owner of dairy cattle and another landowner for the purpose of temporary grazing.

**Discontinuous** means, for the purposes of Schedule F and this glossary, that an area of habitat type is not *continuous*\* and has distinct interruptions or conspicuous gaps, excluding those gaps created by *tree*\* fall.

**Domestic food supply** means crops grown for human consumption under the Commodity Levies (Vegetables and Fruit) Order 2007 (SR2007/161).

**Domestic wastewater** means wastewater and greywater generated on the *property\** from toilets, urinals, kitchens, bathrooms, showers, baths, basins, water closets and laundries. It includes such wastewater flows from facilities serving staff/employees/residents in institutional, commercial and industrial establishments and small schools (under 2,000 l/d), but excludes commercial and industrial *wastes\**, large-scale laundry activities and any stormwater flows.

**Dominant (or dominated)** means, for the purposes of Schedule F and this glossary, species that contribute more than any other species to the composition of an area of interest. Dominant species are the most characteristic species of the area of interest or habitat type. This is a measure of the contribution to an area of interest of a species in relation to other species in the same area, and is not simply a frequency count as both biomass and density of a given species are considered.



**Duneland** means, for the purposes of Schedule F, areas where the landform is characterised by sand dunes (active or stable).

**Endemic** means a species that is indigenous only to a certain area – eg., the Manawatu-Wanganui Region of New Zealand.

**Energy efficiency** means a change to energy use that results in an increase in the net benefits per unit of energy.

**Erosion and Sediment Control Plan** means a plan prepared in accordance with the "Erosion and Sediment Control Guidelines for the Wellington Region" dated September 2002:

- (a) In all cases the Erosion and Sediment Control Plan shall include, but not be limited to:
  - a description of the nature, scale, timing, and duration of land disturbance;
  - (ii) water^ run off controls;
  - (iii) methods to prevent slumping of batters, cuts and side castings;
  - (iv) measures to maintain slope stability;
  - (v) methods of sediment retention and control of sediment run off;
  - (vi) methods to avoid effects on riparian margins and waterbodies^;
  - (vii) re-vegetation requirements;
  - (viii) methods to monitor achievement of the plan; and
  - (ix) contingency measures for heavy rainfall events.
- (b) For the purposes of Rule 13-3 (*Forestry\**), a plan which may either be separate to or form part of an *Operational plan\** and which is prepared in general accordance with the "Erosion and Sediment Control Guidelines for the Wellington Region" dated September 2002 to the extent that it addresses the matters in Section 8 (Forestry Activities) and that any erosion and sediment control measures employed are in general accordance with the specifications in Sections 4 and 5.

The *Erosion and Sediment Control Plan\** must include, but not be limited to the following:

- (i) the description of the nature, scale, timing and duration of activities including construction, roading, the formation of any new *track*\*, earthworks, stabilisation and harvesting;
- (ii) the erosion and sediment control measures to be employed and indicative locations;
- (iii) detail heavy rainfall response and contingency measures;
- (iv) identify maintenance and monitoring procedures;
- (v) identify procedures for review and amendment to the *Erosion and* Sediment Control Plan\*; and
- (vi) relevant Harvest Plans (including maps and associated text).

Any Harvest Plan in (vi) above must include a Harvest Plan Map and associated text. The Harvest Plan Map must be produced at 1:5,000 up to 1:10,000 scale and must include, but not be limited to, the following:

- (i) title, date and north arrow;
- (ii) the harvest area boundary;
- (iii) any property boundaries in the vicinity of the harvest area.
- (iv) contours;
- (v) location of all proposed and existing roads, *track*\*s, landings, firebreaks, stream crossings and associated culverts;
- (vi) harvesting methodology (hauler or ground-base) and proposed extraction directions;
- (vii) location of any water bodies<sup>^</sup>, perennial streams and the bed<sup>^</sup> of any lake<sup>^</sup>;



- (viii) location of any *wetland*^ identified in Schedule F and of any trout fishery or spawning *rivers*^ identified in Schedule B;
- (ix) location of any *rare habitat\**, *threatened habitat\** or *at risk habitat\** within or adjacent to the harvest area;
- (x) location of any known historic heritage^ or waahi tapu\* sites, outstanding natural features and landscapes, areas of significant indigenous vegetation and habitats of significant indigenous fauna identified in any district or regional plan;
- (xi) location of *slash*\* management and disposal areas for hauler landings;
- (xii) location of end haul disposal areas; and
- (xiii) any other area relevant to managing the harvest area.

The text associated with the Harvest Plan Map must include, but not be limited to, the methods and or management tools employed, or to be employed to meet the standards of Rule 13-3, in particular Rule 13-3(k), (I) and (o) related to slash management.

The method and or management tools shall be in general accordance with Section 8 of the "Erosion and Sediment Control Guidelines for the Wellington Region" dated September 2002. Where there is any conflict between the requirements of Rule 13-3 and Section 8.3.2 (protection areas) and Section 8.4.3 (extraction operations) of the "Erosion and Sediment Control Guidelines for the Wellington Region" dated September 2002, the relevant Rule 13-3 condition(s) must prevail.

**Feedpad** means an area of artificially sealed *land*^ used principally for feeding animals.

**Fernland** means, for the purposes of Schedule F, an area of vegetation in which the cover of ferns in the *canopy*\* is 20-100% and in which the fern cover exceeds the cover of any other growth form or bare ground. Tree ferns 10 cm diameter or greater at 1.4 m above the ground are excluded from this definition and are *trees*\*.

**Fertiliser** means any substance or mix of substances that is described as or held to be suitable for sustaining or increasing the growth, productivity or quality of plants (or animals indirectly) through the application to plants and soils of:

- (a) the following major nutrients: nitrogen, phosphorus, potassium, sulphur, magnesium, calcium, chloride and sodium
- (b) the following minor nutrients: manganese, iron, zinc, copper, boron, cobalt, molybdenum, iodine and selenium
- (c) non-nutrient attributes of the materials used in fertiliser
- (d) fertiliser additives
- (e) gypsum and lime

but does not include biosolids\*, animal effluent\*, compost\* or poultry farm litter\* or pig farm litter\*.

Fire training means training undertaken by:

- (a) the New Zealand Fire Service (or under authority of), or
- (b) any Rural Fire Authority (or under authority of), or
- (c) a New Zealand Qualification Authority registered provider accredited for fire training, or
- (d) the New Zealand Defence Force Fire Service (or under the authority of), including the School of Military Engineering.



**Flaxland** means, for the purposes of Schedule F, a subclass of *tussockland\** where species of *Phormium* are *dominant\**.

**Flood hazard avoidance** means, for the purpose of Policy 9-2, ensuring flood control measures are in place that provide protection from the 0.5% annual exceedance probability (1 in 200 year) flood event and those measures are soundly designed and constructed such that there is minimal risk of the measures failing.

**Floodway** means an artificial flood control channel which diverts part of the *river's*^ flow from the *river*^ during flood periods and which is identified by the maps in Schedule J.

**Flow exceedance percentile** means the *river*^ flow in m³/s or l/s that is exceeded for the nominated percentage of time, eg., *river*^ flow is higher than the 50<sup>th</sup> flow exceedance percentile for 50 percent of the time, but higher than the 20<sup>th</sup> flow exceedance percentile for only 20 percent of the time.

**Forest** means, for the purposes of Schedule F and this glossary, an area of woody vegetation in which the *canopy\** cover of *trees\** and *shrubs\** is more than 80% and in which *tree\** cover exceeds *shrub\** cover.

**Forestry** means activities associated with all soil conservation forestry, forestry planted for carbon sequestration purposes or *production forestry\** including tracking, earthworks, *land*^ preparation, planting, pruning, thinning, clearing understorey (indigenous and exotic species), and harvesting.

**Grade Aa biosolids** means a high quality *biosolid\** where the concentration of pathogen and vector attracting compounds has been reduced or removed to provide for *contaminant^* concentrations that are at or below the levels specified in Table 4.4 of the Guidelines for the Safe Application of Biosolids to Land in New Zealand, New Zealand Water and Waste Association, August 2003.

**Grassland** means, for the purposes of Schedule F, an area of vegetation in which the cover of grass in the *canopy*\* is 20-100% and in which grass cover, excluding tussock grasses, exceeds the cover of any other growth form or bare ground.

Green waste means organic material including:

- (a) vegetative material, but not tree trunks or limbs larger than 100 mm diameter
- (b) vegetable peelings or trimmings, but no other kitchen wastes
- (c) soil attached to plant roots that may be physically modified but is otherwise in its natural state

but not including animal products (eg., manure, feathers, carcasses) other than as an occasional or incidental input.

**Groundwater Management Zone (GWMZ)** means a Groundwater Management Zone as described in Schedule D.

**Halogenated** in relation to hydrocarbons means hydrocarbons with fluorine, bromine, iodine or chlorine attached.

**Hand-held appliance**, for the purposes of the rules regulating the *discharge*^ of *agrichemicals*\* and *vertebrate pest control products*\*, means an application technique or method for *agrichemical*\* or *vertebrate pest control product*\* use where the application system is non-motorised, and where spray is being applied that spray is directed only at the target species.



**Hapū** means a social, political unit comprised of *whānau*\* each recognising descent from a common ancestor.

**Hazardous substance** means, unless expressly provided otherwise by regulations prepared under the Hazardous Substances and New Organisms Act 1996, or the RMA, any substance:

- (a) with one or more of the following intrinsic properties:
  - (i) explosiveness
  - (ii) flammability
  - (iii) a capacity to oxidize
  - (iv) corrosiveness
  - (v) toxicity (including chronic toxicity)
  - (vi) ecotoxicity, with or without bioaccumulation, and
- (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 (a).

#### Hazardous waste means waste\* that:

- (a) belongs to one or more categories in Annex I of the *Basel Convention*\*,
- (b) has one or more of the characteristics in Annex III of the Basel Convention\*.

**Health care institution** has the same meaning as in s2(1) of the Health and Disability Commissioner Act 1994.

**Heathland** means, for the purposes of Schedule F, an area of vegetation dominated\* by species that are slow-growing, stunted, with small, hard, scale-like or needle-like leaves with a thick waxy cuticle, and foliage that is flammable, resistant to decay, and produces acid litter. Heathland which occurs on wet substrates (eg., pakihi) comprises a mixture of *shrubland*\* or *treeland*\* with rush-like species, wire rush and ferns.

**Herbaceous** means, for the purposes of Schedule F and this glossary, plant species that do not form woody tissue. Herbaceous species can be annual or perennial.

**Herbfield** means, for the purposes of Schedule F, an area of vegetation in which the cover of herbs in the *canopy*\* is 20-100% and in which the herb cover exceeds the cover of any other growth form or bare ground. Herbs include all *herbaceous*\* species.

**High temperature hazardous waste incinerator** means an incinerator that is designed and operated principally for burning *hazardous waste*\* at a temperature greater than 850°C as measured:

- (a) near the inner wall of the incinerator, or
- (b) at another point in the combustion chamber where the temperature is likely to represent the temperature in the incinerator.

**Hill Country Erosion Management Area** means any area of *land*<sup>^</sup> with a pre-existing *slope*<sup>\*</sup> of 20° or greater on which *vegetation clearance*<sup>\*</sup>, *land disturbance*<sup>\*</sup> *forestry*<sup>\*</sup> or *cultivation*<sup>\*</sup> and ancillary *land disturbance*<sup>\*</sup> for the purposes of constructing erosion and sediment control methods to minimize run off to *water*<sup>^</sup> is being or is to be undertaken.



**Indigenous** means, for the purposes of Schedule F, vegetation comprised predominantly of indigenous species, but which may include *scattered\** exotic species.

**Intensive sheep and beef farming** refers to properties greater than 4 ha engaged in the farming of sheep and cattle, where any of the land grazed is irrigated.

**Interceptor system**, in relation to *discharges*^ of stormwater, means a facility designed into a stormwater management system with the purpose of:

- (a) preventing deliberate or accidental releases of any *hazardous substances*\* in the stormwater system, or
- (b) in the event of stormwater contamination by a hazardous substance\*, reducing all such substances in the stormwater prior to discharge^ to concentrations that will not result in contamination of either water^ or sediments to such a degree that is likely to result in significant adverse effects^ on aquatic life^ or on the suitability of the water^ for potable water^ supply.

**Iwi** means a political grouping comprised of several  $hap\bar{u}^*$ , each recognising descent from a common ancestor(s). The  $hap\bar{u}^*$  not only recognise genealogical ties but geographical, political and social ties. Today  $iwi^*$  are represented by many organisations, including trust boards, rūnanga and iwi authorities^\, but only in specific areas where the mandate to do so has been given by the constituent  $hap\bar{u}^*$ .

**Iwi management plan** means a relevant planning document recognised by *an iwi authority*^ and lodged with the Regional Council.

Kōiwi means human skeletal remains.

Land disturbance (see Vegetation clearance\*).

Land use capability class (LUC) means a classification of a parcel of *land*^ in terms of five characteristics or attributes (rock, soil, *slope\**, erosion, vegetation). The land use capability class can be derived either from the New Zealand Land Resource Inventory (NZLRI) or by a suitably qualified person specifically assessing and mapping the land use capability classes for a particular parcel of *land*^. Where the LUC is assessed by a suitably qualified person, that person may use the more favourable classification of the *land*^ available applying the 3<sup>rd</sup> or 2<sup>nd</sup> edition of the Land Use Capability Survey Handbook.

**Landfill** means a *site*\* where *waste*\* is disposed of by burying it, or placing it upon *land*^ or other *waste*\*, but excludes a farm dump.

**Lichenfield** means, for the purposes of Schedule F, an area of vegetation in which the cover of lichens in the *canopy*\* is 20-100% and in which the lichen cover exceeds the cover of any other growth form or bare ground.

**Light fuel oil** means petroleum distillate fuel that is used in liquid fuel-burning equipment and does not require preheating.

**Maintenance** means all actions which have the objective of retaining or restoring a *structure*^, system, facility or installation in or to a state in which it can perform its required function, provided *maintenance*\* actions themselves do not give rise to any significant adverse *effects*^, and where the character, intensity and scale of the adverse *effects*^ of the *structure*^, system, facility or installation remain the same or similar. *Maintenance*\* includes:



- (a) the reconstruction, alteration, removal or demolition of a *structure*^ or part of a *structure*^, system, facility or installation
- (b) trimming and removal of vegetation encroaching on a *structure*^, system, facility or installation
- (c) the erection and removal of a temporary structure<sup>^</sup>, system, facility or installation
- (d) the maintenance of access to a *structure*^, system, facility or installation
- (e) the maintenance of a track\*

**MALF** means the one-day mean annual low flow calculated as the average of the lowest flow of the *river*<sup>^</sup> for each year (1 July to 30 June) of record.

Mana means legitimacy to act in an authoritive and responsible capacity: prestige.

**Mauri** means essential life force or principle; a metaphysical quality inherent in all things, both animate and inanimate.

**Mossfield** means, for the purposes of Schedule F, an area of vegetation in which the cover of mosses in the *canopy*\* is 20-100% and in which the moss cover exceeds the cover of any other growth form or bare ground.

**Natural capital** means the potential animal stocking rate that can be sustained by a legume-based pasture fixing nitrogen biologically, under optimum management and before the introduction of additional technologies. Using the "Attainable Physical Potential" in stock units/ha for each land unit listed in the extended legend of the *LUC*\* worksheets as a proxy for the soil's natural capital, these stocking rates are transformed to pasture production and used in the OVERSEER® nutrient budget model to calculate nitrogen leaching losses under a pastoral use.

**New tracking** means the formation of a new *track\** but excludes:

- (a) the installation of water table drains and cross-*track*\* culverts for an existing *track*\*
- (b) tracking undertaken to link existing *tracks\** or access ways provided the length of linkage tracking is less than 100 m.

**New Zealand Threat Classification System and Lists** means the threat classification systems and threatened species described in any of the following documents:

- (a) de Lange, P.J., Norton, D.A., Heenan, P.B., Courtney, S.P., Molloy, B.P.J., Ogle, C.C., Rance, B.D., Johnson, P.N. & Hitchmough, R. 2004. Threatened and uncommon plants of New Zealand. New Zealand Journal of Botany 42: 45-76.
- (b) Hitchmough, R., Bull, L., Cromarty, P. (comps) 2007. *New Zealand Threat Classification System Lists 2005*. Science and Technical Publishing No. 236. Department of Conservation, Wellington.
- (c) Molloy, J., Bell, B., Clout, M., de Lange, P., Gibbs, G., Given, D., Norton, D., Smith, N., & Stephens, T. 2002. Classifying Species According to Threat of Extinction. Biodiversity Recovery Unit, Department of Conservation, Wellington.
- (d) Townsend, A.J., de Lange, P.J., Duffy, C.A.J., Miskelly, C.M., Molloy, J., Norton, D.A. 2008. *New Zealand Threat Classification System manual*. Science & Technical Publishing. Department of Conservation. Wellington.

Noa means a state of normality or balance.

**Nutrient management plan** means a plan prepared annually in accordance with the Code of Practice for Nutrient Management (NZ Fertiliser Manufacturers"



Research Association 2007) which records (including copies of the OVERSEER® input and output files used to prepare the plan) and takes into account all sources of nutrients for intensive farming and identifies all relevant nutrient management practices and mitigations, and which is prepared by a person who has both a Certificate of Completion in Sustainable Nutrient Management in New Zealand Agriculture and a Certificate of Completion in Advanced Sustainable Nutrient Management from Massey University.

**Occasional** means, for the purposes of Schedule F and this glossary, species that contribute more than *scattered\** species, but less than species which are *common\**, *abundant\** or *dominant\** and are encountered infrequently within the area of interest. This is a measure of the contribution to an area of interest (eg., the same habitat type or forest tier) of a species in relation to other species in the same area, and is not simply a frequency count as both biomass and density of a given species are considered.

**Oil** means petroleum in any form other than gas and includes crude oil, fuel oil sludge, oil refuse and refined oil products (eg., diesel fuel, kerosene, light fuel and motor gasoline).

**Operation** means the use of any *structure*^, system, facility or installation, including ancillary resource use (For the purposes of Chapter 3 only, "ancillary resource use" in this definition excludes the discharge of contaminants and the abstraction of water. This exclusion does not apply to ancillary resource use for the purposes of renewable electricity generation or which is permitted by a rule.).

**Operational plan** means, for the purposes of Chapter 13, an operational plan to minimise any potential adverse *effects*^ on any *rare habitat*\*, *threatened habitat*\* or *at-risk habitat*\* resulting from *forestry*\*. The operational plan must be prepared in accordance with Part 3, take into account the Ecological values in Part 2 Section 5, and comply with the Best Environmental Management Practices in Part 1, of the New Zealand Environmental Code of Practice for Plantation Forestry Version 1. (An operational plan may be included within an Erosion and Sediment Control Plan)

**Outdoor burning** means the burning of materials other than in purpose-built fuel-burning equipment designed to control the combustion process. Outdoor burning includes burning in drums and backyard rubbish incinerators, barbeques, hāngi, umu and outdoor fireplaces.

### Persistent organic pollutants (POP) are organic substances that:

- (a) demonstrate toxic properties
- (b) resist degradation
- (c) bioaccumulate
- (d) can undergo a long-range transfer in air and water^
- (e) have a potential harmful *effect*<sup>^</sup> on health or the *environment*<sup>^</sup> including accumulating in living organisms and the food chain.

Examples include pesticides (such as DDT), industrial chemicals (such as polychlorinated biphenyls - PCBs) and unintentional by-products of industrial processes (such as dioxins and furans).

**Pig farm litter** means a mixture of spent bedding and solids from pig production sheds which produces no liquid loss when squeezed in the hand.

PM<sub>10</sub> means particulate matter that is:

(a) less than 10 microns in aerodynamic diameter



(b) measured in accordance with the United States Code of Federal Regulations, Title 40 – Protection of Environment, Volume 2, Part 50, Appendix J - Reference method for the determination of particulate matter as  $PM_{10}^{*}$  in the atmosphere.

**Podocarp** means, for the purposes of Schedule F, southern hemisphere conifer species which have cones modified into fleshy berry-like structures but do not have flowers. Podocarp species include, but are not limited to, the totara species, matai, miro, kahikatea and rimu.

**Poultry farm litter** means solid poultry manure, bedding and composted material from poultry farm sheds.

**Production forestry** means a *forest\** of selected species of trees that are specifically planted, managed and harvested for the production of timber or other wood-based products, and includes understorey that has established beneath the *canopy\** and areas that are demonstrated to be failed plantings from the previous rotation.

**Property** means one or more adjacent *allotments*<sup>^</sup> that are in the same ownership. A legal *road*<sup>^</sup> is considered a property for the purposes of this Plan.

**Public land** means *land*^ to which the public has free access at the time that an activity is undertaken.

**Public road** means any formed legal *road*<sup>^</sup> that has open public access. It includes both the road area normally used by motor vehicles and cyclists along with adjacent footpaths and any berms and verges not in private ownership.

**Public water supply** means a reticulated publicly or privately owned drinking *water*<sup>^</sup> supply connecting at least two buildings and serving at least 1,500 person days per year (eg., 25 people for at least 60 days per year). Drinking *water*<sup>^</sup> is *water*<sup>^</sup> intended to be used for human consumption, food preparation, utensil washing, oral hygiene or personal hygiene.

**Rāhui** means a social system of prohibition which recognises the tapu state of a resource, or is used as a voluntary device to ensure sensible management of a resource.

**Rare habitat** means an area determined to be a rare habitat in accordance with Schedule F and, for the avoidance of doubt, excludes any area in Table F.2(b).

**Reasonable mixing**, in relation to the *discharge*^ of *contaminants*^ into a *river*^ or an *artificial watercourse*\*, means either:

- (a) a distance downstream of the discharge<sup>^</sup> that is the least of:
  - (i) the distance that equals seven times the width of the *river*^ at the point of *discharge*^ when the flow is at half the median flow, or
  - (ii) 200 metres from the point of *discharge*^ or, for *discharges*^ to artificial watercourses\*, 200 metres from the point of *discharge*^ or the *property*\* boundary, whichever is the greater, or
  - (iii) the point at which mixing of the particular *contaminant*^ concerned has occurred across the full width of the body of *water*^ in the *river*^, *artificial watercourse*\*, or
- (b) a distance for *reasonable mixing*\* determined as appropriate for a consent application where special circumstances apply.

Rohe means tribal district or tribal area.



Rua kōiwi means a site\* where human skeletal remains are traditionally placed.

**Rushland** means, for the purposes of Schedule F, an area of vegetation in which the cover of rushes in the *canopy*\* is 20-100% and in which the rush cover exceeds the cover of any other growth form or bare ground. Rush species include, but are not limited to, some species of *Juncus*, *Apodasmia*, and all species of *Sporadanthus* and *Empodisma*, but exclude tussock rushes.

**Scattered** means, for the purposes of Schedule F and this glossary, species that contribute less than species which are *occasional\**, *common\**, *abundant\** or *dominant\** and can be expected to be encountered infrequently, and with a sparse distribution within the area of interest. This is a measure of the contribution to an area of interest (eg., the same habitat type or forest tier) of a species in relation to other species in the same area, and is not simply a frequency count as both biomass and density of a given species are considered.

**Scree** means, for the purpose of Schedule F, land $^{\wedge}$  in which the area of unconsolidated bare rock particles (ranging in size from gravel to cobbles, i.e. from 2 – 200 mm) exceeds the area covered by any one other substrate, bare ground, or growth form.

**Scrub** means, for the purposes of Schedule F and this glossary, an area of woody vegetation in which the cover of *trees\** and *shrubs\** in the *canopy\** is greater than 80% and in which the *shrub\** cover exceeds that of *trees\**.

**Sea level rise** is the net rise in sea level relative to the *land*<sup>^</sup> of the Region.

Seawater Management Zone (see Water Management Zone\*).

**Sedgeland** means, for the purposes of Schedule F, an area of vegetation in which the cover of sedges in the *canopy\** is 20-100% and in which the sedge cover exceeds that of any other growth form or bare ground. Sedge species include, but are not limited to, many species of *Carex*, *Uncinia* and *Bolboschoenus*. Tussock-sedges and reed forming sedges are excluded from this definition of sedgeland.

**Shrub** means, for the purposes of Schedule F and this glossary, a woody plant less than 10 cm diameter at 1.4 m above ground.

**Shrubland** means, for the purposes of Schedule F and this glossary, an area of woody vegetation in which the cover of *shrubs*\* in the *canopy*\* is 20-80% and in which the *shrub*\* cover exceeds the cover of any other growth form or bare ground.

**Site** includes, where in the context it is appropriate, an area or place or *river*<sup>^</sup> reach.

**Slash** means any discarded vegetation resulting from *forestry\** pruning, thinning, clearing understorey, or harvesting.

**Slope** is the angle from horizontal and is measured in degrees to an accuracy no less than that achieved by a hand-held inclinometer or abney level.

**Solid fuel** means a solid substance that releases useable energy when burnt (eg., wood and coal).

**Solid waste** means the combination of domestic, industrial and commercial waste\* and is also known as community waste\*.



**Spray drift** means the airborne movement of any sprayed *agrichemical*\* as vapour, aerosol or droplets onto non-target areas.

**Supplementary water^ allocation take** means, in relation to the taking of water^ from a river^, a take granted consent in accordance with Policy 5-17 or any preceding supplementary water^ allocation regime.

**Taonga** means all things prized or treasured, both tangible and intangible.

**Threatened habitat** means an area determined to be a threatened habitat in accordance with Schedule F and, for the avoidance of doubt, excludes any area in Table F.2(b).

**Track** means a formed route for the movement of people, animals or vehicles and includes a *road*^ but excludes any route formed solely by the walking of people or animals.

**Treated timber** means timber treated with preservatives, including boron compounds (except 2-thiocyanomethylthiobenzothiazole (TCMTB) compounds), copper chromium arsenic (CCA), or creosote, but not including timber treated only with anti-sapstain compounds.

**Tree** means, for the purposes of Schedule F and this glossary, a woody plant with a diameter of 10 cm or greater at 1.4 m above ground and includes a tree fern with a diameter of 10 cm or greater at 1.4 m above ground.

**Treeland** means, for the purposes of Schedule F and this glossary, an area of vegetation in which the cover of *trees\** in the *canopy\** is 20-80%, with *tree\** cover exceeding the cover of any other growth form, and in which the *trees\** form a *discontinuous\** upper canopy above either a lower canopy of predominantly non-woody vegetation or bare ground. *Treeland\** excludes orchard trees. (Note: An area of vegetation consisting of *trees\** above *shrubs\** is classified as either *forest\** or *scrub\** depending on the proportion of *trees\** and *shrubs\** in the *canopy\**).

**Tussockland** means, for the purposes of Schedule F and this glossary, an area of vegetation in which the cover of tussocks in the *canopy*\* is 20-100% and in which the tussock cover exceeds the cover of any other growth form or bare ground. Tussocks include all grasses, sedges, rushes and other herbaceous plants with linear leaves (or linear non-woody stems) that are densely clumped and are greater than 10 cm in height. This includes, but is not limited to, all species of *Cortaderia, Gahnia* and *Phormium* (see also *Flaxland*\*) and some species of *Chinochloa, Poa, Festuca, Rytidosperma, Cyperus, Carex, Uncinia, Juncus, Astelia, Aciphylla* and *Celmisia*.

#### Untreated human effluent means sewage which:

- (a) has undergone no treatment; or
- (b) has only undergone changes to its physical properties as a result of:
  - (i) screening, including milliscreening;
  - (ii) comminution;
  - (iii) grit removal;
  - (iv) settlement; or
  - (v) any combination of the above.

**Untreated wood** means any wood material or product, including sawdust, which is not treated with copper chromium arsenic (CCA) (or "tanalised"), or with any organochlorine preservative.



**Upgrade** means bringing a *structure*^, system, facility or installation up to date or to improve its functional characteristics, provided the upgrading itself does not give rise to any significant adverse *effects*^, and the character, intensity and scale of any adverse *effects*^ of the upgraded *structure*^, system, facility or installation remain the same or similar.

**Vegetation clearance** means the cutting, crushing, spraying, burning, or other means of removal or destruction of vegetation, including indigenous and exotic plants (including trees). **Land disturbance** means the disturbance of the *land*^ surface by any means including by blading, blasting, contouring, cutting of batters, filling, excavating, ripping, root raking, recontouring, or moving or removing soil or earth. *Vegetation clearance\** and *land disturbance\** excludes:

- (a) cultivation\*
- (b) forestry\*
- (c) clearance or disturbance by animals including grazing
- (d) activities undertaken for the sole purpose of establishing a fence line and not located within a *rare habitat\**, *threatened habitat\** or *at-risk habitat\**
- (e) the *maintenance*\* or *upgrade*\* of existing *tracks*\*, *structures*^ (including fences) or *infrastructure*^
- (f) maintaining shelterbelts (including cutting of shelterbelt roots)
- (g) activities associated with fruit tree or fruit vine plantations
- (h) activities undertaken for the purpose of protecting, maintaining or enhancing areas of *rare habitat\**, *threatened habitat\** or *at-risk habitat\**
- clearance of vegetation that is fallen or dead and not located within a rare habitat\*, threatened habitat\* or at-risk habitat\* that is forest\* or scrub\* in Schedule F
- (j) activities undertaken within the boundaries of any area of land^ held or managed under the Conservation Act 1987 or any other Act specified in Schedule 1 to that Act (other than land^ held for administrative purposes) that are consistent with a conservation management strategy, conservation management plan, or management plan established under the Conservation Act 1987 or any other Act specified in Schedule 1 to that Act
- (k) activities undertaken within the boundaries of the New Zealand Defence Force Waiouru Military Training Area, provided that those activities are undertaken in accordance with a management plan that has the same or similar outcome as an *Erosion and Sediment Control Plan\**
- (I) clearance of thistles, ring ferns, carpet ferns, rushes, ink weed, briar rose, barberry, introduced pampas grass (other than toetoe), mingimingi, wilding pinus species, Japanese poplar, Japanese walnut and pest plants referred to in the Regional Council's Regional Pest Plant Management Strategy.

**Vertebrate pest control product** means any substance, whether inorganic, human-made or naturally occurring, modified or in its original state, that is used to eradicate, modify or control vertebrate animals, including possums, rats and mustelids. It includes vertebrate toxic agents as identified and regulated under the Hazardous Substances and New Organisms Act 1996.

**Wāhi tapu** means a *site*\* sacred to Māori in the traditional, spiritual, religious, ritual, or mythological sense and includes *rua kōiwi*\*.

**Wāhi tūpuna** means a *site*\* of cultural and historical significance to  $hap\bar{u}^*$  or  $iwi^*$  – though not necessarily in a state of tapu.

**Waste** means any material, solid, liquid or gas that is unwanted or unvalued and discarded or discharged.



Water Management Sub-zone or Sub-zone (WMSZ) means a Water Management Sub-zone as described in Schedules A or I.

**Water Management Zone** means a Water Management Zone as described in Schedule A or the Seawater Management Zone as described in Schedule I.

**Water quality target** means an objective or result for water quality towards which efforts are directed. The word "target" in the One Plan does not have the same meaning ascribed to it by the National Policy Statement for Freshwater Management 2011.

**Wet abrasive blasting** means *abrasive blasting\** when *water*^ or a mixture of abrasive and *water*^ is added to the airflow carrying the abrasive material prior to the blasting nozzle exit, or when the blasting medium is predominantly a pressurised slurry.

Whānau means family or extended family.

Whenua means land.

**Whitebait** means the assemblage of juvenile indigenous fish which migrate into *river*^ systems from the sea, generally during spring. This assemblage can include juvenile inanga, shortjaw kokopu, giant kokopu, banded kokopu, koaro and occasionally common smelt.

**Woodburner** means a domestic heating appliance that burns wood, but does not include:

- (a) an open fire
- (b) a multi-fuel heater, a pellet heater, or a coal burning heater
- (c) a stove that is designed and used for cooking and is heated by burning wood.

Woody vegetation means perennial vegetation that has hard lignified tissues.



Schedule A:
Surface Water Management Zones
and Sub-zones

# Schedule A: Surface Water Management Zones\* and Sub-zones\*

Schedule A is a component of Part II - the Regional Plan.

## SCHEDULE A WATER MANAGEMENT ZONE\* AND SUB-ZONE\* INDEX:

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Figure A:1 Surface Water Management Zones\* in the Region (refer to Table A.1 for details)





Table A.1: Surface Wat	er Management Zones* in th	e Region
Parent Catchment	Surface Water Management Zone* Code	Surface Water Management Zone* Name
	Mana 1	Upper Manawatu
	Mana 2	Weber-Tamaki
	Mana 3	Upper Tamaki
	Mana 4	Upper Kumeti
	Mana 5	Tamaki-Hopelands
	Mana_6	Hopelands-Tiraumea
Manawatu	Mana_7	Tiraumea
	Mana_8	Mangatainoka
	Mana_9	Upper Gorge
	Mana_10	Middle Manawatu
	Mana_11	Lower Manawatu
	Mana_12	Oroua
	Mana_13	Coastal Manawatu
	Rang_1	Upper Rangitikei
Rangitikei	Rang_2	Middle Rangitikei
	Rang_3	Lower Rangitikei
	Rang_4	Coastal Rangitikei
	Whai_1	Upper Whanganui
	Whai_2	Cherry Grove
	Whai_3	Te Maire
Whanganui	Whai_4	Middle Whanganui
mangana	Whai_5	Pipiriki
	Whai_6	Paetawa
	Whai_7	Lower Whanganui
	Whau_1	Upper Whangaehu
Whangashu	Whau_2	Middle Whangaehu
Whangaehu	Whau_3	Lower Whangaehu
	Whau_4	Coastal Whangaehu
Turakina	Tura_1	Turakina
Ohau	Ohau_1	Ohau
Owahanga	Owha_1	Owahanga
East Coast	East_1	East Coast
Akitio	Akit_1	Akitio
West Coast	West_1	Northern Coastal
	West_2	Kai lwi
	West_3	Mowhanau
	West_4	Kaitoke Lakes
	West_5	Southern Whanganui Lakes
	West_6	Northern Manawatu Lakes
	West_7	Waitarere
	West_8	Lake Papaitonga
	West_9	Waikawa
Lake Horowhenua	Hoki_1	Lake Horowhenua





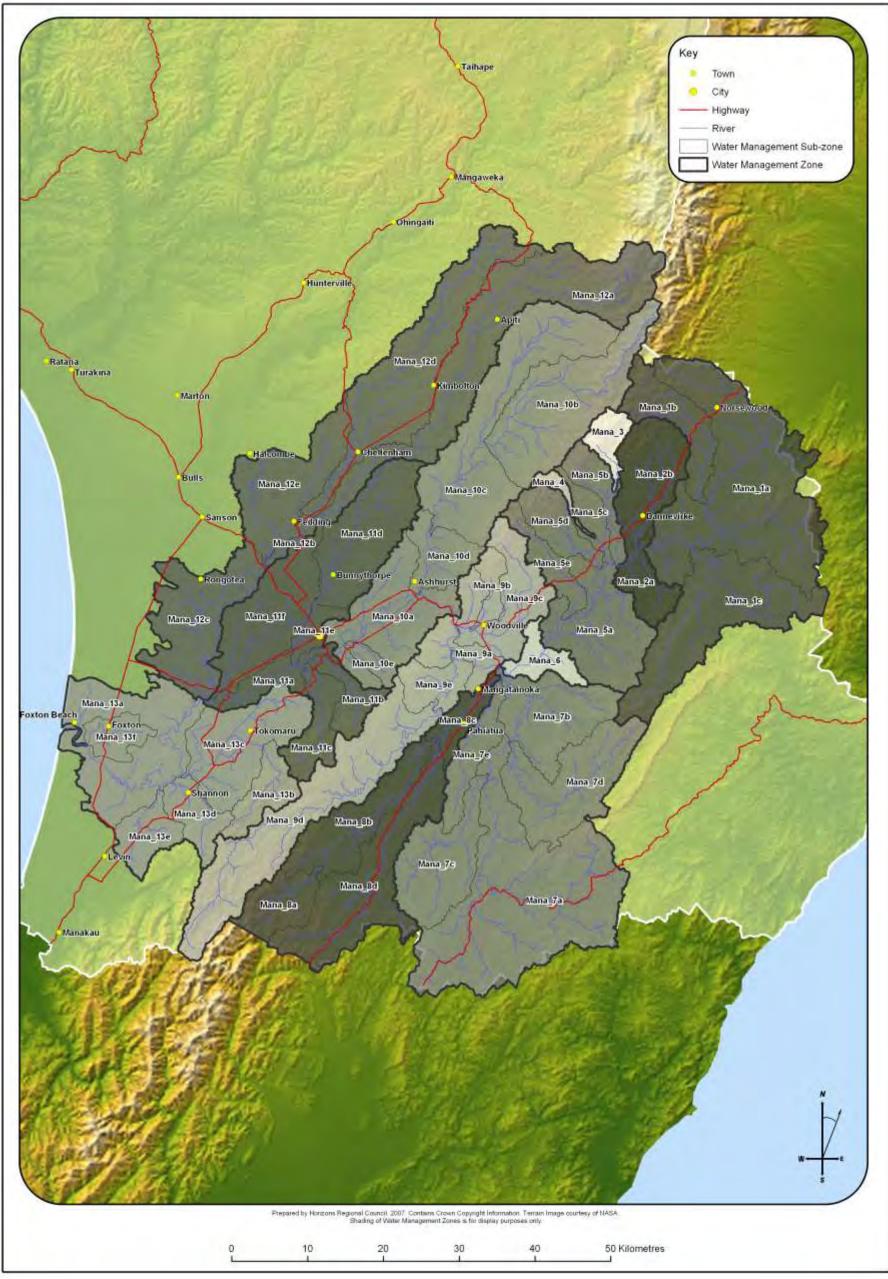


Figure A:2 Manawatu Catchment - Surface Water Management Zones\* and Sub-zones\* (refer to Table A.2 for details)





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Table A.2: Description of Manawatu Catchment Surface Water Management Zones\* and Sub-zones\*

Water Management Zone*	Sub-zone*	Sub-zone* Description1
	Upper Manawatu (Mana_1a)	Manawatu River from Weber Road at approx. NZMS 260 U23:751-027 to source
Upper Manawatu (Mana_1)	Mangatewainui (Mana_1b)	Mangatewainui River from Manawatu River confluence at approx. NZMS 260 U23:829-086 to source
	Mangatoro (Mana_1c)	Mangatoro Stream from Manawatu River confluence at approx. NZMS 260 U23:810-027 to source
Weber-Tamaki	Weber-Tamaki (Mana_2a)	Manawatu River from Tamaki River confluence at approx. NZMS 260 U23:709-003 to Weber Road at approx. NZMS 260 U23:751-027
(Mana_2)	Mangatera (Mana_2b)	Mangatera Stream from Manawatu River confluence at approx. NZMS 260 U23:737-025 to source
Upper Tamaki (Mana_3)	Upper Tamaki (Mana_3)	Tamaki River from water supply weir at approx. NZMS 260 U23:709-111 to source
Upper Kumeti (Mana_4)	Upper Kumeti (Mana_4)	Kumeti Stream from Te Rehunga flow recorder at approx. NZMS 260 T23:663-052 to source
	Tamaki-Hopelands (Mana_5a)	Manawatu River from Hopelands at approx. NZMS 260 T24:616-899 to Tamaki River confluence at approx. NZMS 260 U23:709-003
	Lower Tamaki (Mana_5b)	Tamaki River from Manawatu River confluence at approx. NZMS 260 U23:709-002 to water supply weir at approx. NZMS 260 U23:709-111
Tamaki-Hopelands (Mana_5)	Lower Kumeti (Mana_5c)	Kumeti Stream from Manawatu River confluence at approx. NZMS 260 U23:701-006 to Te Rehunga flow recorder at approx. NZMS 260 T23:663-052
	Oruakeretaki (Mana_5d)	Oruakeretaki Stream from Manawatu River confluence at approx. NZMS 260 T23:690-000 to source
	Raparapawai (Mana_5e)	Raparapawai Stream from Manawatu River confluence at approx. NZMS 260 T24:643-932 to source
Hopelands-Tiraumea (Mana_6)	Hopelands-Tiraumea (Mana_6)	Manawatu River from Tiraumea River confluence at approx. NZMS 260 T24:553-870 to Hopelands at approx. NZMS 260 T24: 616-899
	Upper Tiraumea (Mana_7a)	Tiraumea River from Makuri River confluence at approx. NZMS 260 T24:578-780 to source
Tiraumea	Lower Tiraumea (Mana_7b)	Tiraumea River from Manawatu River confluence at approx. NZMS 260 T24:555-870 to Makuri River confluence at approx. NZMS 260 T24:578-780
(Mana_7)	Mangaone River (Mana_7c)	Mangaone River from Tiraumea River confluence at approx. NZMS 260 T24:541-730 to source
	Makuri (Mana_7d)	Makuri River from Tiraumea River confluence at approx. NZMS 260 T24:568-771 to source

1 Includes all inflowing tributaries and surrounding catchment area unless otherwise specified.



Water Management Zone*	Sub-zone*	Sub-zone* Description1
	Mangaramarama (Mana 7e)	Mangaramarama Creek from Tiraumea River confluence at approx. NZMS 260 T24:559-854 to source
	Upper Mangatainoka (Mana_8a)	Mangatainoka River from Larsons Road at approx. NZMS 260 T25:308-595 to source
Mangatainoka	Middle Mangatainoka (Mana_8b)	Mangatainoka River from Makakahi River confluence at approx. NZMS 260 T24:475-775 to Larsons Road at approx. NZMS 260 T25:308-595
(Mana_8)	Lower Mangatainoka (Mana_8c)	Mangatainoka River from Tiraumea River confluence at approx. NZMS 260 T24:577-854 to Makakahi River confluence at approx. NZMS 260 T24:475-775
	Makakahi (Mana_8d)	Makakahi River from Mangatainoka River confluence at approx. NZMS 260 T24:475-775 to source
	Upper Gorge (Mana_9a)	Manawatu River from Upper Gorge at approx. NZMS 260 T24:494-933 to Tiraumea River confluence at approx. NZMS 260 T24:553-870
	Mangapapa (Mana_9b)	Mangapapa Stream from Mangaatua Stream confluence at approx. NZMS 260 T24:515-922 to source
Upper Gorge (Mana_9)	Mangaatua (Mana_9c)	Mangaatua Stream from Manawatu River confluence at approx. NZMS 260 T24:496-925 to source
, _,	Upper Mangahao (Mana_9d)	Mangahao River from Ballance at approx. NZMS 260 T24:468-818 to source
	Lower Mangahao (Mana_9e)	Mangahao River from Manawatu River confluence at approx. NZMS 260 T24:496-891 to Ballance at approx. NZMS 260 T24:468-818
	Middle Manawatu (Mana_10a)	Manawatu River from Teachers College at approx.  NZMS 260 T24:331-892 to Upper Gorge at approx. NZMS 260 T24:494-933
	Upper Pohangina (Mana_10b)	Pohangina River from Totara Reserve at approx. NZMS 260 T23:534-167 to source
Middle Manawatu (Mana_10)	Middle Pohangina (Mana_10c)	Pohangina River from Mais Reach at approx. NZMS 260 T23:467-053 to Totara Reserve at approx. NZMS 260 T23:534-167
	Lower Pohangina (Mana_10d)	Pohangina River from Manawatu River confluence at approx. NZMS 260 T24:450-966 to Mais Reach at approx. NZMS 260 T23:467-053
	Aokautere (Mana_10e)	Aokautere Stream from Manawatu River confluence at approx. NZMS 260 T24:349-899 to source
	Lower Manawatu (Mana_11a)	Manawatu River from Oroua River confluence at approx. NZMS 260 S24:167-826 to Teachers College at approx. NZMS 260 T24:331-892
	Turitea (Mana_11b)	Turitea Stream from Manawatu River confluence at approx. NZMS 260 T24:304-881 to source
Lower Manawatu (Mana_11)	Kahuterawa (Mana_11c)	Kahuterawa Stream from Manawatu River confluence at approx. NZMS 260 S24:292-876 to source
	Upper Mangaone Stream (Mana_11d)	Mangaone Stream from Milson Line at approx. NZMS 260 T24:311-953 to source
	Lower Mangaone Stream (Mana_11e)	Mangaone Stream from Manawatu River confluence at approx. NZMS 260 S24:283-872 to Milson Line at approx. NZMS 260 T24:311-953



Water Management Zone*	Sub-zone*	Sub-zone* Description <sup>1</sup>
	Main Drain (Mana_11f)	Main Drain catchment (including Taonui Stream) from Manawatu River confluence at approx. NZMS 260 S24:181-836 to source
	Upper Oroua (Mana_12a)	Oroua River from Almadale at approx. NZMS 260 T23:365-113 to source
	Middle Oroua (Mana_12b)	Oroua River from Awahuri Bridge at approx. NZMS 260 S23:243-002 to Almadale at approx. NZMS 260 T23:365-113
Oroua (Mana_12)	Lower Oroua (Mana_12c)	Oroua River from Manawatu River confluence at approx. NZMS 260 S24:167-826 to Awahuri Bridge at approx. NZMS 260 S23:243-002
	Kiwitea (Mana_12d)	Kiwitea Stream from Oroua River confluence at approx. NZMS 260 T23:309-066 to source
	Makino (Mana_12e)	Makino Stream from Oroua River confluence at approx. NZMS 260 S23:243-004 to source
	Coastal Manawatu (Mana_13a)	Manawatu River at approx. NZMS 260 S24:977-788 to Oroua River confluence at approx. NZMS 260 S24:167-826 (excluding the mainstem of the Manawatu River from the cross-river CMA boundary at NZMS 260 S24:2700963-6076686 seawards)
	Upper Tokomaru (Mana_13b)	Tokomaru River from Horseshoe Bend at approx. NZMS 260 S24:241-768 to source
Coastal Manawatu (Mana 13)	Lower Tokomaru (Mana_13c)	Tokomaru River from Manawatu River confluence at approx. NZMS 260 S24:134-727 to Horseshoe Bend at approx. NZMS 260 S24:241-768
(Malia_13)	Mangaore (Mana_13d)	Mangaore River from Manawatu River confluence at approx. NZMS 260 S24:123-717 to source
	Koputaroa (Mana_13e)	Koputaroa Stream from Manawatu River confluence at approx. NZMS 260 S24:106-708 to source
	Foxton Loop (Mana_13f)	Manawatu River from downstream limit of Whirikino Cut at approx. NZMS 260 S24:010-769 to SH1





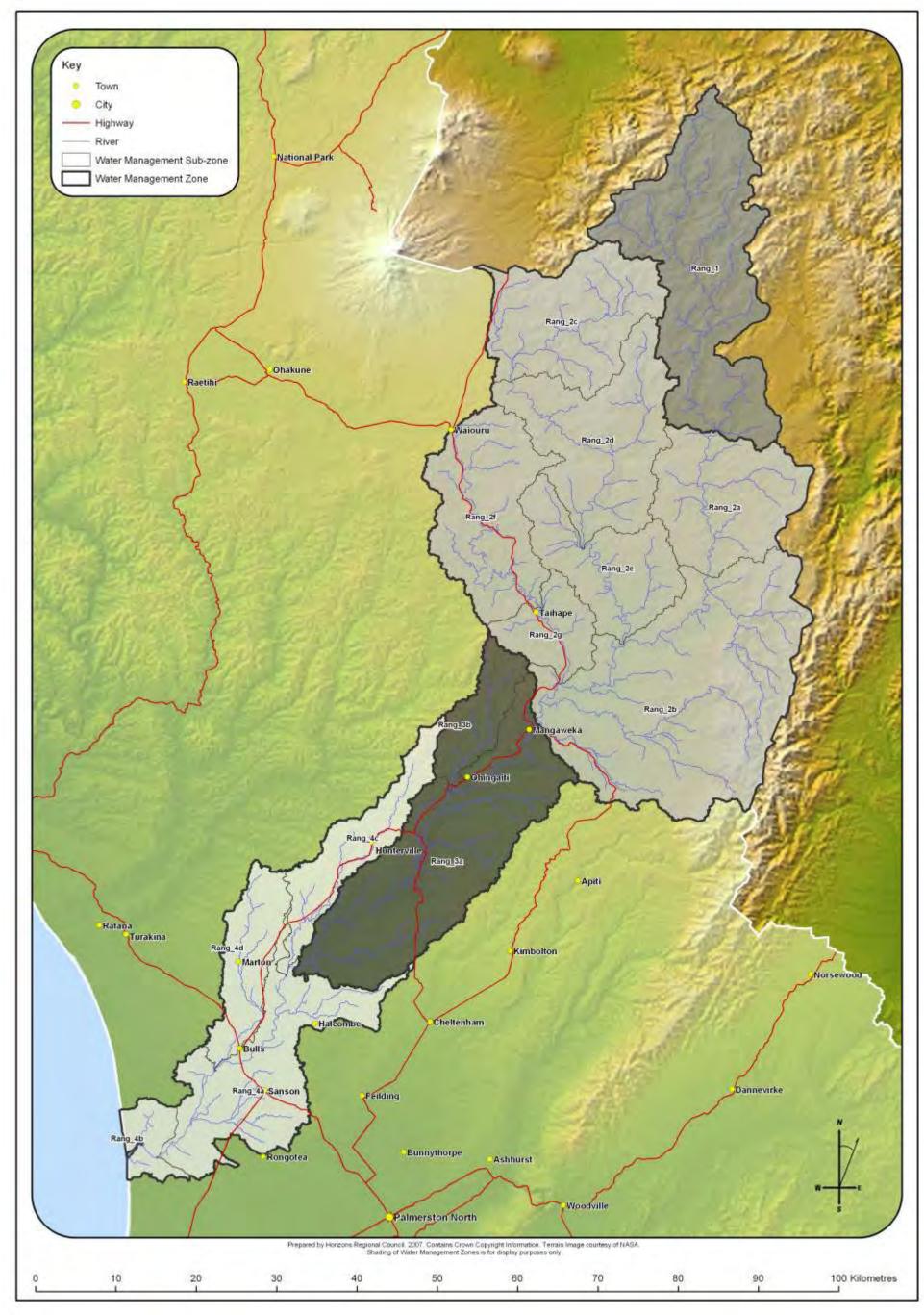


Figure A:3 Rangitikei Catchment - Surface Water Management Zones\* and Sub-zones\* (refer to Table A.3 for details)





Table A.3: Description of Rangitikei Catchmo	ent Surface Water Management Zones	s* and Sub-zones*
Water Management Zone*	Sub-zone*	Sub-zone* Description1
Upper Rangitikei (Rang_1)	Upper Rangitikei (Rang_1)	Rangitikei River from Makahikatoa Stream at approx. NZMS 260 U21:726-888 to source
	Middle Rangitikei (Rang_2a)	Rangitikei River from Pukeokahu at approx. NZMS 260 U21:713-708 to Makahikatoa Stream at approx. NZMS 260 U21:726-888
	Pukeokahu – Mangaweka (Rang_2b)	Rangitikei River from Mangaweka at approx. NZMS 260 T22:504-513 to Pukeokahu at approx. NZMS 260 U21:713-708
	Upper Moawhango (Rang_2c)	Moawhango River from Moawhango Dam at approx. NZMS 260 T20:469-960 to source
Middle Rangitikei (Rang_2)	Middle Moawhango (Rang_2d)	Moawhango River from Moawhango Township at approx. NZMS 260 T21:557-745 to Moawhango Dam at approx. NZMS 260 T20:469-960
	Lower Moawhango (Rang_2e)	Moawhango River from Rangitikei River confluence at approx. NZMS 260 T21:609-623 to Moawhango Township at approx. NZMS 260 T21:557-745
	Upper Hautapu (Rang_2f)	Hautapu River from Taihape at approx. NZMS 260 T21:506-670 to source
	Lower Hautapu (Rang_2g)	Hautapu River from Rangitikei River confluence at approx. NZMS 260 T22:529-574 to Taihape at approx. NZMS 260 T21:506-670
Lower Rangitikei	Lower Rangitikei (Rang_3a)	Rangitikei River from Onepuhi at approx. NZMS 260 S23:201-222 to Mangaweka at approx. NZMS 260 T22:504-513
(Rang_3)	Makohine (Rang_3b)	Makohine Stream from Rangitikei River confluence at approx. NZMS 260 T22:400-443 to source
	Coastal Rangitikei (Rang_4a)	Rangitikei River from McKelvies at approx. NZMS 260 S24:033-985 to Onepuhi at approx. NZMS 260 S23:201-222
Coastal Rangitikei (Rang_4)	Tidal Rangitikei (Rang_4b)	Rangitikei River at approx. NZMS 260 S24:991-984 to McKelvies at approx.  NZMS 260 S24:033-985 (excluding the mainstem of the Rangitikei River from the cross-river CMA boundary at NZMS 260 S23:2700960-6100119 seawards)
	Porewa (Rang_4c)	Porewa Stream from Rangitikei River confluence at approx. NZMS 260 S23:190-212 to source
	Tutaenui (Rang_4d)	Tutaenui Stream from Rangitikei River confluence at approx. NZMS 260 S23:101-095 to source

<sup>1</sup> Includes all inflowing tributaries and surrounding catchment area unless otherwise specified.





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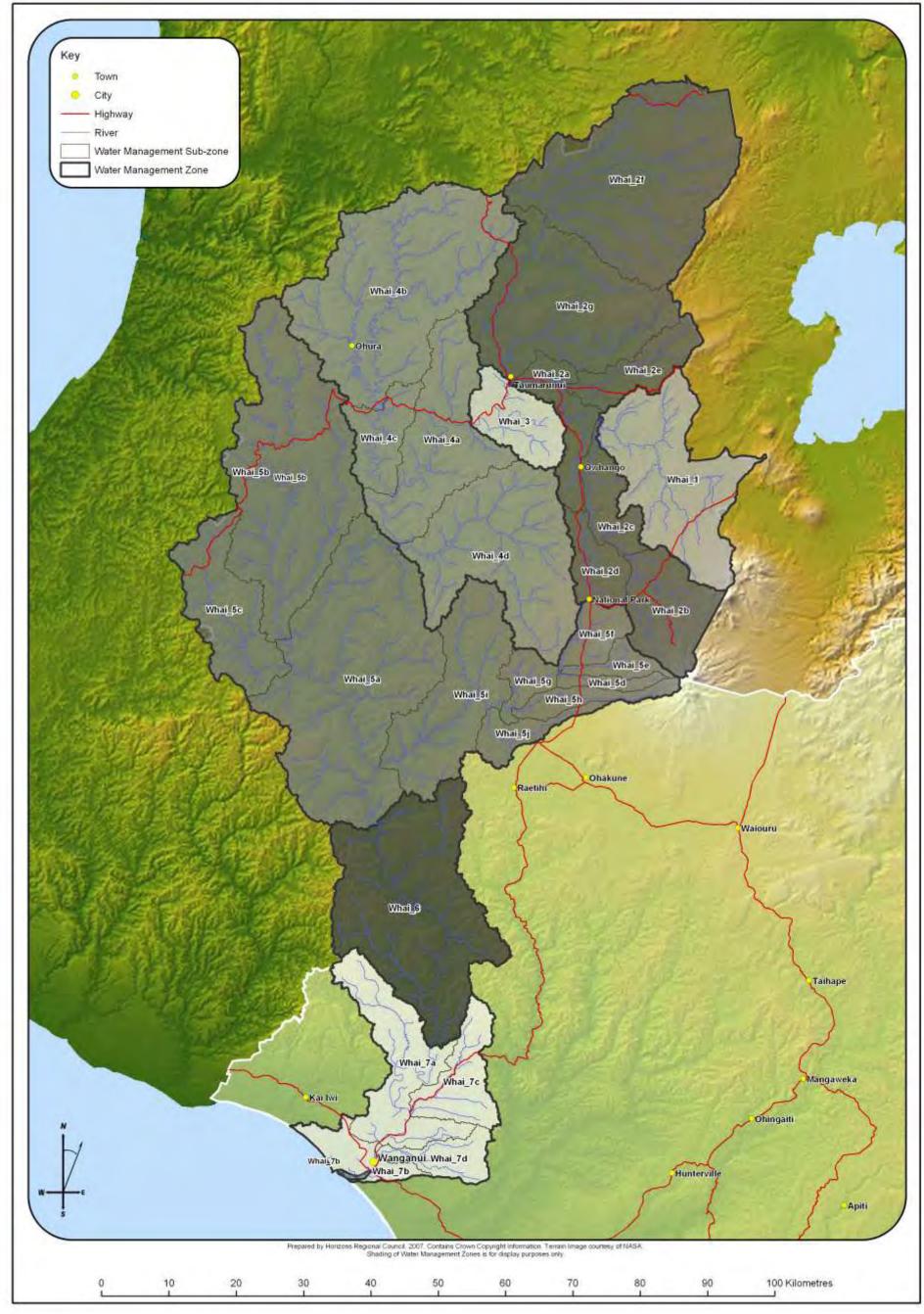


Figure A:4 Whanganui Catchment - Surface Water Management Zones\* and Sub-zones\* (refer to Table A.4 for details)





Water Management Zone*	Sub-zone*	Sub-zone* Description <sup>3</sup>
Upper Whanganui (Whai 1)	Upper Whanganui (Whai 1)	Whanganui River from Whakapapa River confluence at approx. NZMS 260 S19:189-499 to source
Cherry Grove (Whai_2)	Cherry Grove (Whai_2a)	Whanganui River from Cherry Grove at approx. NZMS 260 S18:057-545 to Whakapapa River confluence at approx. NZMS 260 S19:189-499
	Upper Whakapapa (Whai_2b)	Whakapapa River from Footbridge at approx. NZMS 260 S19:226-293 to source
	Lower Whakapapa (Whai_2c)	Whakapapa River from Whanganui River confluence at approx. NZMS 260 S19:189-499 to Footbridge at approx. NZMS 260 S19:226-293
	Piopiotea (Whai_2d)	Piopiotea Stream from Whakapapa River confluence at approx. NZMS 260 S19:174-356 to source
	Pungapunga (Whai_2e)	Pungapunga River from Whanganui River confluence at approx. NZMS 260 S18:124-546 to source
	Upper Ongarue (Whai_2f)	Ongarue River from Waihuka Stream confluence at approx. NZMS 260 S18:108-785 to source
	Lower Ongarue (Whai_2g)	Ongarue River from Whanganui River confluence at approx. NZMS 260 S18:056-547 to Waihuka Stream confluence approx. NZMS 260 S18:108-785
Te Maire	Te Maire	Whanganui River from Te Maire at approx. NZMS 260 S19:998-490 to Cherry Grove at
(Whai_3)	(Whai_3)	approx. NZMS 260 S18:057-545
	Middle Whanganui (Whai_4a)	Whanganui River from Retaruke River confluence at approx. NZMS 260 R19:886-306 to Te Maire at approx. NZMS 260 S19:998-490
Middle Whanganui	Upper Ohura (Whai_4b)	Ohura River from Tokorima at approx. NZMS 260 R18:863-521 to source
(Whai_4)	Lower Ohura (Whai_4c)	Ohura River from Whanganui River confluence at approx. NZMS 260 R19:887-386 to Tokorima at approx. NZMS 260 R18:863-521
	Retaruke (Whai_4d)	Retaruke River from Whanganui River confluence at approx. NZMS 260 R19:890-309 to source
Pipiriki (Whai_5)	Pipiriki (Whai_5a)	Whanganui River from Pipiriki at approx. NZMS 260 R21:859-897 to Retaruke River confluence at approx. NZMS 260 R19: 886-306
	Tangarakau (Whai_5b)	Tangarakau River from Whanganui River confluence at approx. NZMS 260 R20:714-175 to source
	Whangamomona (Whai_5c)	Whangamomona River from Whanganui River confluence at approx. NZMS 260 R20:731-130 to source
	Upper Manganui o te Ao (Whai 5d)	Manganui o te Ao River from Makatote River confluence at approx. NZMS 260 S20:129-120 to source

<sup>&</sup>lt;sup>3</sup> Includes all inflowing tributaries and surrounding catchment area unless otherwise specified.



Water Management Zone*	Sub-zone*	Sub-zone* Description <sup>3</sup>
	Makatote (Whai_5e)	Makatote River from Manganui o te Ao River confluence at approx. NZMS 260 S20:129-120 to source
	Waimarino (Whai_5f)	Waimarino Stream from Makatote River confluence at approx. NZMS 260 S20:129-120 to source
	Middle Manganui o te Ao (Whai_5g)	Manganui o te Ao River from Hoihenga Road at approx. NZMS 260 S20:047-077 to Makatote River confluence at approx. NZMS 260 S20:129-120
	Mangaturuturu (Whai_5h)	Mangaturuturu River from Manganui o te Ao River confluence at approx. NZMS 260 S20:057-067 to source
	Lower Manganui o te Ao (Whai_5i)	Manganui o te Ao River from Whanganui River confluence at approx. NZMS 260 R20:861-979 to Hoihenga Road at approx. NZMS 260 S20:047-077
	Orautoha (Whai_5j)	Orautoha Stream from Manganui o te Ao River confluence at approx. NZMS 260 S20:026-067 to source
Paetawa (Whai_6)	Paetawa (Whai_6)	Whanganui River from Paetawa at approx. NZMS 260 S22:937-566 to Pipiriki at approx. NZMS 260 R21:859-897
	Lower Whanganui (Whai_7a)	Whanganui River from Aramoho Bridge at approx. NZMS 260 R22:858-420 to Paetawa at approx. NZMS 260 S22:937-566
Lower Whanganui	Coastal Whanganui (Whai_7b)	Whanganui River at approx. NZMS 260 R22:797-328 to Aramoho Bridge at approx. NZMS 260 R22:858-420 (excluding the mainstem of the Whanganui River from the cross-river CMA boundary at NZMS 260 R22:2684857-6138015 seawards)
(Whai_7)	Upokongaro (Whai_7c)	Upokongaro River from Whanganui River confluence at approx. NZMS 260 S22:908-463 to source
	Matarawa (Whai_7d)	Matarawa River from Whanganui River confluence at approx. NZMS 260 R22:857-403 to source



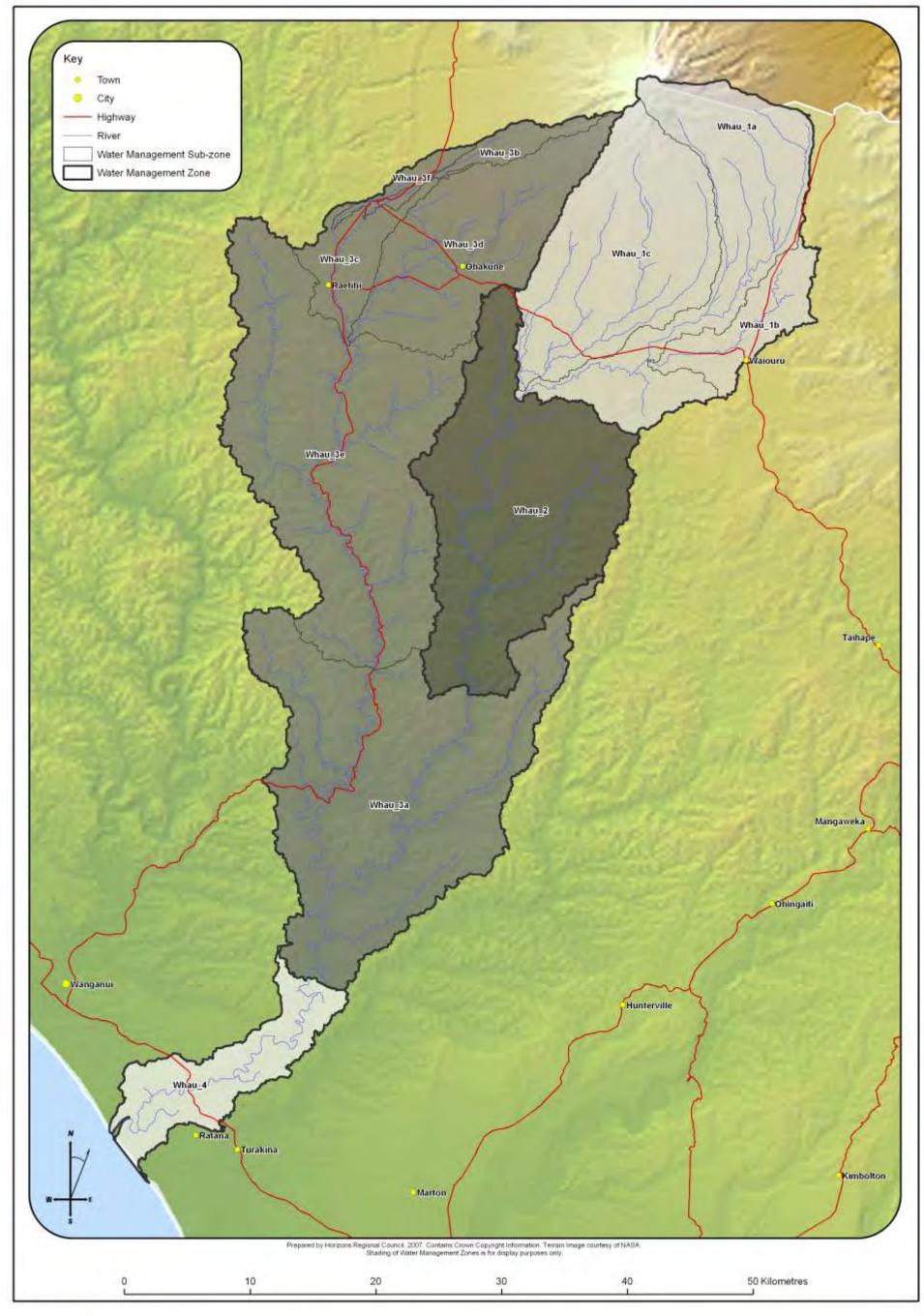


Figure A:5 Whangaehu Catchment - Surface Water Management Zones\* and Sub-zones\* (refer to Table A.5 for details)





Table A.5: Description of Whangaehu Catchmo	ent Surface <i>Water Management Zones</i> * and S	Sub-zones*
Water Management Zone*	Sub-zone*	Sub-zone* Description1
	Upper Whangaehu (Whau_1a)	Whangaehu River from Karioi at approx. NZMS 260 S21:218-864 to source
Upper Whangaehu (Whau_1)	Waitangi (Whau_1b)	Waitangi Stream from Whangaehu River confluence at approx. NZMS 260 T21:316-888 to source
	Tokiahuru (Whau_1c)	Tokiahuru Stream from Whangaehu River confluence at approx. NZMS 260 S21:219-865 to source
Middle Whangaehu (Whau_2)	Middle Whangaehu (Whau_2)	Whangaehu River from Aranui at approx. NZMS 260 S21:175-627 to Karioi at approx. NZMS 260 S21:218-864
	Lower Whangaehu (Whau_3a)	Whangaehu River from Kauangaroa at approx. NZMS 260 S22:045-397 to Aranui at approx. NZMS 260 S21:175-627 (including the Mangawhero River from Whangaehu River confluence to Raupiu Road at approx. NZMS 260 S21:099-646)
	Upper Makotuku (Whau_3b)	Makotuku River from water supply weir at approx. NZMS 260 S20:103-011 to source
Lower Whangaehu (Whau 3)	Lower Makotuku (Whau_3c)	Makotuku River from Mangawhero River confluence at approx. NZMS 260 S20:080-903 to water supply weir at approx. NZMS 260 S20:103-011
(wildu_5)	Upper Mangawhero (Whau_3d)	Mangawhero River from Makotuku River confluence at approx. NZMS 260 S20:080-903 to source
	Lower Mangawhero (Whau_3e)	Mangawhero River from Raupiu Road at approx. NZMS 260 S21:099-646 to Makotuku River confluence at approx. NZMS 260 S20:080-903
	Makara (Whau_3f)	Makara Stream from unnamed tributary confluence at approx. NZMS 260 S20:065-992 to source
Coastal Whangaehu (Whau_4)	Coastal Whangaehu (Whau_4)	Whangaehu River at approx. NZMS 260 R23:890-275 to Kauangaroa at approx. NZMS 260 S22:045-397 (excluding the mainstem of the Whangaehu River from the cross-river CMA boundary at NZMS 260 S23:2690359-6128748 seawards)

<sup>1</sup> Includes all inflowing tributaries and surrounding catchment area unless otherwise specified.





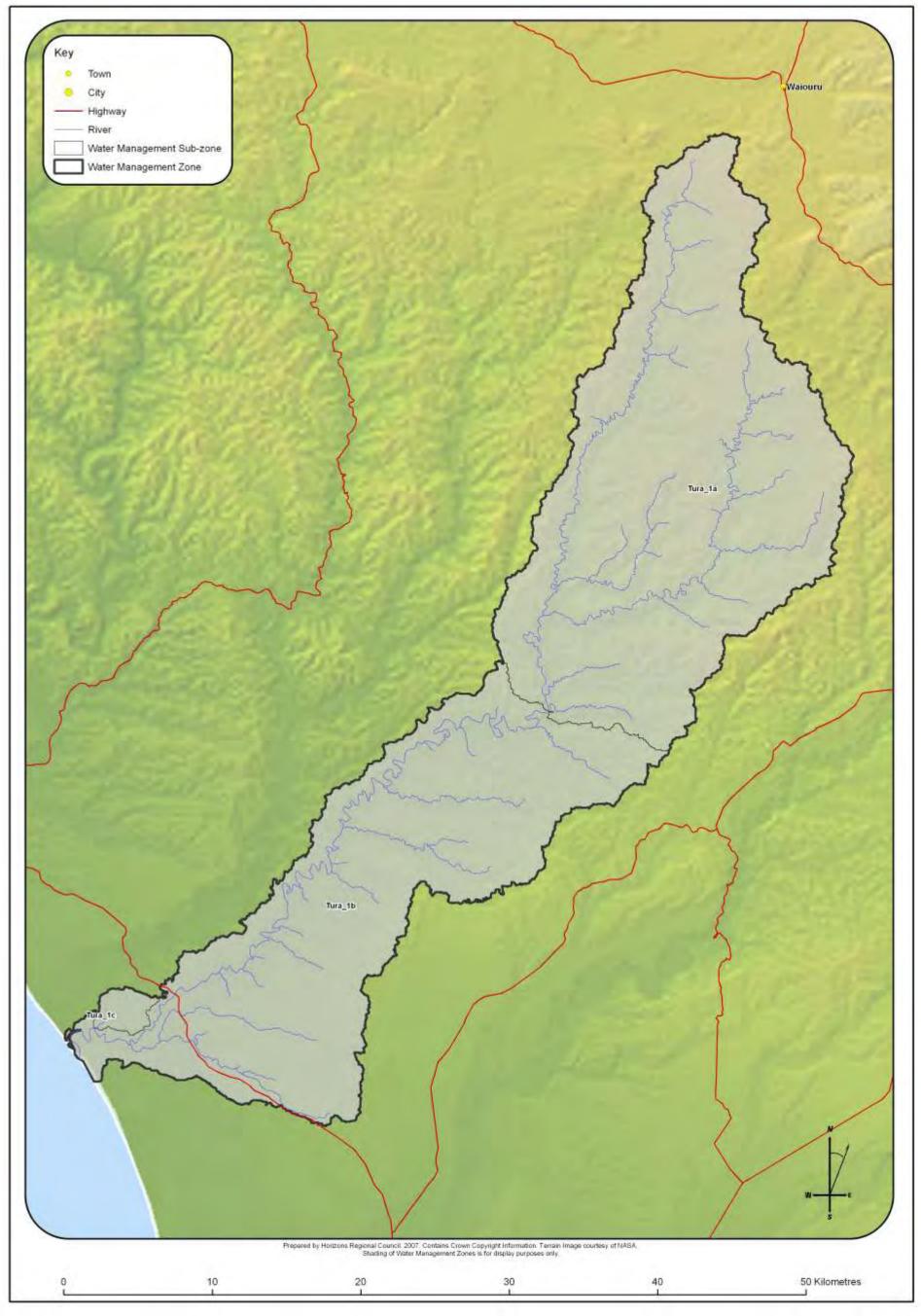


Figure A:6 Turakina Catchment - Surface Water Management Zones\* and Sub-zones\* (refer to Table A.6 for details)





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Table A.6: Description of Turakina Catchmer	t Surface Water Management Zone* and Sub-zone	es*
Water Management Zone*	Sub-zone*	Sub-zone* Description1
	Upper Turakina (Tura_1a)	Turakina River from Otairi at approx. NZMS 260 S22:236-471 to source
Turakina (Tura_1)	Lower Turakina (Tura_1b)	Turakina River at approx. NZMS 260 S23:924-231 to Otairi at approx. NZMS 260 S22:236-471 (excluding the mainstem of the Turakina River from the cross-river CMA boundary at NZMS 260 S23:2692145-6125465 seawards)
	Ratana (Tura_1c)	Lakes Waipu and Oraekomiko and all surrounding catchment area

<sup>1</sup> Includes all inflowing tributaries and surrounding catchment area unless otherwise specified.





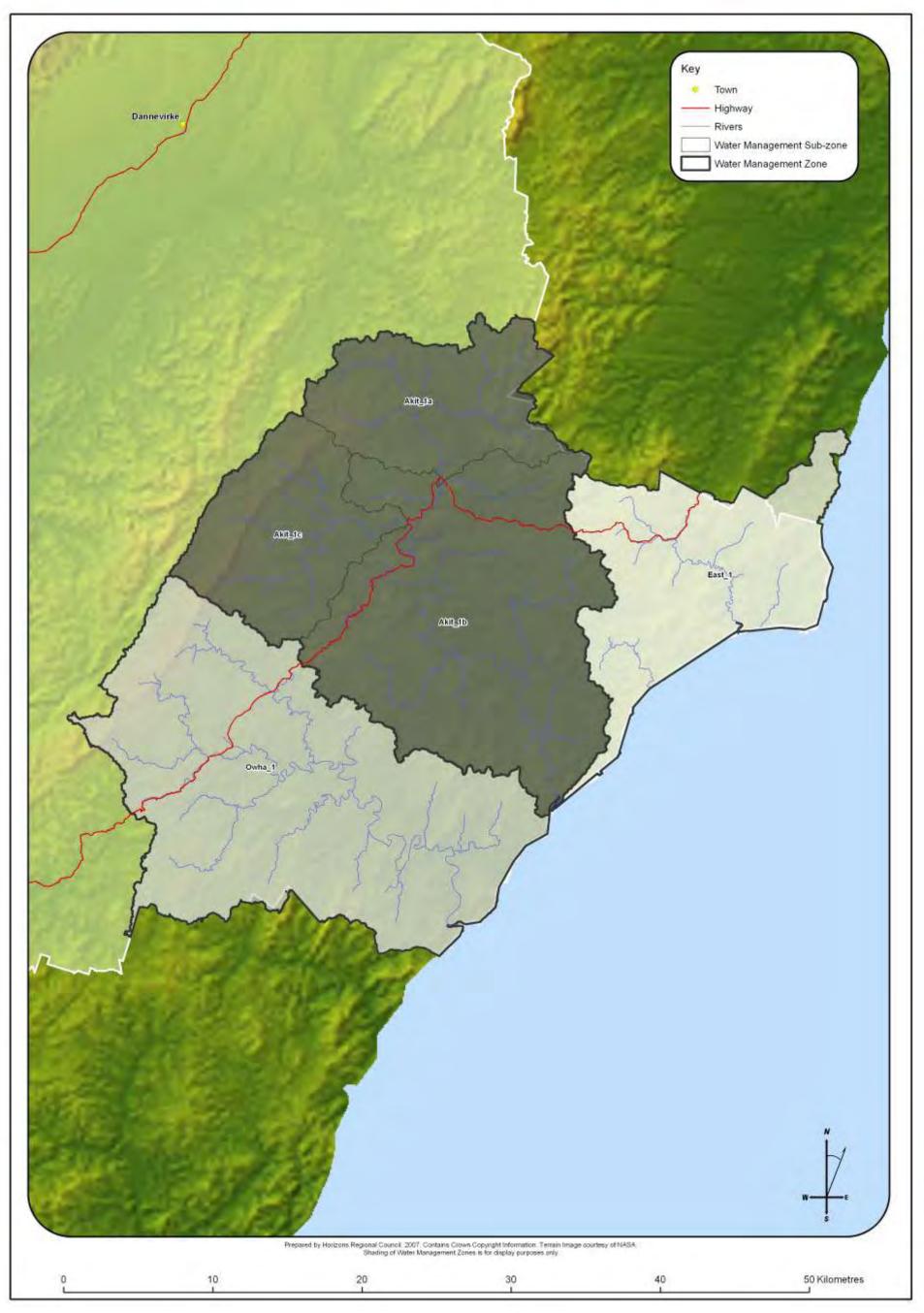


Figure A:7 East Coast - Surface Water Management Zones\* and Sub-zones\* (refer to Table A.7 for details)





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Table A.7: Description of East Coast Surface Water	ter Management Zone* and Sub-zones*	
Water Management Zone*	Sub-zone*	Sub-zone* Description1
East Coast (East_1)	East Coast (East_1)	Wainui, Tautane and Waimata – whole catchments (excluding the mainstem of the Wainui River from the cross-river CMA boundary at NZMS 260 V24:2811596-6073518 seawards)
	Upper Akitio (Akit_1a)	Akitio River from Weber Road at approx. NZMS 260 U24:919-832 to source
Akitio (Akit_1)	Lower Akitio (Akit_1b)	Akitio River at approx. NZMS 260 U25:992-610 to Weber Road at approx.  NZMS 260 U24:919-832 (excluding the mainstem of the Akitio River from the cross-river CMA boundary at NZMS 260 U25:2799657-6061852 seawards)
	Waihi (Akit_1c)	Waihi Stream from Akitio River confluence at approx. NZMS 260 U24:895-801 to source
Owahanga (Owha_1)	Owahanga (Owha_1)	Owahanga River at approx. NZMS 260 U25:932-532 to source (excluding the mainstem of the Owahanga River from the cross-river CMA boundary at NZMS 260 U25:2792204-6053185 seawards)

<sup>1</sup> Includes all inflowing tributaries and surrounding catchment area unless otherwise specified.





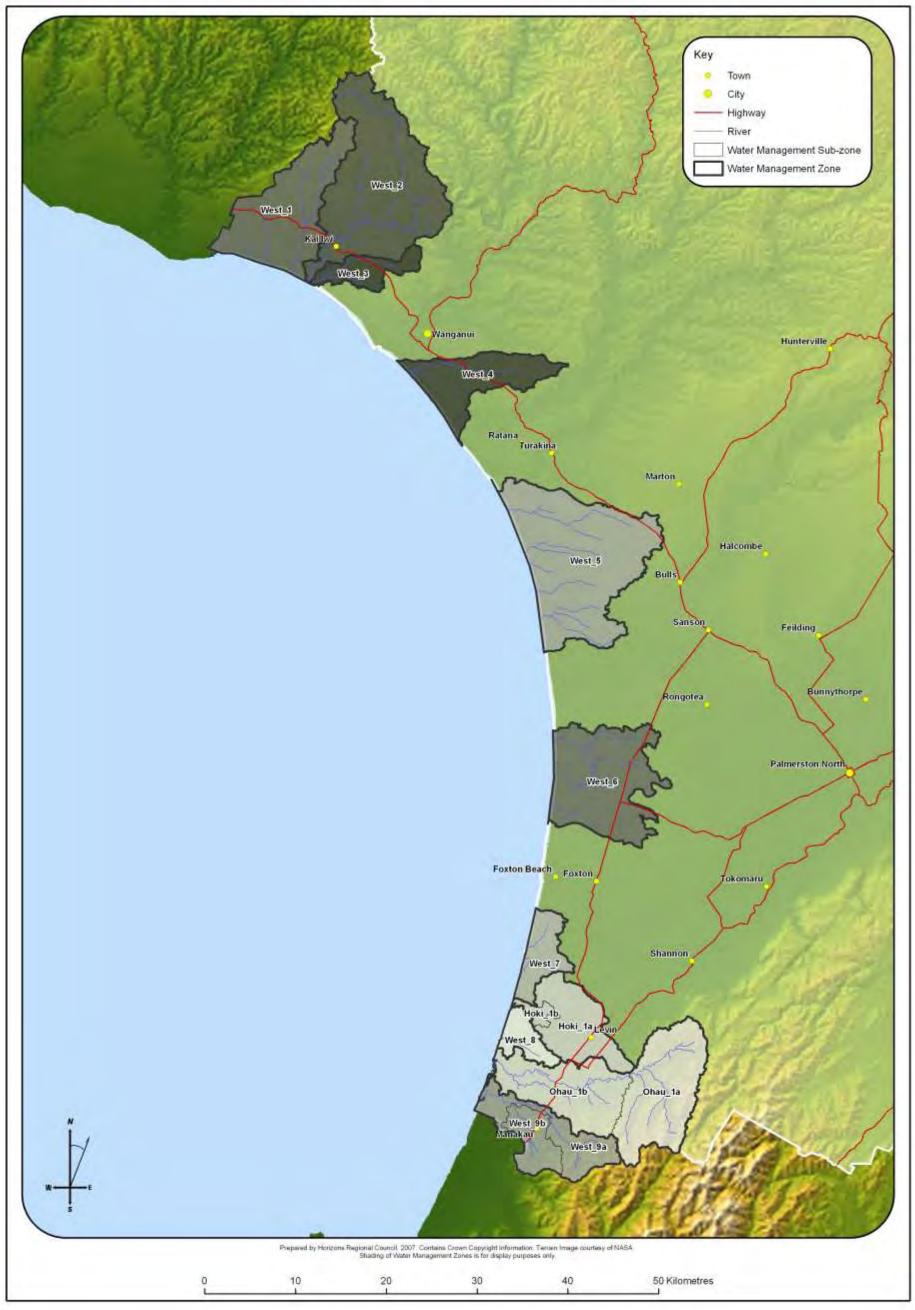


Figure A:8 West Coast, Ohau and Lake Horowhenua - Surface Water Management Zones\* and Sub-zones\* (refer to Table A.8 for details)





Water Management Zone*	Sub-zone*	Sub-zone* Description <sup>7</sup>
Northern Coastal (West 1)	Northern Coastal (West 1)	All coastal catchments and dune lakes between Kai lwi and Waitotara catchments
Kai lwi (West_2)	Kai lwi (West_2)	Kai lwi Stream at approx. NZMS 260 R23:723-449 to source (excluding the mainstem of the Kai lwi Stream from the cross-river CMA boundary at NZMS 260 R22:2672262-6145059 seawards)
Mowhanau (West_3)	Mowhanau (West_3)	Mowhanau Stream at approx. NZMS 260 R22:725-447 to source (excluding the mainstem of the Mowhanau Stream from the cross-river CMA boundary at NZMS 260 R22:2672640-6144895 seawards)
Kaitoke Lakes (West_4)	Kaitoke Lakes (West_4)	Lakes Kaitoke, Pauri, Wiritoa, Kohata and all surrounding catchment area
Southern Whanganui Lakes (West_5)	Southern Whanganui Lakes (West_5)	Lakes Vipan, Heaton, Bernard, William, Herbert, Hickson, Alice, Koitiata, Dudding and all surrout catchment area
Northern Manawatu Lakes (West_6)	Northern Manawatu Lakes (West_6)	All lakes and lagoons between Coastal Rangitikei and Coastal Manawatu and all surrounding cato area
Waitarere (West 7)	Waitarere (West 7)	All lakes and lagoons between Coastal Manawatu and Lake Horowhenua catchment and all surror catchment area
Lake Papaitonga (West_8)	Lake Papaitonga (West_8)	Lake Papaitonga catchment
Waikawa	Waikawa (West_9a)	Waikawa Stream at approx. NZMS 260 S25:908-548 to source (excluding the mainstem of the Waikawa Stream from the cross-river CMA boundary at NZMS 260 S25:2691531-6055429 seawards )
(West_9)	Manakau (West_9b)	Manakau Stream from Waikawa Stream confluence at approx. NZMS 260 S25:946-549 to sou
Oherr	Upper Ohau (Ohau_1a)	Ohau River from Rongomatane at approx. NZMS 260 S25:072-577 to source
Ohau (Ohau_1)	Lower Ohau (Ohau_1b)	Ohau River at approx. NZMS 260 S25:918-578 to Rongomatane at approx. NZMS 260 S25:072-577 (excluding the mainstem of the Ohau River from the cross-river boundary at NZMS 260 S25:2692921-6059503 seawards)
Lake Horowhenua	Lake Horowhenua (Hoki_1a)	Whole lake catchment above Hokio Stream outlet
(Hoki_1)	Hokio (Hoki_1b)	Hokio Stream downstream of Lake Horowhenua outlet (excluding the mainstem of the Hokio Stream the cross-river CMA boundary at NZMS 260 S25:2694967-6065799 seawards)

 $<sup>^{7}\,</sup>$   $\,$  Includes all inflowing tributaries and surrounding catchment area unless otherwise specified.





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Schedule B: Surface Water Management Values

# Schedule B: Surface Water^ Management Values

Schedule B is a component of Part II - the Regional Plan.

This Schedule uses the terminology "Surface *Water*\" Management Values". In some cases, these Values also apply to the *beds*\" of the relevant *water body*\". This is clarified in Part B.3 and the respective policies and rules of Part II.

#### **SCHEDULE B INDEX:**

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Part B.1: Surface Water^ Management Values listed by Sub-zone*	B-3 - B-14
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Zone-wide values (except for LSC)	Not mapped
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Natural State (NS) Value	B-17 - B-20
Sites of Significance - Aquatic (SOS-A) Value	B-21 - B-32
Sites of Significance - Riparian (SOS-R) Value	B-33 - B-38
Inanga Spawning (IS) Value	B-39 - B-42
Whitebait* Migration (WM) Value	B-43 - B-46
Sites of Significance - Cultural (SOS-C) Value	B-47 - B-50
Trout Fishery (TF) Value	B-51 - B-60
Trout Spawning (TS) Value	B-61 - B-72
Water^ Supply (WS) Value	B-73 - B-80
Flood Control and Drainage (FC/D) Value	B-81 - B-106
Amenity Value in the Manawatu (AM) Value	B-107 - B-112
Domestic Food Supply (DFS) Value	B-113 - B-116
Part B.3: Surface Water^ Management Values Key (fold-out)	B-117





### Part B.1: Surface Water<sup>^</sup> Management Values listed by Sub-zone<sup>\*</sup>

**ADVICE NOTE:** To help with interpretation of these tables please turn to Part B.3 (the back of Schedule B) and fold out the **VALUES KEY** and view together with the tables and figures in this schedule.

#### Legend:

Table Headings: LSC: Life-supporting Capacity; AE: Aesthetics; CR: Contact Recreation; Mau: Mauri; IA: Industrial Abstraction; I: Irrigation; SW: Stockwater; EI: Existing Infrastructure\*; CAP: Capacity to Assimilate Pollution; NS: Natural State; SOS-A: Sites of Significance - Aquatic; SOS-R: Sites of Significance - Recreation; IS: Inanga Spawning; AM: Amenity; WM: Whitebait\* migration; SOS-C: Sites of Significance - Cultural; TF: Trout Fishery; TS: Trout Spawning; WS: Water Supply; DFS: Domestic Food Supply; FC/D: Flood Control and Drainage.

Key for LSC Classes: **UHS**: Upland Hard Sedimentary, **UVA**: Upland Volcanic Acidic, **UVM**: Upland Volcanic Mixed, **ULi**: Upland Limestone, **HM**: Hill Mixed, **HSS**: Hill Soft Sedimentary, **LM**: Lowland Mixed, **LS**: Lowland Sand. The LSC Classes are listed as the geology of the catchment influences water quality and life-supporting capacity

Key for Fishery Classes: I: Outstanding, II: Regionally Significant, III: Other Trout Fishery

Table B.1: Su	ırface <i>Water</i> ^ M	anagement Values by Sub-zone*																					
Water	Sub-zone*	Sub-zone* Description <sup>1</sup>				Zone	-wide V	alues/								5	Site/R	each-spe	ecific \	/alues			
Management Zone*	Sub-zone	Sub-zone Description:	LSC	AE	CR	Mau	IA <sup>2</sup>	<b>l</b> <sup>2</sup>	SW	El	CAP <sup>3</sup>	NS	SOS-A	SOS-R	IS	AM	WM	SOS-C	TF	TS	WS	DFS	FC/D
	Upper Manawatu (Mana_1a)	Manawatu River from Weber Road at approx. NZMS 260 U23:751-027 to source	НМ	<b>✓</b>	✓	<b>✓</b>	✓	✓	<b>✓</b>	✓	✓	<b>✓</b>	✓			✓				<b>√</b>			<b>✓</b>
Upper Manawatu (Mana_1)	Mangatewainui (Mana_1b)	Mangatewainui River from Manawatu River confluence at approx. NZMS 260 U23:829-086 to source	НМ	<b>√</b>	✓	<b>~</b>	✓	✓	<b>✓</b>	✓	<b>✓</b>	<b>\</b>	✓						II	<b>~</b>			✓
(Wana_1)	Mangatoro (Mana_1c)	Mangatoro Stream from Manawatu River confluence at approx. NZMS 260 U23:810-027 to source	HSS	<b>√</b>	✓	<b>✓</b>	✓	✓	<b>✓</b>	✓	<b>✓</b>	<b>~</b>							=	<b>~</b>			<b>✓</b>
Weber-Tamaki	Weber-Tamaki (Mana_2a)	Manawatu River from Tamaki River confluence at approx. NZMS 260 U23:709-003 to Weber Road at approx. NZMS 260 U23:751-027	НМ	✓	<b>✓</b>	✓	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>			<b>✓</b>					II				<b>✓</b>
(Mana_2)	Mangatera (Mana_2b)	Mangatera Stream from Manawatu River confluence at approx. NZMS 260 U23:737-025 to source	НМ	✓	✓	✓	✓	✓	<b>✓</b>	✓	<b>✓</b>									✓			<b>✓</b>

<sup>1</sup> Includes all inflowing tributaries and surrounding catchment area unless otherwise specified.

All natural water bodies\* and their beds^ except those classified as NS.



<sup>&</sup>lt;sup>2</sup> All natural water bodies\* except those classified as NS and those identified as zero allocation in Schedule C.

Water	Cub*	Cut and Description				Zone	-wide \	/alues								9	Site/R	each-spe	cific \	/alues			
Management Zone*	Sub-zone*	Sub-zone* Description1	LSC	AE	CR	Mau	IA <sup>2</sup>	<b> </b> 2	SW	El	CAP <sup>3</sup>	NS	SOS-A	SOS-R	IS	AM	WM	SOS-C	TF	TS	WS	DFS	FC/D
Upper Tamaki (Mana_3)	Upper Tamaki (Mana_3)	Tamaki River from water supply weir at approx. NZMS 260 U23:709-111 to source	UHS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							✓	✓		✓
Upper Kumeti (Mana_4)	Upper Kumeti (Mana_4)	Kumeti Stream from Te Rehunga flow recorder at approx. NZMS 260 T23:663-052 to source	UHS	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>√</b>	✓	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>										<b>√</b>
	Tamaki- Hopelands (Mana_5a)	Manawatu River from Hopelands at approx.  NZMS 260 T24:616-899  to Tamaki River confluence at approx. NZMS 260 U23:709-003	НМ	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>			<b>✓</b>					II	<b>√</b>			<b>~</b>
Tamaki-	Lower Tamaki (Mana_5b)	Tamaki River from Manawatu River confluence at approx. NZMS 260 U23:709-002 to water supply weir at approx. NZMS 260 U23:709-111	НМ	>	<b>✓</b>	✓	>	✓	<b>✓</b>	>	<b>✓</b>	>	<b>✓</b>							✓			<b>√</b>
Hopelands (Mana_5)	Lower Kumeti (Mana_5c)	Kumeti Stream from Manawatu River confluence at approx. NZMS 260 U23:701-006 to Te Rehunga flow recorder at approx. NZMS 260 T23:663-052	НМ	✓	<b>√</b>	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	✓								✓			<b>✓</b>
	Oruakeretaki (Mana_5d)	Oruakeretaki Stream from Manawatu River confluence at approx. NZMS 260 T23:690-000 to source	НМ	✓	✓	~	<b>√</b>	✓	<b>✓</b>	✓	<b>✓</b>	✓	<b>√</b>							<b>✓</b>			<b>✓</b>
	Raparapawai (Mana_5e)	Raparapawai Stream from Manawatu River confluence at approx. NZMS 260 T24:643-932 to source	НМ	✓	✓	✓	✓	✓	<b>✓</b>	✓	<b>✓</b>	✓								✓			<b>✓</b>
Hopelands- Tiraumea (Mana_6)	Hopelands- Tiraumea (Mana_6)	Manawatu River from Tiraumea River confluence at approx. NZMS 260 T24:553-870 to Hopelands at approx. NZMS 260 T24:616-899	НМ	<b>√</b>	✓	~	<b>√</b>	~	<b>✓</b>	<b>√</b>	1			<b>✓</b>		<b>√</b>			II				<b>✓</b>
Tiraumea (Mana_7)	Upper Tiraumea (Mana_7a)	Tiraumea River from Makuri River confluence at approx. NZMS 260 T24:578-780 to source	HSS	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>							III				<b>√</b>
	Lower Tiraumea (Mana_7b)	Tiraumea River from Manawatu River confluence at approx. NZMS 260 T24:555-870 to Makuri River confluence at approx. NZMS 260 T24:578-780	HSS	✓	<b>√</b>	✓	✓	<b>√</b>	<b>√</b>	✓	<b>✓</b>	✓	<b>✓</b>	<b>√</b>					III				
	Mangaone River (Mana_7c)	Mangaone River from Tiraumea River confluence at approx. NZMS 260 T24:541-730 to source	HSS	✓	<b>√</b>	~	✓	✓	<b>✓</b>	✓	<b>✓</b>	✓											<b>√</b>
	Makuri (Mana_7d)	Makuri River from Tiraumea River confluence at approx. NZMS 260 T24:568-771 to source	ULi	✓	✓	✓	✓	✓	✓	✓	✓	✓							II	✓			



Water	2.1.	0.4 +0 +1 +1				Zone	-wide V	/alues								S	Site/Re	each-spe	cific \	/alues			
Management Zone*	Sub-zone*	Sub-zone* Description1	LSC	AE	CR	Mau	IA <sup>2</sup>	<b>[</b> 2	SW	El	CAP <sup>3</sup>	NS	SOS-A	SOS-R	IS	AM	WM	SOS-C	TF	TS	WS	DFS	FC/D
	Mangaramarama (Mana_7e)	Mangaramarama Creek from Tiraumea River confluence at approx. NZMS 260 T24:559-854 to source	HSS	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	✓	<b>√</b>												<b>✓</b>
	Upper Mangatainoka (Mana_8a)	Mangatainoka River from Larsons Road at approx. NZMS 260 T25:308-595 to source	UHS	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>*</b>						II	<b>√</b>	<b>√</b>		<b>✓</b>
Mangatainoka	Middle Mangatainoka (Mana_8b)	Mangatainoka River from Makakahi River confluence at approx. NZMS 260 T24:475-775 to Larsons Road at approx. NZMS 260 T25:308-595	НМ	✓	<b>√</b>	✓	✓	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	✓	<b>✓</b>						II	✓	<b>✓</b>		<b>✓</b>
(Mana_8)	Lower Mangatainoka (Mana_8c)	Mangatainoka River from Tiraumea River confluence at approx. NZMS 260 T24:577-854 to Makakahi River confluence at approx. NZMS 260 T24:475-775	НМ	✓	<b>√</b>	✓	✓	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>			<b>✓</b>		✓			II	✓	<b>✓</b>		<b>✓</b>
	Makakahi (Mana_8d)	Makakahi River from Mangatainoka River confluence at approx. NZMS 260 T24:475-775 to source	НМ	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	✓	<b>✓</b>						II	✓	<b>√</b>		<b>✓</b>
	Upper Gorge (Mana_9a)	Manawatu River from Upper Gorge at approx. NZMS 260 T24:494-933 to Tiraumea River confluence at approx. NZMS 260 T24:553-870	НМ	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>*</b>	<b>✓</b>					III				<b>✓</b>
	Mangapapa (Mana_9b)	Mangapapa Stream from Mangaatua Stream confluence at approx. NZMS 260 T24:515-922 to source	НМ	✓	~	<b>✓</b>	✓	~	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>								~	<b>✓</b>		✓
Upper Gorge (Mana_9)	Mangaatua (Mana_9c)	Mangaatua Stream from Manawatu River confluence at approx. NZMS 260 T24:496-925 to source	НМ	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	<b>√</b>										<b>✓</b>
	Upper Mangahao (Mana_9d)	Mangahao River from Ballance at approx. NZMS 260 T24:468-818 to source	UHS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓			III	✓			✓
	Lower Mangahao (Mana_9e)	Mangahao River from Manawatu River confluence at approx. NZMS 260 T24:496-891 to Ballance at approx. NZMS 260 T24:468-818	НМ	✓	✓	✓	✓	<b>√</b>	✓	✓	<b>✓</b>			<b>✓</b>					III	✓			<b>✓</b>
Middle		Managadu Diyar from Taaahara Callana																					
Middle Manawatu (Mana_10)	Middle Manawatu (Mana_10a)	Manawatu River from Teachers College at approx. NZMS 260 T24:331-892 to Upper Gorge at approx. NZMS 260 T24:494-933	НМ	✓	<b>✓</b>	<b>✓</b>	✓	✓	✓	✓	<b>✓</b>		✓	✓		✓		<b>√</b>	III				✓
	Upper Pohangina (Mana_10b)	Pohangina River from Totara Reserve at approx. NZMS 260 T23:534-167 to source	UHS	<b>✓</b>	✓	✓	<b>✓</b>	✓	✓	✓	✓	✓	✓	✓					III	✓			✓
	Middle Pohangina (Mana_10c)	Pohangina River from Mais Reach at approx. NZMS 260 T23:467-053 to Totara Reserve at approx. NZMS 260 T23:534-167	НМ	✓	✓	✓	✓	✓	<b>√</b>	✓	<b>✓</b>	✓	✓	✓		✓			III	✓			✓



Water	Cub*	Cub and Descriptions				Zone	-wide \	/alues								9	Site/Re	each-spe	cific \	/alues			
Management Zone*	Sub-zone*	Sub-zone* Description1	LSC	AE	CR	Mau	IA <sup>2</sup>	<b> </b> 2	SW	EI	CAP <sup>3</sup>	NS	SOS-A	SOS-R	IS	AM	WM	SOS-C	TF	TS	WS	DFS	FC/D
	Lower Pohangina (Mana_10d)	Pohangina River from Manawatu River confluence at approx. NZMS 260 T24:450-966 to Mais Reach at approx. NZMS 260 T23:467-053	НМ	<b>√</b>	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓	✓	<b>√</b>				<b>√</b>	III				<b>✓</b>
	Aokautere (Mana_10e)	Aokautere Stream from Manawatu River confluence at approx. NZMS 260 T24:349-899 to source	НМ	<b>✓</b>	1	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>												
	Lower Manawatu (Mana_11a)	Manawatu River from Oroua River confluence at approx. NZMS 260 S24:167-826 to Teachers College at approx. NZMS 260 T24:331-892	НМ	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>			<b>✓</b>		<b>√</b>		<b>✓</b>	III				<b>✓</b>
	Turitea (Mana_11b)	Turitea Stream from Manawatu River confluence at approx. NZMS 260 T24:304-881 to source	UHS	<b>√</b>	<b>√</b>	~	<b>√</b>	<b>✓</b>	<b>~</b>	✓	<b>✓</b>		✓			<b>√</b>			III	<b>√</b>	<b>√</b>		
Lower Manawatu	Kahuterawa (Mana_11c)	Kahuterawa Stream from Manawatu River confluence at approx. NZMS 260 S24:292-876 to source	UHS	<b>√</b>	<b>✓</b>	~	✓	<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>			<b>√</b>			III	✓			
(Mana_11)	Upper Mangaone Stream (Mana_11d)	Mangaone Stream from Milson Line at approx. NZMS 260 T24:311-953 to source	LM	<b>✓</b>	<b>✓</b>	~	<b>&gt;</b>	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>												<b>✓</b>
	Lower Mangaone Stream (Mana_11e)	Mangaone Stream from Manawatu River confluence at approx. NZMS 260 S24:283-872 to Milson Line at approx. NZMS 260 T24:311-953	LM	<b>✓</b>	✓	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>					✓							<b>✓</b>
	Main Drain (Mana_11f)	Main Drain catchment (including Taonui Stream) from Manawatu River confluence at approx. NZMS 260 S24:181-836 to source	LM	✓	<b>√</b>	<b>√</b>	✓	<b>✓</b>	<b>√</b>	<b>√</b>	<b>✓</b>		<b>✓</b>										<b>✓</b>
	Upper Oroua (Mana_12a)	Oroua River from Almadale at approx. NZMS 260 T23:365-113 to source	НМ	✓	<b>√</b>	<b>✓</b>	✓	<b>✓</b>	<b>√</b>	✓	<b>✓</b>	✓	<b>✓</b>	✓		<b>✓</b>			III	✓	✓	<b>√</b>	✓
	Middle Oroua (Mana_12b)	Oroua River from Awahuri Bridge at approx. NZMS 260 S23:243-002 to Almadale at approx. NZMS 260 T23:365-113	НМ	<b>√</b>	<b>✓</b>	✓	✓	<b>✓</b>	<b>√</b>	✓	<b>√</b>			<b>✓</b>		<b>√</b>			III		<b>√</b>	<b>√</b>	<b>✓</b>
Oroua (Mana_12)	Lower Oroua (Mana_12c)	Oroua River from Manawatu River confluence at approx. NZMS 260 S24:167-826 to Awahuri Bridge at approx. NZMS 260 S23:243-002	LM	<b>√</b>	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>			<b>✓</b>				<b>✓</b>	III			<b>√</b>	~
	Kiwitea (Mana_12d)	Kiwitea Stream from Oroua River confluence at approx. NZMS 260 T23:309-066 to source	НМ	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓				✓	✓	✓	✓
	Makino (Mana_12e)	Makino Stream from Oroua River confluence at approx. NZMS 260 S23:243-004 to source	LM	✓	✓	✓	✓	✓	✓	✓	✓		✓			✓			III	✓		✓	✓



Water	Cub*	Cub * Description 1				Zone	-wide \	/alues								5	Site/Re	each-spe	ecific \	/alues			
Management Zone*	Sub-zone*	Sub-zone* Description1	LSC	AE	CR	Mau	IA <sup>2</sup>	<b> </b> 2	SW	El	CAP <sup>3</sup>	NS	SOS-A	SOS-R	IS	AM	WM	SOS-C	TF	TS	WS	DFS	FC/D
	Coastal Manawatu (Mana_13a)	Manawatu River at approx. NZMS 260 S24: 977-788 to Oroua River confluence at approx. NZMS 260 S24:167-826 (excluding the mainstem of the Manawatu River from the cross-river CMA boundary at NZMS 260 S24:2700963-6076686 seawards)	LM	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓		<b>✓</b>	<b>✓</b>	<b>√</b>	✓	<b>✓</b>	~	III				<b>✓</b>
	Upper Tokomaru (Mana_13b)	Tokomaru River from Horseshoe Bend at approx. NZMS 260 S24:241-768 to source	UHS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						Ш	✓	✓		
Coastal Manawatu (Mana_13)	Lower Tokomaru (Mana_13c)	Tokomaru River from Manawatu River confluence at approx. NZMS 260 S24:134-727 to Horseshoe Bend at approx. NZMS 260 S24:241-768	LM	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	1		<b>✓</b>			✓			III	<b>✓</b>	<b>✓</b>		✓
	Mangaore (Mana_13d)	Mangaore River from Manawatu River confluence at approx. NZMS 260 S24:123-717 to source	НМ	<b>√</b>	<b>√</b>	~	<b>√</b>	<b>√</b>	~	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>								<b>✓</b>		<b>✓</b>
	Koputaroa (Mana_13e)	Koputaroa Stream from Manawatu River confluence at approx. NZMS 260 S24:106-708 to source	LM	<b>✓</b>	~	~	<b>✓</b>	<b>✓</b>	~	~	<b>~</b>		<b>✓</b>										<b>✓</b>
	Foxton Loop (Mana_13f)	Manawatu River from downstream limit of Whirikino Cut at approx. NZMS 260 S24:010-769 to SH1	LM	✓	✓	✓	✓	✓	<b>✓</b>	✓	✓					✓		<b>✓</b>					✓
Upper Rangitikei (Rang_1)	Upper Rangitikei (Rang_1)	Rangitikei River from Makahikatoa Stream at approx. NZMS 260 U21:726-888 to source	UHS	<b>✓</b>	✓	✓			✓	✓	✓	<b>✓</b>	<b>✓</b>						I	✓	<b>√</b>		
Middle Rangitikei (Rang_2)	Middle Rangitikei (Rang_2a)	Rangitikei River from Pukeokahu at approx.  NZMS 260 U21:713-708  to Makahikatoa Stream at approx.  NZMS 260 U21:726-888	UHS	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>								I	<b>✓</b>	<b>√</b>		
	Pukeokahu – Mangaweka (Rang_2b)	Rangitikei River from Mangaweka at approx. NZMS 260 T22:504-513 to Pukeokahu at approx. NZMS 260 U21:713-708	НМ	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓	✓			✓			I	<b>√</b>	<b>✓</b>		
	Upper Moawhango (Rang_2c)	Moawhango River from Moawhango Dam at approx. NZMS 260 T20:469-960 to source	UVA	<b>√</b>	<b>✓</b>	~	<b>√</b>		~	<b>✓</b>	<b>✓</b>	<b>✓</b>		<b>√</b>					III	<b>✓</b>	<b>✓</b>		
	Middle Moawhango (Rang_2d)	Moawhango River from Moawhango Township at approx. NZMS 260 T21:557-745 to Moawhango Dam at approx. NZMS 260 T20:469-960	UVM	✓	✓	✓			✓	✓	✓			✓					III	✓	<b>√</b>		



Water	Sub-zone*	Cub zana* Description 1				Zone	-wide V	/alues								5	Site/Re	each-spe	cific \	/alues			
Management Zone*	Sub-zone	Sub-zone* Description1	LSC	AE	CR	Mau	IA <sup>2</sup>	<b> </b> 2	SW	El	CAP <sup>3</sup>	NS	SOS-A	SOS-R	IS	AM	WM	SOS-C	TF	TS	WS	DFS	FC/D
	Lower Moawhango (Rang_2e)	Moawhango River from Rangitikei River confluence at approx. NZMS 260 T21:609-623 to Moawhango Township at approx. NZMS 260 T21:557-745	HSS	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓							III		<b>√</b>		
	Upper Hautapu (Rang_2f)	Hautapu River from Taihape at approx. NZMS 260 T21:506-670 to source	UVM	✓	✓	✓	>	✓	✓	>	✓	✓				✓			II	✓	✓		
	Lower Hautapu (Rang_2g	Hautapu River from Rangitikei River confluence at approx. NZMS 260 T22:529-574 to Taihape at approx. NZMS 260 T21:506-670	HSS	✓	<b>✓</b>	✓	✓	✓	✓	✓	✓	✓				✓			III	<b>✓</b>	✓		
Lower Rangitikei	Lower Rangitikei (Rang_3a)	Rangitikei River from Onepuhi at approx. NZMS 260 S23:201-222 to Mangaweka at approx. NZMS 260 T22:504-513	НМ	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	~	<b>✓</b>	<b>✓</b>	<b>✓</b>		<b>√</b>	<b>✓</b>		<b>√</b>			I/II	<b>✓</b>	<b>✓</b>		<b>✓</b>
(Rang_3)	Makohine (Rang_3b)	Makohine Stream from Rangitikei River confluence at approx. NZMS 260 T22:400-443 to source	HSS	✓	<b>√</b>	✓	✓	✓	✓	✓	<b>✓</b>									<b>✓</b>	<b>√</b>		
	Coastal Rangitikei (Rang_4a)	Rangitikei River from McKelvies at approx. NZMS 260 S24:033-985 to Onepuhi at approx. NZMS 260 S23:201-222	НМ	✓	<b>✓</b>	~	<b>✓</b>	✓	~	<b>√</b>	~		✓	✓					III		<b>✓</b>		✓
Coastal Rangitikei (Rang_4)	Tidal Rangitikei (Rang_4b)	Rangitikei River at approx. NZMS 260 S24:991-984 to McKelvies at approx. NZMS 260 S24:033-985 (excluding the mainstem of the Rangitikei River from the cross-river CMA boundary at NZMS 260 S23:2700960-6100119 seawards)	LM	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	✓	<b>✓</b>		III		<b>✓</b>		<b>√</b>
	Porewa (Rang_4c)	Porewa Stream from Rangitikei River confluence at approx. NZMS 260 S23:190-212 to source	HSS	✓	✓	~	✓	<b>✓</b>	<b>~</b>	✓	<b>~</b>									<b>✓</b>	<b>✓</b>		<b>✓</b>
	Tutaenui (Rang_4d)	Tutaenui Stream from Rangitikei River confluence at approx. NZMS 260 S23:101-095 to source	LM	✓	✓	✓	<b>√</b>	✓	<b>√</b>	✓	<b>✓</b>		✓			✓					<b>✓</b>		✓
- 11		What are 'D' as four What are 'D'																					
Upper Whanganui (Whai_1)	Upper Whanganui (Whai_1)	Whanganui River from Whakapapa River confluence at approx. NZMS 260 S19:189-499 to source	UVA	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	<b>√</b>	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>						III	<b>✓</b>	<b>✓</b>		
Cherry Grove (Whai_2)	Cherry Grove (Whai_2a)	Whanganui River from Cherry Grove at approx. NZMS 260 S18:057-545 to Whakapapa River confluence at approx. NZMS 260 S19:189-499	UVM	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>					<b>√</b>			III	<b>✓</b>	<b>✓</b>		<b>✓</b>



Water	C. I*	C. h				Zone-	-wide V	/alues								9	Site/Re	each-spe	ecific \	/alues			
Management Zone*	Sub-zone*	Sub-zone* Description1	LSC	AE	CR	Mau	IA <sup>2</sup>	<b> </b> 2	SW	El	CAP <sup>3</sup>	NS	SOS-A	SOS-R	IS	AM	WM	SOS-C	TF	TS	WS	DFS	FC/D
	Upper Whakapapa (Whai_2b)	Whakapapa River from Footbridge at approx. NZMS 260 S19:226-293 to source	UVA	✓	<b>✓</b>	~	✓	<b>✓</b>	✓	✓	<b>✓</b>	✓	✓						11/111	<b>✓</b>	✓		
	Lower Whakapapa (Whai_2c)	Whakapapa River from Whanganui River confluence at approx. NZMS 260 S19:189-499 to Footbridge at approx. NZMS 260 S19:226-293	UVA	<b>√</b>	✓	<b>✓</b>	<b>√</b>	✓	✓	✓	<b>✓</b>	<b>√</b>	<b>✓</b>			✓			11/111	<b>√</b>	<b>√</b>		
	Piopiotea (Whai_2d)	Piopiotea Stream from Whakapapa River confluence at approx. NZMS 260 S19:174-356 to source	UVA	>	~	<b>✓</b>	>	<b>✓</b>	✓	✓	<b>✓</b>	>	✓						≡	<b>✓</b>	<b>&gt;</b>		
	Pungapunga (Whai_2e)	Pungapunga River from Whanganui River confluence at approx. NZMS 260 S18:124-546 to source	UVM	<b>&gt;</b>	~	<b>✓</b>	<b>√</b>	✓	✓	✓	✓	<b>&gt;</b>	✓						I	✓	<b>~</b>		
	Upper Ongarue (Whai_2f)	Ongarue River from Waihuka Stream confluence at approx. NZMS 260 S18:108-785 to source	UVA	<b>&gt;</b>	~	~	>	<b>✓</b>	✓	✓	<b>✓</b>	<b>&gt;</b>	✓						II/III	<b>✓</b>	<b>&gt;</b>		
	Lower Ongarue (Whai_2g)	Ongarue River from Whanganui River confluence at approx. NZMS 260 S18:056-547 to Waihuka Stream confluence at approx. NZMS 260 S18:108-785	UVM	<b>✓</b>	<b>✓</b>	✓	<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>~</b>	✓	<b>✓</b>			<b>√</b>			III	✓			
		When the Property of the Prope																					
Te Maire (Whai_3)	Te Maire (Whai_3)	Whanganui River from Te Maire at approx. NZMS 260 S19:998-490 to Cherry Grove at approx. NZMS 260 S18:057-545	UVM	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓	~	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓	✓						III				<b>✓</b>
	Middle Whanganui (Whai_4a)	Whanganui River from Retaruke River confluence at approx. NZMS 260 R19:886-306 to Te Maire at approx. NZMS 260 S19:998-490		<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	✓	<b>✓</b>						III				
Middle	Upper Ohura (Whai_4b)	Ohura River from Tokorima at approx. NZMS 260 R18:863-521 to source	HSS	✓	✓	✓	✓	✓	✓	✓	<b>~</b>	✓									✓		
Whanganui (Whai_4)	Lower Ohura (Whai_4c)	Ohura River from Whanganui River confluence at approx. NZMS 260 R19:887-386 to Tokorima at approx. NZMS 260 R18:863-521	HSS	✓	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	✓	✓	<b>√</b>	<b>√</b>											
	Retaruke (Whai_4d)	Retaruke River from Whanganui River confluence at approx. NZMS 260 R19:890-309 to source	UVM	✓	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	✓	✓	<b>✓</b>	<b>√</b>	<b>✓</b>						III	<b>✓</b>			
Pipiriki (Whai_5)	Pipiriki (Whai_5a)	Whanganui River from Pipiriki at approx. NZMS 260 R21:859-897 to Retaruke River confluence at approx. NZMS 260 R19:886-306	HSS	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>						III				



Water	Cub sand	Cub and December 1				Zone	-wide \	/alues								5	Site/Re	each-spe	ecific \	/alues			
Management Zone*	Sub-zone*	Sub-zone* Description1	LSC	AE	CR	Mau	IA <sup>2</sup>	<b>l</b> <sup>2</sup>	SW	El	CAP <sup>3</sup>	NS	SOS-A	SOS-R	IS	AM	WM	SOS-C	TF	TS	WS	DFS	FC/D
	Tangarakau (Whai_5b)	Tangarakau River from Whanganui River confluence at approx. NZMS 260 R20:714-175 to source	HSS	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓	~	✓	✓										
	Whangamomona (Whai_5c)	Whangamomona River from Whanganui River confluence at approx. NZMS 260 R20:731-130 to source	HSS	<b>✓</b>	<b>√</b>	~	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>~</b>	<b>✓</b>										
	Upper Manganui o te Ao (Whai_5d)	confluence at approx. NZMS 260 S20:129-120 to source	UVA	✓	✓	<b>✓</b>			✓	✓	<b>✓</b>	<b>√</b>	✓						I				
	Makatote (Whai_5e)	Makatote River from Manganui o te Ao River confluence at approx. NZMS 260 S20:129-120 to source	UVA	✓	✓	✓			✓	✓	~	✓	✓						I	✓			
	Waimarino (Whai_5f)	Waimarino Stream from Makatote River confluence at approx. NZMS 260 S20:129-120 to source	UVA	✓	✓	✓	<b>✓</b>	~	<b>✓</b>	✓	~	<b>✓</b>	✓						I				
	Middle Manganui o te Ao (Whai_5g)	Manganui o te Ao River from Hoihenga Road at approx. NZMS 260 S20:047-077 to Makatote River confluence at approx. NZMS 260 S20:129-120	UVA	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	✓	✓			✓			I	✓			
	Mangaturuturu (Whai_5h)	Mangaturuturu River from Manganui o te Ao River confluence at approx. NZMS 260 S20:057-067 to source	UVA	✓	✓	~			✓	✓	<b>✓</b>	<b>&gt;</b>	✓						I				
	Lower Manganui o te Ao (Whai_5i)	Manganui o te Ao River from Whanganui River confluence at approx. NZMS 260 R20:861-979 to Hoihenga Road at approx. NZMS 260 S20:047-077	UVM	✓	<b>✓</b>	<b>~</b>	✓	<b>✓</b>	✓	✓	<b>✓</b>	✓	<b>✓</b>						I	<b>√</b>			
	Orautoha (Whai_5j)	Orautoha Stream from Manganui o te Ao River confluence at approx. NZMS 260 S20:026-067 to source	UVM	✓	✓	<b>✓</b>	✓	<b>✓</b>	✓	✓	<b>✓</b>	✓	✓						I	✓			
Paetawa (Whai_6)	Paetawa (Whai_6)	Whanganui River from Paetawa at approx. NZMS 260 S22:937-566 to Pipiriki at approx. NZMS 260 R21:859-897	HSS	✓	✓	<b>✓</b>	✓	~	✓	✓	<b>✓</b>	✓	✓	✓					III		<b>✓</b>		
		MI 101 ( A 1 511 )																					
Lower Whanganui (Whai_7)	Lower Whanganui (Whai_7a)	Whanganui River from Aramoho Bridge at approx. NZMS 260 R22:858-420 to Paetawa at approx. NZMS 260 S22:937-566	HSS	✓	✓	~	✓	✓	✓	✓	<b>✓</b>	✓	✓	✓	✓	✓	✓		III				✓



Water						Zone	-wide \	'alues								9	Site/Re	each-spe	cific \	/alues			
Management Zone*	Sub-zone*	Sub-zone* Description1	LSC	AE	CR	Mau	IA <sup>2</sup>	<b> </b> 2	SW	El	CAP <sup>3</sup>	NS	SOS-A	SOS-R	IS	AM	WM	SOS-C	TF	TS	WS	DFS	FC/D
	Coastal Whanganui (Whai_7b)	Whanganui River at approx. NZMS 260 R22:797-328 to Aramoho Bridge at approx. NZMS 260 R22:858-420 (excluding the mainstem of the Whanganui River from the cross-river CMA boundary at NZMS 260 R22:2684857-6138015 seawards)		<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>~</b>			<b>√</b>	<b>√</b>	✓	<b>✓</b>		II				<b>√</b>
	Upokongaro (Whai_7c)	Upokongaro River from Whanganui River confluence at approx. NZMS 260 S22:908-463 to source	HSS	~	~	~	✓	✓	✓	<b>✓</b>	✓		✓										
	Matarawa (Whai_7d)	Matarawa River from Whanganui River confluence at approx. NZMS 260 R22:857-403 to source	HSS	✓	✓	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓	<b>√</b>				✓	✓	<b>✓</b>						✓
	Upper Whangaehu (Whau_1a)	Whangaehu River from Karioi at approx. NZMS 260 S21:218-864 to source	UVA	✓	<b>✓</b>	✓	<b>✓</b>	<b>~</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	~	<b>✓</b>								<b>√</b>	
Upper Whangaehu (Whau_1)	Waitangi (Whau_1b)	Waitangi Stream from Whangaehu River confluence at approx. NZMS 260 T21:316-888 to source	UVM	✓	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓	✓	✓									<b>~</b>	<b>✓</b>	<b>✓</b>	
	Tokiahuru (Whau_1c)	Tokiahuru Stream from Whangaehu River confluence at approx. NZMS 260 S21:219-865 to source	UVA	✓	✓	✓	<b>✓</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	✓	✓	✓					III	<b>√</b>		<b>√</b>	
Middle Whangaehu (Whau_2)	Middle Whangaehu (Whau_2)	Whangaehu River from Aranui at approx. NZMS 260 S21:175-627 to Karioi at approx. NZMS 260 S21:218-864	HSS	✓	✓	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>											<b>✓</b>	
Lower Whangaehu (Whau_3)	Lower Whangaehu (Whau_3a)	Whangaehu River from Kauangaroa at approx. NZMS 260 S22:045-397 to Aranui NZMS 260 S21:175-627 (including the Mangawhero River from Whangaehu River confluence to Raupiu Road at approx. NZMS 260 S21:099-646)	HSS	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>~</b>	<b>✓</b>	<b>~</b>	<b>√</b>	<b>✓</b>						III			<b>√</b>	<b>✓</b>
	Upper Makotuku (Whau_3b)	Makotuku River from water supply weir at approx. NZMS 260 S20:103-011 to source	UVA	✓	<b>✓</b>	✓	✓	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	✓							Ш	<b>✓</b>	<b>✓</b>	✓	
	Lower Makotuku (Whau_3c)	Makotuku River from Mangawhero River confluence at approx. NZMS 260 S20:080-903 to water supply weir at approx. NZMS 260 S20:103-011	UVA	✓	✓	<b>✓</b>	✓	<b>√</b>	✓	✓	<b>✓</b>								II	✓		<b>~</b>	
	Upper Mangawhero (Whau_3d)	Mangawhero River from Makotuku River confluence at approx. NZMS 260 S20:080-903 to source	UVA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓			III	✓	✓	✓	✓



Water	Sub-zone*	Cub zana* Description1				Zone	-wide \	/alues								9	Site/Re	each-spe	cific \	/alues			
Management Zone*	Sub-zone	Sub-zone* Description1	LSC	AE	CR	Mau	IA <sup>2</sup>	<b>[</b> 2	SW	El	CAP <sup>3</sup>	NS	SOS-A	SOS-R	IS	AM	WM	SOS-C	TF	TS	WS	DFS	FC/D
	Lower Mangawhero (Whau_3e)	Mangawhero River from Raupiu Road at approx. NZMS 260 S21:099-646 to Makotuku River confluence at approx. NZMS 260 S20:080-903	HSS	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>✓</b>		<b>√</b>						III			<b>√</b>	
	Makara (Whau_3f)	Makara Stream from unnamed tributary confluence at approx. NZMS 260 S20:065-992 to source	UVA	✓	✓	✓			✓	✓	~	✓							III	✓		✓	
Coastal Whangaehu (Whau_4)	Coastal Whangaehu (Whau_4)	Whangaehu River at approx. NZMS 260 R23:890-275 to Kauangaroa at approx. NZMS 260 S22:045-397 (excluding the mainstem of the Whangaehu River from the cross-river CMA boundary at NZMS 260 S23:2690359- 6128748 seawards)	HSS	<b>✓</b>	✓	✓	<b>√</b>	<b>✓</b>	✓	<b>√</b>	<b>✓</b>			<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>						✓
	Upper Turakina (Tura_1a)	Turakina River from Otairi at approx. NZMS 260 S22:236-471 to source	HSS	✓	✓	<b>√</b>	✓	✓	<b>√</b>	<b>√</b>	<b>√</b>	✓											
Turakina (Tura_1)	Lower Turakina (Tura_1b)	Turakina River at approx.  NZMS 260 S23:924-231 to Otairi at approx.  NZMS 260 S22:236-471 (excluding the mainstem of the Turakina River from the crossriver CMA boundary at NZMS 260  S23:2692145-6125465 seawards)	HSS	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>		<b>✓</b>	<b>✓</b>		✓							<b>✓</b>
	Ratana (Tura_1c)	Lakes Waipu and Oraekomiko and all surrounding catchment area	LM	✓	✓	✓	✓	✓	✓	✓	✓												
	Upper Ohau (Ohau_1a)	Ohau River from Rongomatane at approx. NZMS 260 S25:072-577 to source	UHS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						Ш	✓	✓	✓	✓
Ohau (Ohau_1)	Lower Ohau (Ohau_1b)	Ohau River at approx. NZMS 260 S25:918-578 to Rongomatane at approx. NZMS 260 S25:072-577 (excluding the mainstem of the Ohau River from the crossriver CMA boundary at NZMS 260 S25:2692921-6059503 seawards)	НМ	<b>√</b>	<b>~</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>~</b>		<b>~</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>		III	<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>
Owahanga (Owha_1)	Owahanga (Owha_1)	Owahanga River at approx.  NZMS 260 U25:932-532 to source (excluding the mainstem of the Owahanga River from the cross-river CMA boundary at NZMS 260 U25:2792204-6053185 seawards)	HSS	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>		<b>√</b>										



Water	Cub*	Cult * Description 1				Zone-	wide V	/alues								9	Site/Re	each-spe	ecific \	/alues			
Management Zone*	Sub-zone*	Sub-zone* Description1	LSC	AE	CR	Mau	IA <sup>2</sup>	<b>[</b> 2	SW	EI	CAP <sup>3</sup>	NS	SOS-A	SOS-R	IS	AM	WM	SOS-C	TF	TS	WS	DFS	FC/D
East Coast (East_1)	East Coast (East_1)	Wainui, Tautane and Waimata - whole catchments (excluding the mainstem of the Wainui River from the cross-river CMA boundary at NZMS 260 V24:2811596-6073518 seawards)	HSS	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>~</b>	<b>✓</b>		<b>✓</b>	<b>✓</b>		<b>√</b>							
	Upper Akitio (Akit_1a)	Akitio River from Weber Road at approx. NZMS 260 U24:919-832 to source	HSS	<b>✓</b>	<b>✓</b>	✓	✓	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>		<b>√</b>										<b>✓</b>
Akitio (Akit_1)	Lower Akitio (Akit_1b)	Akitio River at approx. NZMS 260 U25:992-610 to Weber Road at approx. NZMS 260 U24:919-832 (excluding the mainstem of the Akitio River from the crossriver CMA boundary at NZMS 260 U25:2799657-6061852 seawards)	HSS	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		<b>✓</b>		<b>✓</b>	<b>√</b>	✓						<b>√</b>
	Waihi (Akit_1c)	Waihi Stream from Akitio River confluence at approx. NZMS 260 U24:895-801 to source	HSS	✓	<b>✓</b>	✓	✓	✓	✓	✓	✓										✓		
Northern Coastal (West_1)	Northern Coastal (West_1)	All coastal catchments and dune lakes between Kai lwi and Waitotara catchments	LM	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>		<b>✓</b>		<b>✓</b>	<b>✓</b>	<b>✓</b>						
Kai lwi (West_2)	Kai lwi (West_2)	Kai lwi Stream at approx. NZMS 260 R23:723-449 to source (excluding the mainstem of the Kai lwi Stream from the cross-river CMA boundary at NZMS 260 R22:2672262-6145059 seawards)	HSS	<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>			<b>✓</b>	<b>✓</b>	<b>✓</b>						
Mowhanau (West_3)	Mowhanau (West_3)	Mowhanau Stream at approx. NZMS 260 R22:725-447 to source (excluding the mainstem of the Mowhanau Stream from the cross-river CMA boundary at NZMS 260 R22:2672640-6144895 seawards)	LM	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>		<b>✓</b>		<b>✓</b>	<b>✓</b>	<b>✓</b>						
Kaitoke Lakes (West_4)	Kaitoke Lakes (West_4)	Lakes Kaitoke, Pauri, Wiritoa, Kohata and all surrounding catchment area	LM	✓	<b>√</b>	<b>√</b>	✓	<b>√</b>	<b>√</b>	✓	<b>√</b>				✓	✓	✓		III				
Southern Whanganui Lakes (West_5)	Southern Whanganui Lakes (West_5)	Lakes Vipan, Heaton, Bernard, William, Herbert, Hickson, Alice, Koitiata, Dudding and all surrounding catchment area	LS	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>	~	<b>√</b>	<b>~</b>		<b>✓</b>		<b>✓</b>	<b>√</b>	<b>✓</b>						<b>✓</b>



Water	C. I. sant	C. hourt Donald Bart				Zone	wide V	'alues								S	ite/Re	each-spe	cific \	/alues			
Management Zone*	Sub-zone*	Sub-zone* Description1	LSC	AE	CR	Mau	IA <sup>2</sup>	<b> </b> 2	SW	El	CAP <sup>3</sup>	NS	SOS-A	SOS-R	IS	AM	WM	SOS-C	TF	TS	WS	DFS	FC/D
Northern Manawatu Lakes (West_6)	Northern Manawatu Lakes (West_6)	All lakes and lagoons between Coastal Rangitikei and Coastal Manawatu and all surrounding catchment area	LS	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		<b>~</b>		✓	<b>√</b>	<b>√</b>						<b>✓</b>
Waitarere (West_7)	Waitarere (West_7)	All lakes and lagoons between Coastal Manawatu and Lake Horowhenua catchment and all surrounding catchment area	LS	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>					✓							
Lake Papaitonga (West_8)	Lake Papaitonga (West_8)	Lake Papaitonga catchment	LS	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓	<b>√</b>		<b>✓</b>		<b>✓</b>		<b>√</b>					<b>√</b>	<b>✓</b>
		Waikawa Stream at approx.																					
Waikawa (West_9)	Waikawa (West_9a)	NZMS 260 S25:908-548 to source (excluding the mainstem of the Waikawa Stream from the cross-river CMA boundary at NZMS 260 S25:2691531-6055429 seawards)	НМ	<b>✓</b>	✓	<b>✓</b>	✓	✓	✓	✓	<b>√</b>	✓	✓	✓		✓					✓	✓	<b>✓</b>
	Manakau (West_9b)	Manakau Stream from Waikawa Stream confluence at approx. NZMS 260 S25:946-549 to source	НМ	✓	<b>~</b>	✓	<b>~</b>	<b>✓</b>	<b>&gt;</b>	✓	<b>✓</b>	<b>&gt;</b>										<b>√</b>	✓
	Lake Horowhenua (Hoki_1a)	Whole lake catchment above Hokio Stream outlet	LM	✓	✓	✓	✓	✓	✓	✓	✓		✓									✓	✓
Lake Horowhenua (Hoki_1)	Hokio (Hoki_1b)	Hokio Stream downstream of Lake Horowhenua outlet (excluding the mainstem of the Hokio Stream from the cross-river CMA boundary at NZMS 260 S25:2694967-6065799 seawards)	LS	<b>√</b>	✓	<b>√</b>	<b>√</b>	<b>√</b>	✓	<b>√</b>	<b>✓</b>				✓	✓	✓					<b>√</b>	<b>✓</b>



# Part B.2: Where Specific Water^ Management Values Apply

ADVICE NOTE: For figure abbreviations - refer to the fold-out A3 VALUES KEY at the back of this schedule.

Life-supporting Capacity (LSC) Value

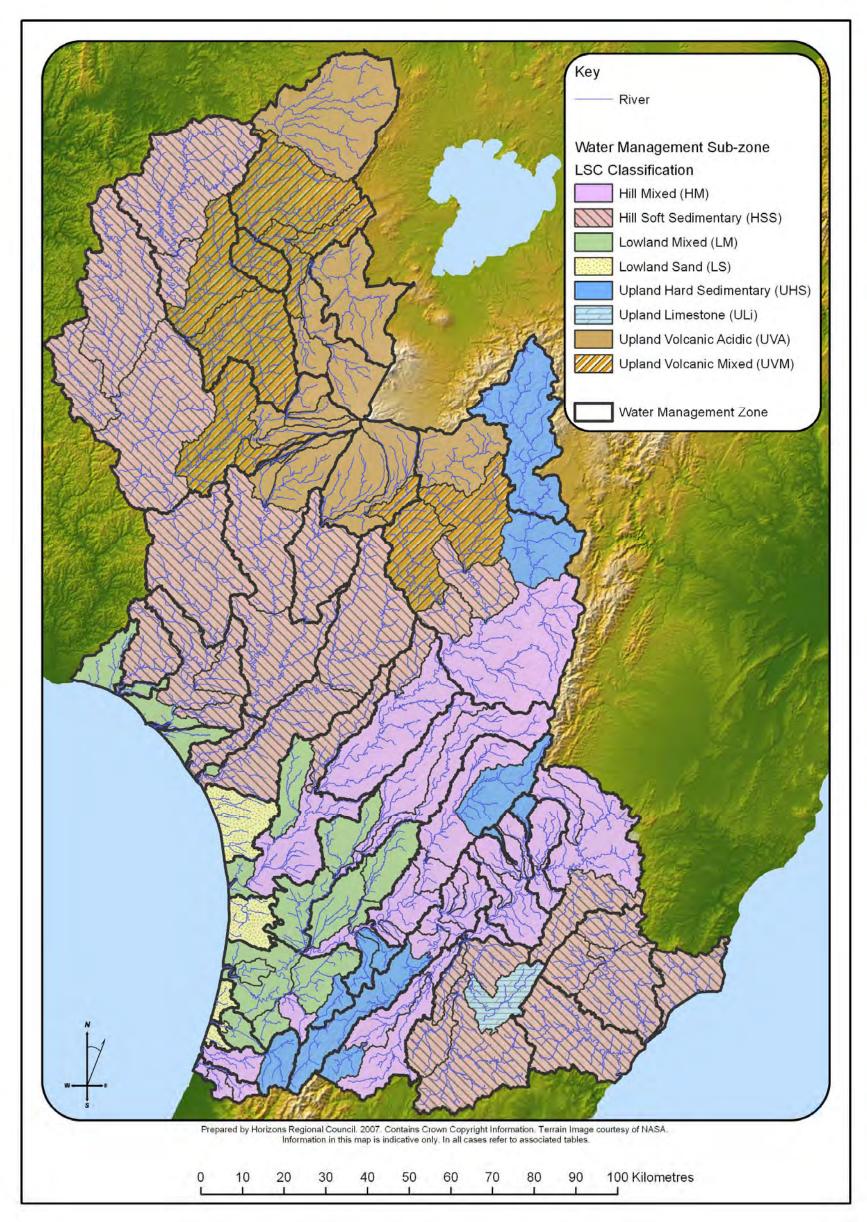


Figure B:1 Visual Guide to the Distribution of the Life-supporting Capacity (LSC) Value





# Natural State (NS) Value

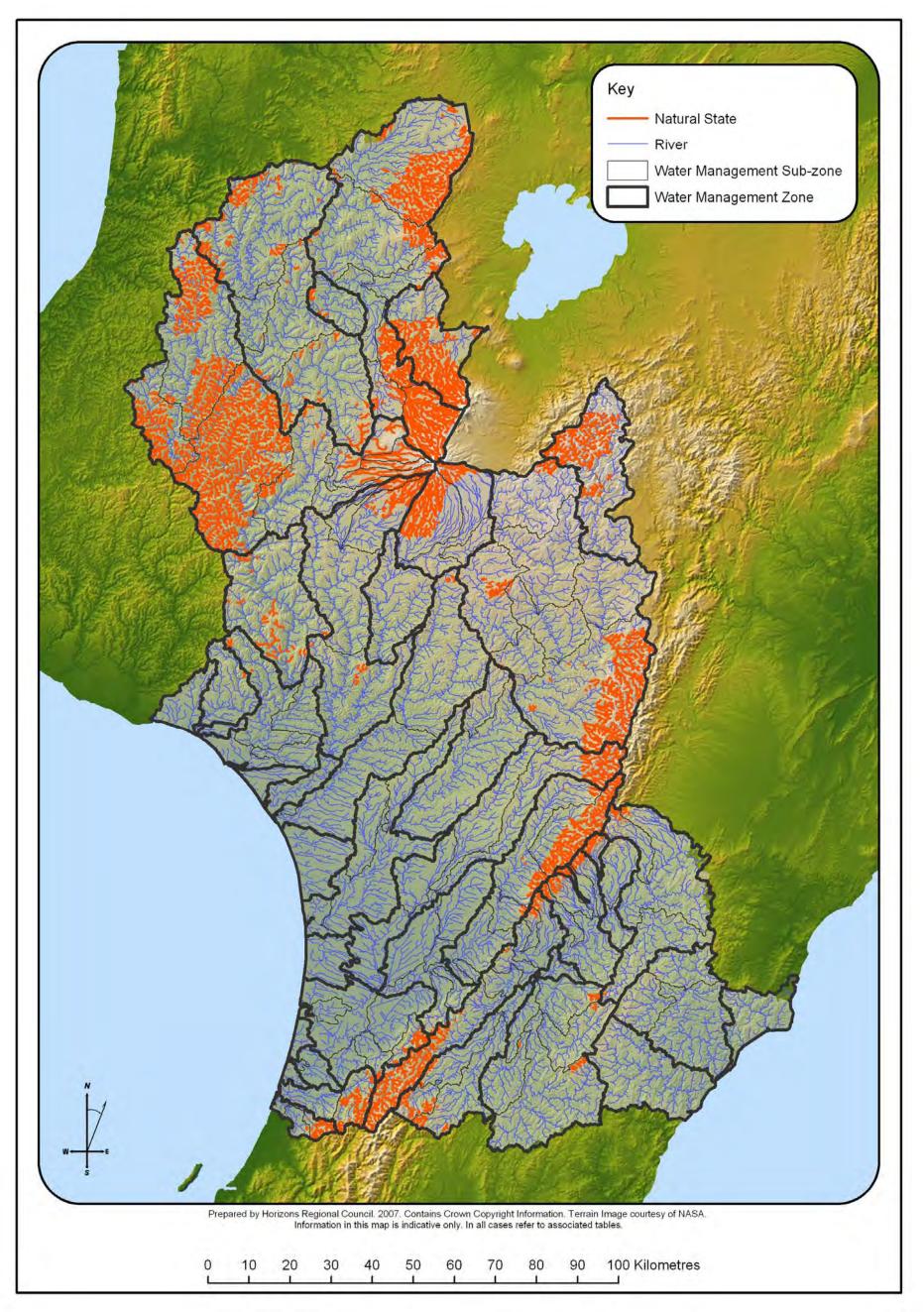


Figure B:2 Visual Guide to the Distribution of the Natural State (NS) Value





**Natural State Definition:** All sections of *rivers*^ and their *beds*^ that have sources in, and flow within, the Public Conservation Land (land held under the Conservation Act 1987 or administered by the Department of Conservation), with the exception of those where damming or diversion have significantly affected the natural state of the *water*^ (Table B.2).

Table B.2: Rivers <sup>^</sup> within Public Conservation Land excluded from the Natural State (NS) Value					
Water Management Zone*	Sub-zone*	River^	Locality Description		
Upper Gorge (Mana_9)	Upper and Lower Mangahao (Mana_9d and Mana_9c)	Mangahao River	From the confluence with the Manawatu River at approx. NZMS 260 T24:496-892 to the top of the Upper Dam at approx. NZMS 260 S24:191-608		
Coastal Manawatu (Mana_13)	Upper and Lower Tokomaru (Mana_13b and Mana_13c)	Tokomaru River	From the confluence with the Manawatu River at approx. NZMS 260 S24:132-727 to the top of the Tokomaru No.3 Reservoir at approx. NZMS 260 S25:203-654		
	Mangaore (Mana_13d)	Mangaore Stream	From confluence with the Manawatu River at approx. NZMS 260 S24:116-712 to source		





# Sites of Significance - Aquatic (SOS-A) Value



Figure B:3 Visual Guide to the Distribution of the Sites of Significance - Aquatic (SOS-A) Value





Water Management	Sub-zone*	Site	Locality Description	Species
Zone* Upper Manawatu (Mana_1)	Upper Manawatu (Mana_1a)	Manawatu River and tributaries	From the confluence with the Manawatu River at approx. NZMS 260 U23:780-258 to source	Koaro and dwarf <i>Galaxias</i>
	Mangatewainui (Mana_1b)	Mangatewainui River	From approx. NZMS 260 U23:828-177 to approx. NZMS 260 U23:785-231	Dwarf <i>Galaxias</i>
Upper Tamaki (Mana_3)	Upper Tamaki (Mana_3)	Tamaki River including East and West Branches	From approx. NZMS 260 U23:710-131 to source	Dwarf <i>Galaxias</i>
Upper Kumeti (Mana_4)	Upper Kumeti (Mana_4)	Kumeti/Mangapuaka Stream	From approx. NZMS 260 T23:646-091 to source	Dwarf <i>Galaxias</i>
	Lower Tamaki (Mana_5b)	Rokaiwhana Stream	From the confluence with the Tamaki River at approx. NZMS 260 T23:697-091 to source	Dwarf <i>Galaxias</i>
Tamaki-Hopelands	Oruakeretaki (Mana_5d)	Mangapukakakahu Stream	From the confluence with the Oruakeretaki River at approx. NZMS 260 T23:666-023 to source	Dwarf <i>Galaxias</i>
(Mana_5)		Oruakeretaki Stream	From approx. NZMS 260 T23:642-045 to approx. NZMS 260 T23:618-067	Dwarf <i>Galaxias</i>
		Oruakeretaki Tributary	From the confluence with the Oruakeretaki Stream at approx. NZMS 260 T23:628-058 to source	Dwarf <i>Galaxias</i>
Tiraumea (Mana_7)	Lower Tiraumea (Mana_7b)	Makairo Stream	From approx. NZMS 260 T24:655-833 to source	Shortjaw kokopu and koa
Mangatainoka (Mana_8)	Upper Mangatainoka (Mana_8a)	Mangatainoka Tributary	From the confluence with the Mangatainoka River at approx. NZMS 260 S25:249-535 to source	Shortjaw kokopu and koa
		Ngamaia Stream Tributary	From the confluence with the Ngamaia Stream at approx. NZMS 260 S25:243-568 to source	Koaro
		Mangatainoka River	From approx. NZMS 260 S25:262-562 to source	Shortjaw kokopu and koa
		Mangatainoka Tributary	From the confluence with the Mangatainoka River at approx. NZMS 260 S25:252-555 to source	Shortjaw kokopu
		Rawnsley Stream	From the confluence with the Mangatainoka River at approx. NZMS 260 S25:259-555 to source	Shortjaw kokopu
		Makotukutuku Stream	From the confluence with the Mangatainoka River at approx. NZMS 260 S25:279-576 to source	Shortjaw kokopu
	Middle Mangatainoka (Mana_8b)	Tramway Creek	From the confluence with the Mangatainoka River at approx. NZMS 260 T25:326-625 to source	Dwarf <i>Galaxias</i>
	Makakahi (Mana_8c)	Bruce Stream Tributary	From the confluence with the Bruce Stream at approx. NZMS 260 T25:332-510 to source	Shortjaw kokopu
		Makakahi River Tributary	From the confluence with the Makakahi River at approx. NZMS 260 S25:286-514 to source	Shortjaw kokopu



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Water Management Zone*	Sub-zone*	Site	Locality Description	Species
		Makakahi River	From the confluence with a tributary at approx. NZMS 260 S25:286-514 to source	Shortjaw kokopu
	Upper Gorge	Manawatu River Tributary	From the confluence with the Manawatu River at approx. NZMS 260 T24:486-899 to source	Redfin bully
	(Mana_9a)	Manawatu River Tributary	From the confluence with the Manawatu River at approx. NZMS 260 T24:490-928 to source	Redfin bully
Upper Gorge	Mangaatua (Mana_9c)	Mangaatua Stream	From approx. NZMS 260 T24:590-992 to approx. NZMS 260 T23:574-023	Shortjaw kokopu
(Mana_9)		Mangahao Tributary	From the confluence with the Mangahao River at approx. NZMS 260 S25:150-532 to source	Dwarf <i>Galaxias</i>
	Lower Mangahao	Mangahao River	From approx. NZMS 260 T25:324-679 to source	Dwarf Galaxias and shortjaw kokopu
	(Mana_9e)	Roaring Creek	From the confluence with the Mangahao River at approx. NZMS 260 S25:190-606 to source	Dwarf <i>Galaxias</i>
		Ngapuketurua Stream	From the confluence with the Mangahao River at approx. NZMS 260 S25:278-660 to source	Banded kokopu and shortjaw kokopu
	Middle Manawatu (Mana_10a)	Manawatu River Tributary	From the confluence with the Manawatu River at approx. NZMS 260 T24:410-937 to approx. NZMS 260 T24:444-940	Lamprey
		Manawatu River Tributary	From the confluence with the Manawatu River at approx. NZMS 260 T24:392-929 to approx. NZMS 260 T24:413-902	Lamprey
Mid-II- Managarata	Upper Pohangina (Mana_10b)	Pohangina Tributary	From the confluence with the Pohangina River at approx. NZMS 260 T23:652-233 to source	Koaro
Middle Manawatu (Mana_10)		Pohangina River	From approx. NZMS 260 U23:705-256 to approx. NZMS 260 U23:708-303	Whio
(Waria_10)		Makawakawa Stream Tributary	From approx. NZMS 260 T23:606-173 to source	Koaro
	Middle Pohangina	Pohangina River	From approx. NZMS 260 T23:468-058 to approx. NZMS 260 T23:469-086	Koaro
	(Mana_10c)	Waitokanui Stream	From the confluence with the Pohangina River at approx. NZMS 260 T23:474-069 to source	Redfin bully
	Lower Pohangina (Mana_10d)	Ashhurst Domain	At approx. NZMS 260 T24:446-967 to approx. NZMS 260 T24:444-940	Brown mudfish
	Turitea (Mana_11b)	Tiritea Stream	From the confluence with the Manawatu River at approx. NZMS 260 T24:302-880 to approx. NZMS 260 T24:341-866	Lamprey
Lower Manawatu (Mana_11)	Kahuterawa (Mana_11c)	Kahuterawa Stream and tributaries	From the confluence with the Manawatu River at approx. NZMS 260 S24:293-870 to source	Banded kokopu, shortjaw kokopu koaro and redfin bully
	Main Drain (Mana_11f)	Unnamed Wetland	At approx. NZMS 260 S24:223-877	Brown mudfish
Oroua (Mana_12)	Upper Oroua (Mana_12a)	Mangapikopiko Stream	From the confluence with the Oroua River at approx. NZMS 260 T22:515-307 to approx. NZMS 260 T22:538-317	Banded kokopu



Water Management Zone*	Sub-zone*	Site	Locality Description	Species
		Oroua River	From approx. NZMS 260 T22:667-349 to source	Banded kokopu
	Makino (Mana_12e)	Mangaone West Stream	From approx. NZMS 260 S23:258-050 to approx. NZMS 260 S23:236-064	Redfin bully
	Coastal Manawatu	Round Bush Scenic Reserve and Tributary	From approx. NZMS 260 S24:013-835 to source at approx. NZMS 260 S24:058-819	Brown mudfish
	(Mana_13a)	Heatherlea Park Swamp	At approx. NZMS 260 S25:041-667	Banded kokopu
		Te Whanga Swamp	At approx. NZMS 260 S25:030-672	Banded kokopu
		Tokomaru River Tributary	From the confluence with the Tokomaru River at approx. NZMS 260 S24:243-705 to source	Redfin bully, koaro and banded kokopu
	Upper Tokomaru (Mana_13b)	Tokomaru River Tributary	From the confluence with the Tokomaru River at approx. NZMS 260 S24:255-720 to source	Redfin bully, koaro and banded kokopu
		Tokomaru River Tributary	From the confluence with the Tokomaru River at approx. NZMS 260 S24:259-734 to source	Redfin bully, koaro and banded kokopu
Coastal Manawatu (Mana_13)	Upper and Lower Tokomaru (Mana_13b and Mana_13c)	Tokomaru River	From approx. NZMS 260 S24:198-776 to approx. NZMS 260 S25:240-698	Redfin bully, koaro and banded kokopu
	Lower Tokomaru (Mana_13c)	Makerua Swamp Wildlife Management Reserve	At approx. NZMS 260 S24:190-760	Brown mudfish
	Mangaore (Mana_13d) Koputaroa (Mana_13e)	Mangaore Stream	From approx. NZMS 260 S24:142-711 to source	Shortjaw kokopu, redfin bully and koaro
		Mangatangi Stream	From the confluence with the Mangaore Stream at approx. NZMS 260 S25:173-670 to source	Shortjaw kokopu, redfin bully and koaro
		Mangaore Stream Tributary	From the confluence with the Mangaore Stream at approx. NZMS 260 S25:161-648 to source	Koaro
		Perawitis Wetland	At approx. NZMS 260 S25:094-688 and approx. NZMS 260 S25:095-688	Brown mudfish
		Rangitikei River	From approx. NZMS 260 U20:707-031 to approx. NZMS 260 U19:716-274	Whio
Upper Rangitikei (Rang_1)	Upper Rangitikei (Rang_1)	Mangamarie River	From the confluence with the Rangitikei River at approx. NZMS 260 T20:691-090 to approx. NZMS 260 T20:699-102	Whio
(Nuriy_1)	(rung_1)	Otamatenui Stream	From the confluence with the Rangitikei River at approx. NZMS 260 T20:672-107 to approx. NZMS 260 T20:603-146	Whio
Middle Rangitikei (Rang_2)	Pukeokahu - Mangaweka (Rang_2b)	Mangatera River	From the confluence with the Maropea River at approx. NZMS 260 U21:749-655 to Lake Colenso at approx. NZMS 260 U21:781-660	Whio
		Waiokotore Stream	From the confluence with the Mangatera River at approx. NZMS 260 U21:770-659 to approx. NZMS 260 U21: 789-697	Whio
		Maropea River	From the confluence with the Mangatera River at approx. NZMS 260 U21:749-655 to approx. NZMS 260 U22:803-580	Whio



Water Management Zone*	Sub-zone*	Site	Locality Description	Species
		Kawhatau River	From the confluence with Hikurangi Stream at approx. NZMS 260 U22:700-557 to approx. NZMS 260 U22:760-499	Whio
		Waikakamaka River	From the confluence with the Maropea River at approx. NZMS 260 U21:748-622 to approx. NZMS 260 U22:782-502	Whio
		Porangaki River	From the confluence with the Mangakukeke Stream at approx. NZMS 260 T22:635-507 to approx. NZMS 260 T22:651-499	Dwarf <i>Galaxias</i> and redfin bully
		Hikurangi Stream	From the confluence with the Kawhatau River at approx. NZMS 260 T22:661-530 to source	Dwarf <i>Galaxias</i>
		Mangawharariki River	From approx. NZMS 260 T22:602-449 to approx. NZMS 260 T22:632-444	Dwarf <i>Galaxias</i>
Lower Rangitikei and Coastal Rangitikei (Rang_3 and Rang_4)	Lower Rangitikei and Coastal Rangitikei (Rang_3a and Rang_4a)	Rangitikei River	From approx. NZMS 260 S23:184-206 to approx. NZMS 260 S23:210-222	Redfin bully
Coastal Rangitikei	Tidal Rangitikei (Rang_4b)	Forest Road Wetland	From approx. NZMS 260 S23:016-028 to approx. NZMS 260 S23:040-034	Giant kokopu
(Rang_4)	Tutaenui (Rang_4d)	Tutaenui Stream Tributary	From the confluence with the Tutaenui Stream at approx. NZMS 260 S23:104-104 to source	Brown mudfish
Upper Whanganui (Whai_1)	Upper Whanganui (Whai_1)	Otamangakau Outlet	From the confluence with the Whanganui River at approx. NZMS 260 T19:354-409 to approx. NZMS 260 T19:359-411	Whio
		Otamarautara Stream and tributaries	From the confluence with the Whanganui River at approx. NZMS 260 T19:329-408 to source	Whio
		Otongokaku Stream	From the confluence with the Whanganui River at approx. NZMS 260 T19:319-405 to approx. NZMS 260 T19:321-398	Whio
		Waipapaiti Stream	From the confluence with the Whanganui River at approx. NZMS 260 T19:309-401 to approx. NZMS 260 T19:312-395	Whio
		Mangatepopo Stream	From the confluence with the Whanganui River at approx. NZMS 260 S19:289-405 to approx. NZMS 260 T19:312-323	Whio
		Okupata Stream	From the confluence with the Mangatepopo Stream at approx. NZMS 260 S19:288-398 to approx. NZMS 260 S19:264-364	Whio
		Tawhitikuri Stream	From the confluence with the Mangatepopo Stream at approx. NZMS 260 T19:309-361 to approx. NZMS 260 T19:311-338	Whio
		Waione Stream	From the confluence with the Whanganui River at approx. NZMS 260 S19:276-427 to approx. NZMS 260 S19:245-396	Whio
		Waipari Stream	From the confluence with the Whanganui River at approx. NZMS 260 S19:269-456 to approx. NZMS 260 S18:282-516	Whio



Water Management Zone*	Sub-zone*	Site	Locality Description	Species
		Waionenui Stream	From the confluence with the Waipari Stream at approx. NZMS 260 S19:289-476 to approx. NZMS 260 S19:292-478	Whio
		Waione Stream	From the confluence with the Waipari Stream at approx. NZMS 260 S19:282-465 to approx. NZMS 260 S19:286-462	Whio
Upper Whanganui (Whai_1)	Upper Whanganui (Whai_1)	Whanganui River	From the confluence with the Whakapapa River at approx. NZMS 260 S19:188-496 to approx. NZMS 260 T19:334-332	Whio
Cherry Grove (Whai_2)	Upper and Lower Whakapapa (Whai_2b and Whai_2c)	Whakapapa River and Whakapapaiti Stream	From the confluence with the Whanganui River at approx. NZMS 260 S19:188-495 to source	Whio
		Waikare Stream	From the confluence with the Whakapapaiti Stream at approx. NZMS 260 S19:238-224 to approx. NZMS 260 S19:287-216	Whio
	Upper Whakapapa	Mangahuia Stream	From the confluence with the Whakapapaiti Stream at approx. NZMS 260 S19:233-230 to approx. NZMS 260 S19:238-166	Whio
	(Whai_2b)	Whakapapanui Stream	From the confluence with the Whakapapa River at approx. NZMS 260 S19:243-269 to source	Whio
		Papamanuka Stream	From the confluence with the Whakapapa River at approx. NZMS 260 S19:233-289 to approx. NZMS 260 S19:254-287	Whio
	Lower Whakapapa (Whai_2c)	Otamawairua Stream	From the confluence with the Whakapapa River at approx. NZMS 260 S19:196-324 to approx. NZMS 260 S19:240-337	Whio
	Piopiotea	Piopiotea Stream	From the confluence with the Whakapapa River at approx. NZMS 260 S19:174-356 to approx. NZMS 260 S19:183-275	Whio
	(Whai_2d)	Tepure Stream	From the confluence with the Piopiotea Stream at approx. NZMS 260 S19:160-328 to approx. NZMS 260 S19:168-316	Whio
	Pungapunga	Pungapunga River	From approx. NZMS 260 S18:291-612 to source	Whio
	(Whai_2e)	Pungapunga River	From approx. NZMS 260 S18:234-573 to source	Koaro
		Ongarue River and tributaries	From approx. NZMS 260 T17:314-864 to source	Whio
		Mangatukutuku Stream	From approx. NZMS 260 S18:166-770 to approx. S18:204-729	Whio
		Maramataha River	From approx. NZMS 260 S17:176-825 to source	Whio
	Upper Ongarue (Whai_2f)	Piropiro Stream	From the confluence with the Maramataha River at approx. NZMS 260 S17:251-804 to source	Whio
		Paupangonui Stream	From the confluence with the Piropiro River at approx. NZMS 260 S17:265-819 to source	Whio
		Totara Stream	From the confluence with the Maramataha River at approx. NZMS 260 S18:271-796 to source	Whio
		Unnamed Maramataha River Tributary	From the confluence with the Maramataha River at approx. NZMS 260 S18:273-793 to source	Whio



Water Management Zone*	Sub-zone*	Site	Locality Description	Species
	Lower Ongarue (Whai_2g)	Opotiki Stream	From approx. NZMS 260 S18:022-633 to source	Shortjaw kokopu
Te Maire (Whai_3)	Te Maire (Whai_3)	Motutara Stream	From the confluence with Whanganui River at approx. NZMS 260 S19:000-488 to source	Shortjaw kokopu
	Middle Whanganui (Whai_4a)	Whanganui River Tributary	From the confluence with the Whanganui River at approx. NZMS 260 S19:939-422 to source	Shortjaw kokopu
Middle Whanganui (Whai_4)	Retaruke	Retaruke River	From the confluence with the Whanganui River at approx. NZMS 260 R19:890-309 to approx. NZMS 260 S19:072-213	Whio
	(Whai_4d)	Horomea Stream	From approx. NZMS 260 S19:947-252 to source	Whio
		Morinui Stream	From approx. NZMS 260 S19:954-233 to source	Whio
Pipiriki (Whai_5)		Mangapurua Stream and tributaries	From approx. NZMS 260 R20:800-117 to source	Whio
(**************************************		Mangatiti Stream and tributaries	From approx. NZMS 260 R20:832-079 to source	Whio
	Pipiriki (Whai_5a)	Kaiwhakauka Stream	From approx. NZMS 260 R19:878-305 to source	Whio
		Puketapu Stream	From the confluence with the Whanganui River at approx. NZMS 260 R20:737-180 to source	Redfin bully
		Whanganui River Tributary	From the confluence with the Whanganui River at approx. NZMS 260 R20:793-115 to source	Redfin bully
		Puawa Stream	From the confluence with the Whanganui River at approx. NZMS 260 R20:819-058 to source	Redfin bully
		Mangaio Stream and tributaries	From the confluence with the Whanganui River at approx. NZMS 260 R20:839-955 to source	Whio and redfin bully
		Waitaanga Stream Tributary	From the confluence with the Waitaanga Stream at approx. NZMS 260 R18:710-645 to source	Redfin bully
	Tangarakau	Heao Stream	From approx. NZMS 260 R18:781-513 to source	Shortjaw kokopu and koaro
	(Whai_5b)	Mangarae Stream	From the confluence with the Mangarae Stream at approx. NZMS 260 R19:732-302 to source	Banded kokopu
		Mangarae Stream Tributary	From approx. NZMS 260 R19:728-288 to source	Banded kokopu
	M/h on gone on our	Tirohanga Stream	From the confluence with the Whangamomona River at approx. NZMS 260 R20:658-157 to source	Shortjaw kokopu
	Whangamomona (Whai_5c)	Awahou Stream	From the confluence with the Marangae Stream at approx. NZMS 260 R19:587-277 to source	Shortjaw kokopu
		Kuri Stream	From approx. NZMS 260 R20:666-190 to source	Shortjaw kokopu
	Upper and Middle Manganui o te Ao (Whai_5d and Whai_5g)	Manganui o te Ao River	From approx. NZMS 260 S20:067-085 to source	Koaro



Water Management Zone*	Sub-zone*	Site	Locality Description	Species
	Upper Middle and Lower Manganui o te Ao (Whai_5d, Whai_5g and Whai_5i)	Manganui o te Ao River	From the confluence with the Whanganui River at approx. NZMS 260 R20:861-980 to source	Whio
	Makatote (Whai_5e)	Makatote River	From the confluence with the Manganui o te Ao River at approx. NZMS 260 S20:128-119 to source	Koaro and whio
	Waimarino (Whai_5f)	Waimarino Stream	From the confluence with the Makatote River at approx. NZMS 260 S20:129-120 to the confluence with the Makomiko Stream at approx. NZMS 260 S20:128-119	Whio
	Middle Manganui o te Ao	Makomiko Stream	From the confluence with the Waimarino Stream at approx. NZMS 260 S20:153-168 to source	Koaro
	(Whai_5g)	Manganui o te Ao River Tributary	From the confluence with the Manganui o te Ao River at approx. NZMS 260 S20:068-099 to source	Whio
	Mangaturuturu	Mangaturuturu River and tributaries	From the confluence with the Manganui o te Ao River at approx. NZMS 260 S20:056-067 to source	Banded kokopu and whio
	(Whai_5h)	Mangaturuturu River Tributary	From the confluence with the Mangaturuturu River at approx. NZMS 260 S20:161-083 to source	Koaro
	Lower Manganui o te Ao (Whai_5e)	Ruatiti Stream	From the confluence with the Manganui o te Ao River at approx. NZMS 260 S20:993-080 to source	Whio and shortjaw kokopu
		Makino Stream Tributary	From approx. NZMS 260 S20:011-130 to source	Shortjaw kokopu and koaro
		Ohangaia Stream	From the confluence with the Manganui o te Ao River at approx. NZMS 260 S20:919-021 to source	Redfin bully
		Orautoha	From the confluence with the Manganui o te Ao River at approx. NZMS 260 S20:027-067 to source	Whio
	Orautoha (Whai_5j)	Kaukore Stream	From the confluence with the Whanganui River at approx. NZMS 260 R21:859-894 to source	Shortjaw kokopu, redfin bully, koaro
		Whanganui River	From approx. NZMS 260 R21:861-858 to approx. NZMS 260 R21:861-892	Redfin bully
		Riripo Stream	From the confluence with the Whanganui River at approx. NZMS 260 S21:915-777 to source	Redfin bully
Paetawa (Whai_6)	Paetawa (Whai_6)	Otuporiki Stream	From the confluence with the Whanganui River at approx. NZMS 260 S21:950-696 to source	Redfin bully
(Wildi_O)	(vvnai_6)	Taupiri Stream	From the confluence with the Whanganui River at approx. NZMS 260 S21:942-624 to source	Redfin bully
		Whauteihi Stream	From the confluence with Whanganui River at approx. NZMS 260 S22:959-577 to source	Bluegill bully



Water Management Zone*	Sub-zone*	Site	Locality Description	Species
Lower Whanganui (Whai_7)	Lower Whanganui (Whai_7a)	Kauarapaoa Stream	From approx. NZMS 260 S22:900-558 to source	Redfin bully
	Upokongaro (Whai_7c)	Mongotai Stream	From the confluence with the Upokongaro Stream at approx. NZMS 260 S22:958-511 to source	Lamprey
	Upper Whangaehu	Unnamed Tributary of the Whangaehu River	From approx. NZMS 260 T20:410-019 to source	Whio
	(Whau_1a)	Makahikatoa Stream and tributaries	From approx. NZMS 260 T20:396-008 to source	Whio
		Wahianoa Stream	From approx. NZMS 260 T20:365-039 to source	Whio
Upper Whangaehu (Whau_1)		Unnamed Tributary of the Tokiahuru Stream	From approx. NZMS 260 T20:341-027 to source	Whio
	Tokiahuru (Whau_1c)	Unnamed Tributary of the Unuunuakapuateariki Stream	From approx. NZMS 260 T20:329-989 to source	Whio
		Unuunuakapuateariki Stream and tributaries	From approx. NZMS 260 T20:312-960 to source	Whio
	Lower Whangaehu (Whau_3a)	Taukoro Stream	From the confluence with the Mangawhero River at approx. NZMS 260 S22:083-566 to source	Koaro
Lower Whangaehu	Upper Mangawhero (Whau_3d)	Mangawhero River	From approx. NZMS 260 S20:179-978 (Ohakune) to source	Whio
(Whau_3)		Taonui Stream	From approx. NZMS 260 S20:135-009 to approx. NZMS 260 S20:160-021	Whio
	Lower Mangawhero (Whau_3e)	Mangawhero River	From approx. NZMS 260 S21:067-875 to approx. NZMS 260 S20:080-903	Whio
Turakina (Tura_1)	Lower Turakina (Tura_1b)	Turakina River Tributary	From the confluence with the Turakina River at approx. NZMS 260 S22:090-361 to approx. NZMS 260 S22:104-350	Redfin bully
	Upper Ohau (Ohau_1a)	Waiti Stream	From the confluence with the Ohau River at approx. NZMS 260 S25:118-604 to source	Redfin bully
Ohau (Ohau_1)	Upper and Lower Ohau (Ohau_1a and Ohau_1b)	Ohau River	From approx. NZMS 260 S25:061-575 to approx. NZMS 260 S25:098-588	Redfin bully, bluegill bully and banded kokopu
(Onau_1)	Lower Ohau	Ohau River	From approx. NZMS 260 S25:982-578 to approx. NZMS 260 S25:039-574	Redfin bully
	(Ohau_1b)	Makorokio Stream	From the confluence with the Ohau River at approx. NZMS 260 S25:018-563 to source	Redfin bully, lamprey and shortjaw kokopu
Owahanga	Owahanga	Owahanga River	From approx. NZMS 260 U25:902-585 to approx. NZMS 260 U25:889-568	Redfin bully
Owahanga (Owha_1)	Owahanga (Owha_1)	Pongaroa River	From approx. NZMS 260 U24:778-708 to source	Redfin bully and shortjaw kokopu
East Coast (East_1)	East Coast (East_1)	Waimata River	From the cross-river CMA boundary at approx. NZMS 260 U25:058-691 to approx. NZMS 260 U24:051-710	Redfin bully



Water Management Zone*	Sub-zone*	Site	Locality Description	Species
		Papuka Stream	From the cross-river CMA boundary at approx. NZMS 260 U24:076-705 to approx. NZMS 260 U24:072-723	Redfin bully
		Wainui River	From approx. NZMS 260 V24:112-752 to approx. NZMS 260 V24:102-771	Redfin bully
	Upper Akitio (Akit_1a)	Akitio River Tributary	From the confluence with the Akitio River at approx. NZMS 260 U24:955-866 to source	Banded kokopu
Akitio		Middle Creek	From the confluence with the Akitio River at approx. NZMS 260 U25:986-654 to source	Redfin bully and banded kokopu
(Akit_1)	Lower Akitio (Akit_1b)	Wakawaihine Stream	From the confluence with the Akitio River at approx. NZMS 260 U25:985-657 to approx. NZMS 260 U25:990-677	Redfin bully
		Wakawaihine Stream Tributary	From approx. NZMS 260 U25:998-696 to source	Redfin bully
Northern Coastal (West_1)	Northern Coastal (West_1)	Okehu Stream	From approx. NZMS 260 R22:713-495 to approx. NZMS 260 R22:731-531	Redfin bully
Mowhanau (West_3)	Mowhanau (West_3)	Mowhanau Stream	From the cross-river CMA boundary at NZMS 260 R22:2672640-6144895 to approx. NZMS 260 R22:743-462	Redfin bully
	Southern Whanganui Lakes (West_5)	Unnamed Stream Santoft Forest	From the cross-river CMA boundary at approx. NZMS 260 S23:954-173 to Lake Koitiata at approx. NZMS 260 S23:973-185	Banded kokopu
Southern Whanganui		Waimahora Stream	From the cross-river CMA boundary at approx. NZMS 260 S23:961-153 to approx. NZMS 260 S23:989-154	Banded kokopu
Lakes (West_5)		Lake Herbert	At approx. NZMS 260 S23:063-162	Brown mudfish
		Knottingly Swamp	At approx. NZMS 260 S23:988-131	Brown mudfish
Northern Manawatu Lakes (West_6)	Northern Manawatu Lakes (West_6)	Kaikokopu Stream	From the cross-river CMA boundary at approx. NZMS 260 S24:992-905 to approx. NZMS 260 S24:009-902	Redfin bully
Lake Papaitonga	Lake Papaitonga	Lake Papaitonga	Lake Papaitonga Wetland at approx. NZMS 260 S25:991-600	Brown mudfish
(West_8)	(West_8)	Lake Papaitonga and tributaries	From the confluence with Lake Papaitonga and Waiwiri Stream at approx. NZMS 260 S25:977-600 to source	Banded kokopu
Waikawa	Waikawa	Panatewaewae Stream	From the confluence with the Waikawa Stream at approx. NZMS 260 S25:017-498 to source	Koaro
(West_9)	(West_9)	Waikawa Stream	Waikawa Stream mainstem from the cross-river CMA boundary at approx. NZMS 260 S25:2691531-6055429 to source	Shortjaw kokopu and redfin bully



	Water Management Zone*	Sub-zone*	Site	Locality Description	Species
7	Lake Horowhenua	Lake Horowhenua	Patiki Stream	From the confluence with Lake Horowhenua at approx. NZMS 260 S25:019-642 to source	Giant kokopu
	(Hoki_1)	(Hoki_1a)	Whitiki Swamp	At approx. NZMS 260 S25:010-655	Brown mudfish



# Sites of Significance - Riparian (SOS-R) Value

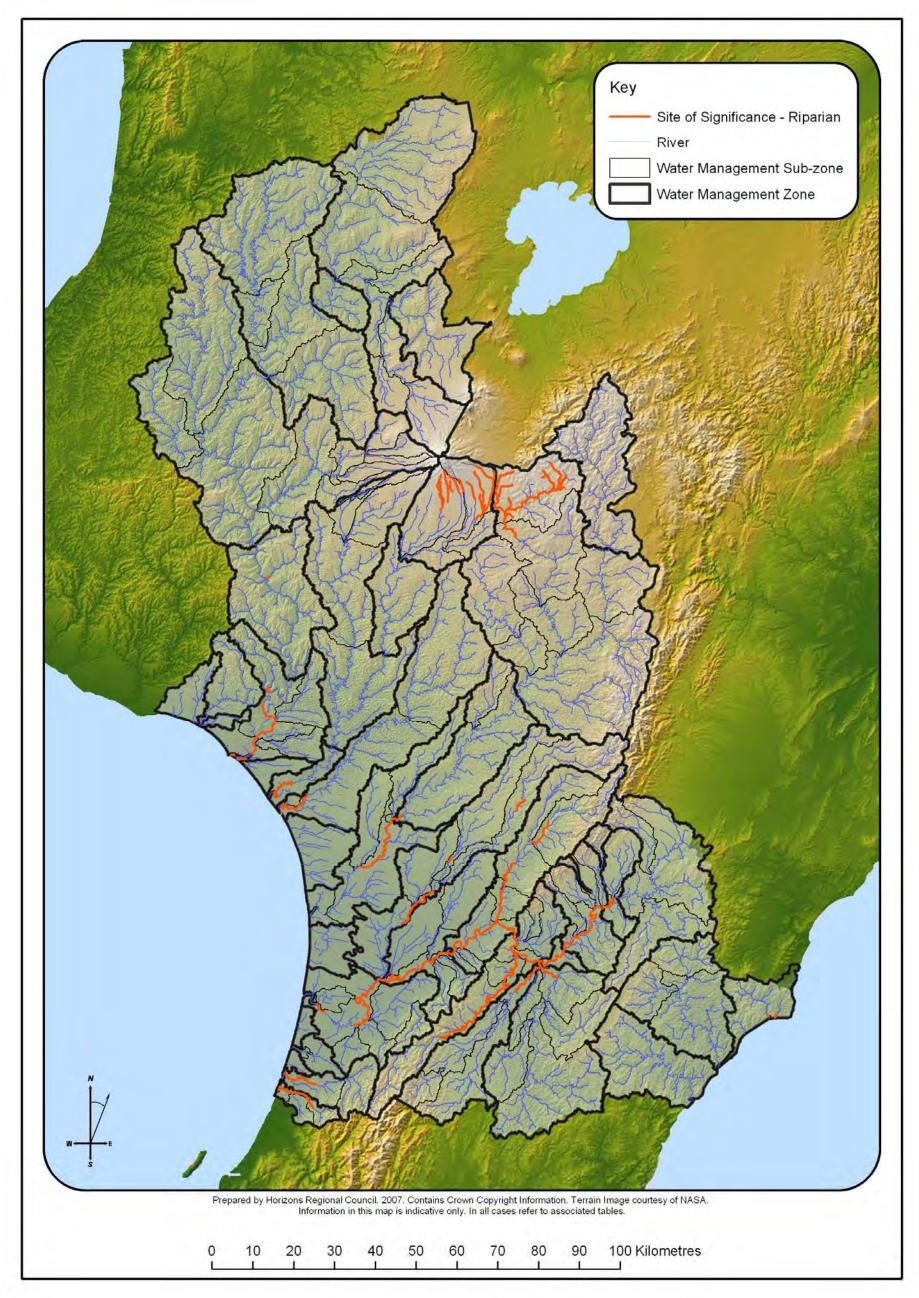


Figure B:4 Visual Guide to the Distribution of the Sites of Significance - Riparian (SOS-R) Value





Table B.4: Sites of Significance - Riparian (SOS-R) Value in the Region

Water Management Zone*	Sub-zone*	River^	Locality Description	Riparian Habitat Value
Weber-Tamaki (Mana_2)	Weber-Tamaki (Mana_2a)	Manawatu River	From approx. NZMS 260 U23:708-003 to approx. NZMS 260 U23:737-025 (confluence with Mangatera Stream)	Gravel and sand (dotterel)
Tamaki-Hopelands (Mana_5)	Tamaki- Hopelands (Mana_5a)	Manawatu River	From approx. NZMS 260 T24:614-897 to approx. NZMS 260 U23:708-003	Gravel and sand (dotterel)
Hopelands-Tiraumea (Mana_6)	Hopelands- Tiraumea (Mana_6)	Manawatu River	From the confluence with the Tiraumea River at approx. NZMS 260 T24:553-871 to approx. NZMS 260 T24:614-897	Gravel and sand (dotterel)
Tiraumea (Mana_7)	Lower Tiraumea (Mana_7b)	Tiraumea River	From the confluence with the Manawatu River at approx. NZMS 260 T24:553-871 to the confluence with the Makairo Stream at approx. NZMS 260 T24:597-831	Gravel and sand (dotterel)
Mangatainoka (Mana_8)	Lower Mangatainoka (Mana_8c)	Mangatainoka River	From the confluence with the Tiraumea River at approx. NZMS 260 T24:557-856 to approx. NZMS 260 T24:495-786	Gravel and sand (dotterel)
	Upper Gorge (Mana_9a)	Manawatu River	From the Manawatu Gorge at approx. NZMS 260 T24:495-938 to the confluence with the Tiraumea River at approx. NZMS 260 T24:553-871	Gravel and sand (dotterel)
Upper Gorge (Mana_9)	Upper Mangahao (Mana_9d)	Mangahao River	From approx. NZMS 260 T24:469-826 to approx. NZMS 260 T25:309-684	Gravel and sand (dotterel)
(Maria_7)	Lower Mangahao (Mana_9e)	Mangahao River	From the confluence with the Manawatu River at approx. NZMS 260 T24:496-892 to approx. NZMS 260 T24:469-826	Gravel and sand (dotterel)
	Middle Manawatu (Mana_10a)	Manawatu River	From Teachers College at approx. NZMS 260 T24:332-891 to the Manawatu Gorge at approx. NZMS 260 T24:495-938	Gravel and sand (dotterel)
Middle Manawatu	Upper Pohangina (Mana_10b)	Pohangina River	From approx. NZMS 260 T23:534-168 to approx. NZMS 260 T23:577-213	Gravel and sand (dotterel)
(Mana_10)	Middle Pohangina (Mana_10c)	Pohangina River	From approx. NZMS 260 T23:464-043 to approx. NZMS 260 T23:493-113	Gravel and sand (dotterel)
	Lower Pohangina (Mana_10d)	Pohangina River	From the confluence with the Manawatu River at approx. NZMS 260 T24:448-965 to approx. NZMS 260 T23:464-043	Gravel and sand (dotterel)
Lower Manawatu (Mana_11)	Lower Manawatu (Mana_11a)	Manawatu River	From the confluence with the Oroua River at approx. NZMS 260 S24:164-825 to Teachers College at approx. NZMS 260 T24:332-891	Gravel and sand (dotterel)
Oroua (Mana_12)	Upper Oroua (Mana_12a)	Oroua River	From approx. NZMS 260 T23:500-242 to approx. NZMS 260 T23:519-267	Gravel and sand (dotterel)
	Middle Oroua (Mana_12b)	Oroua River	From approx. 200 m upstream of SH3 bridge at approx. NZMS 260 S23:243-005 to SH54 bridge at approx. NZMS 260 S23:293-044	Gravel and sand (dotterel)
	Lower Oroua (Mana_12c)	Oroua River	From approx. 300 m upstream of Kopane Bridge at approx. NZMS 260 S24:218-965 to approx. 200 m upstream of SH3 bridge at approx. NZMS 260 S23:243-005	Gravel and sand (dotterel)



Water Management Zone*	Sub-zone*	River^	Locality Description	Riparian Habitat Value					
	Kiwitea (Mana_12d)	Kiwitea Stream	From approx. NZMS 260 T23:332-116 to approx. NZMS 260 T23:339-127	Gravel and sand (dotterel)					
Coastal Manawatu (Mana_13)	Coastal Manawatu	Manawatu River	From the cross-river CMA boundary at NZMS 260 S24:2700963-6076686 to approx. 100 m downstream of the SH1 bridge at approx. NZMS 260 S24:027-744	Gravel and sand (dotterel) Mud/silt habitat and estuarine roosts (waders)					
(mana_roy	(Mana_13a)		From approx. NZMS 260 S24:101-715 to the confluence with the Oroua River at approx. NZMS 260 S24:164-825	Gravel and sand (dotterel)					
Middle Rangitikei	Upper Moawhango (Rang_2c)	Moawhango River and tributaries	From approx. NZMS 260 T20:468-948 to source	Gravel and sand (dotterel)					
(Rang_2)	Middle Moawhango (Rang_2d)	Moawhango River	From approx. NZMS 260 T20:495-916 to approx. NZMS 260 T20:468-948	Gravel and sand (dotterel)					
Lower Rangitikei (Rang_3)	Lower Rangitikei (Rang_3a)	Rangitikei River	From approx. NZMS 260 S23:200-221 to approx. NZMS 260 S23:217-231	Gravel and sand (dotterel)					
Coastal Rangitikei (Rang_4)	CoastalRangitikei (Rang_4a)	Rangitikei River	From approx. NZMS 260 S23:111-104 to approx. NZMS 260 S23:200-221	Gravel and sand (dotterel)					
Paetawa (Whai_6)	Paetawa (Whai_6)	Mangoihe Stream	From the confluence with the Whanganui River at approx. NZMS 260 R21:889-813 to 1 km upstream of Jerusalem at approx. NZMS 260 R21:894-818	Nankeen night heron roosts					
	Lower Whanganui (Whai_7a)						Whanganui River	From the confluence of the Whanganui River and the Kauarapaoa Stream at approx.  NZMS 260 R22:886-537 to 1 km upstream at approx. NZMS 260 R22:897-532	Nankeen night heron roosts
Lower Whanganui						Kauarapaoa Stream	From the confluence of the Whanganui River and the Kauarapaoa Stream at approx. NZMS 260 R22:886-537 to 1 km upstream at approx. NZMS 260 R22:891-544	Nankeen night heron roosts	
(Whai_7)		Whanganui River	From approx. NZMS 260 R22:861-422 to approx. NZMS 260 R26:878-505 (near Kaiwhaiki)	Mud/silt habitat and estuarine roosts (waders)					
	Coastal Whanganui (Whai_7b)	Whanganui River and Estuary	From the cross-river CMA boundary at NZMS 260 R22:2684857-6138015 to SH3 Bridge at approx. NZMS 260 R22:861-422	Gravel and sand (dotterel) Mud/silt habitat and estuarine roosts (waders)					
Upper Whangaehu	Upper	Whangaehu River and tributaries	From approx. NZMS 260 T20:397-960 to source	Gravel and sand (dotterel)					
(Whau_1)	Whangaehu	Makahikatoa Stream and tributaries	From approx. NZMS 260 T20:396-008 to source	Gravel and sand (dotterel)					
	(Whau_1a)	Wahianoa Stream	From approx. NZMS 260 T20:370-024 to source	Gravel and sand (dotterel)					
	Tokiahuru (Whau_1c)	Unnamed tributary of the Tokiahuru Stream	From approx. NZMS 260 T20:359-022 to source	Gravel and sand (dotterel)					
		Unnamed tributary of the Tokiahuru Stream	From approx. NZMS 260 T20:341-027 to source	Gravel and sand (dotterel)					
		Unnamed tributary of the Te Unuunuakapuateariki Stream	From approx. NZMS 260 T20:329-999 to source	Gravel and sand (dotterel)					



Water Management Zone*	Sub-zone*	River^	Locality Description	Riparian Habitat Value
		Te Unuunuakapuateariki Stream and tributaries	From approx. NZMS 260 T20:311-980 to source	Gravel and sand (dotterel)
Coastal Whangaehu (Whau_4)	Coastal Whangaehu (Whau_4)	Whangaehu River	From the cross-river CMA boundary at NZMS 260 S23:2690359-6128748 to the SH3 Bridge at approx. NZMS 260 S23:949-311	Gravel and sand (dotterel) Mud/silt habitat and estuarine roosts (waders)
Turakina (Tura_1)	Lower Turakina (Tura_1b)	Turakina River	From the cross-river CMA boundary at NZMS 260 S23:2692145-6125465 to the SH3 Bridge at approx. NZMS 260 S23:985-279	Gravel and sand (dotterel) Mud/silt habitat and estuarine roosts (waders)
Ohau (Ohau_1)	Lower Ohau (Ohau_1b)	Ohau River	From the cross-river CMA boundary at NZMS 260 S25:2692921-6059503 to approx. NZMS 260 S25:007-569	Gravel and sand (dotterel)  Mud/silt habitat and estuarine roosts (waders)
East Coast	East Coast	Wainui River	From the cross-river CMA boundary at NZMS 260 V24:2811596-6073518 to approx.  NZMS 260 V24:113-738	Mud/silt habitat and estuarine roosts (waders)
(East_1)	(East_1)	(East_1) Tuatane Stream	From approx. NZMS 260 V24:132-730 to approx. NZMS 260 V24:136-737	Mud/silt habitat and estuarine roosts (waders)
Waikawa (West_9)	Waikawa (West_9a)	Waikawa Stream	From the cross-river CMA boundary at NZMS 260 S25:2691531-6055429 to approx. NZMS 260 S25:000-511	Gravel and sand (dotterel) Mud/silt habitat and estuarine roosts (waders)





# Inanga Spawning (IS) Value

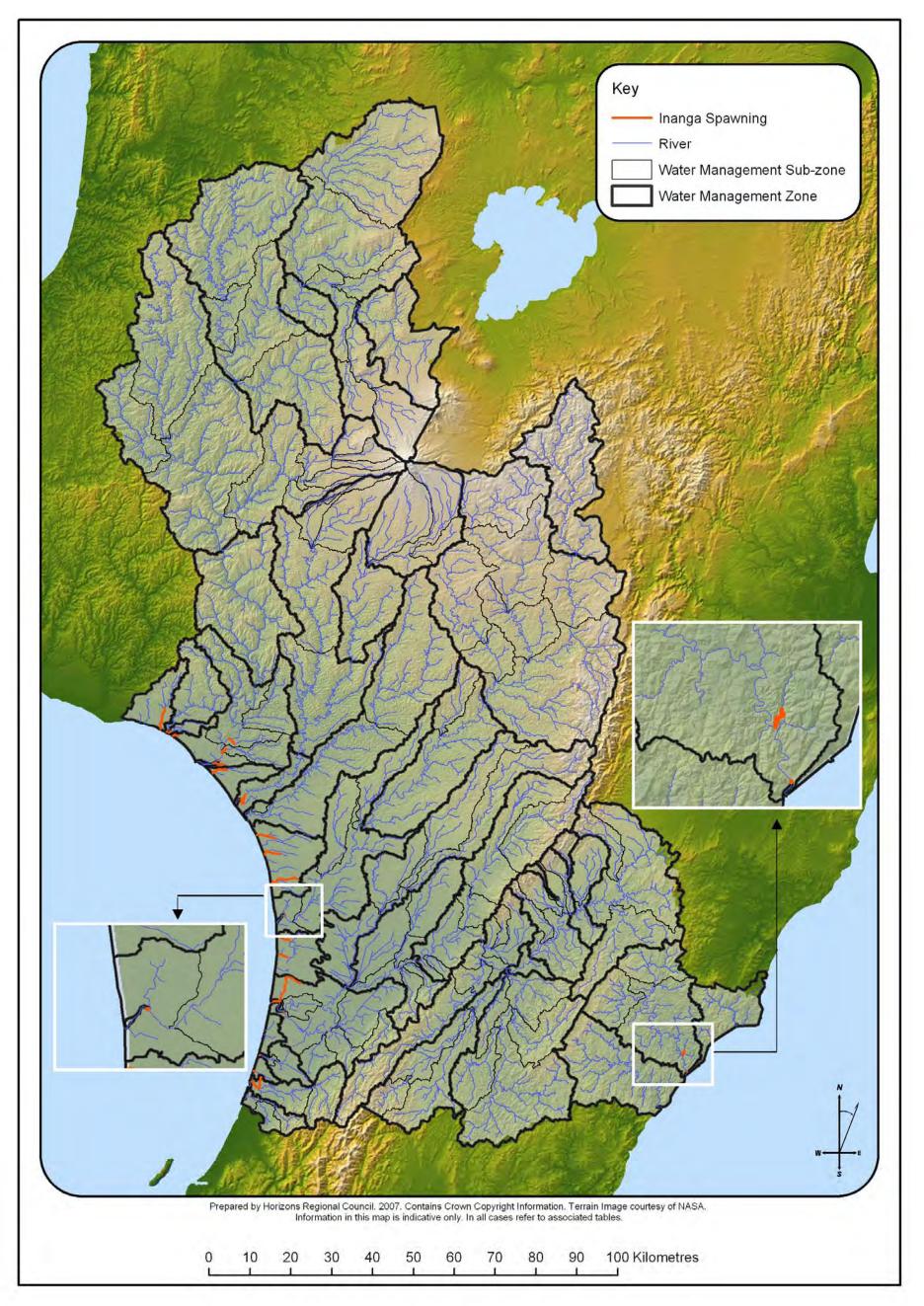


Figure B:5 Visual Guide to the Distribution of the Inanga Spawning (IS) Value





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Table B.5: Inanga Spawning (IS) Value in the Region

Water Management Zone*	Sub-zone*	River^	Locality Description
Coastal Manawatu	Coastal Manawatu	Manawatu River	From the cross-river CMA boundary at NZMS 260 S24:2700963-6076686 to a point 100 m upstream
(Mana_13)	(Mana_13a)	Whitebait Creek	From the confluence with the Manawatu River at approx. NZMS 260 S24:982-791 to source
Coastal Rangitikei (Rang 4)	Tidal Rangitikei (Rang_4b)	Rangitikei River	From the cross-river CMA boundary at NZMS 260 S23:2700960-6100119 to a point 100 m upstream
	Lower Whanganui (Whai_7a)	Mateongaonga Stream	From the confluence with the Whanganui River at approx. NZMS 260 R22:876-434 to Kaimatira Road at approx. NZMS 260 R22:889-422
		Whanganui River	From the cross-river CMA boundary at NZMS 260 R22:2684857-6138015 to a point 100 m upstream
Lower Whanganui (Whai_7)	Coastal Whanganui (Whai_7b)	Stream opposite Corliss Island	From the confluence with the Whanganui River at approx. NZMS 260 R22:836-374 to SH3 at approx. NZMS 260 R22:862-370
		Omapu Stream	From the cross-river CMA boundary to a point 1 km upstream at approx. NZMS 260 R22:750-441
	Matarawa (Whai_7d)	Matarawa Stream	From the confluence with the Whanganui River at approx. NZMS 260 R22:858-398 to Ikitara Road at approx. NZMS 260 R22:869-409
Coastal Whangaehu (Whau_4)	Coastal Whangaehu (Whau_4)	Whangaehu River	From the cross-river CMA boundary at NZMS 260 S23:2690359-6128748 to approx. NZMS 260 S22:915-300
Ohau	Lower Ohau (Ohau_1b)	Ohau River	From the cross-river CMA boundary at NZMS 260 S25:2692921-6059503 to approx. NZMS 260 S25:948-579
(Ohau_1)		Lake Waitaha Drain	From the confluence with the Ohau River at approx. NZMS 260 S25:946-580 to the Lake Waitaha outlet at approx. NZMS 260 S25:954-605
Akitio	Lower Akitio (Akit_1b)	Akitio River	From the cross-river CMA boundary at NZMS 260 U25:2799657-6061852 to a point 100 m upstream
(Akit_1)		Wakawaihine Stream	From the confluence with the Akitio River at approx. NZMS 260 U25:985-657 to a point approx. 2 km upstream at approx. NZMS 260 U25:989-670
Northern Coastal (West_1)	Northern Coastal (West_1)	Okehu Stream	From the cross-river CMA boundary to the intersection with SH3 at approx. NZMS 260 R22:717-510



Water Management Zone*	Sub-zone*	River^	Locality Description
Kai lwi (West_2)	Kai lwi (West_2)	Kai lwi Stream	From the cross-river CMA boundary at NZMS 260 R22:2672262-6145059 to approx. NZMS 260 R22:721-519
Mowhanau (West_3)	Mowhanau (West_3)	Mowhanau Stream	From the cross-river CMA boundary at NZMS 260 R22:2672640-6144895 to Rapanui Road at approx.  NZMS 260 R22:731-452
Kaitoke Lakes (West_4)	Kaitoke Lakes (West_4)	Kaitoke Stream	From the cross-river CMA boundary to Kaitoke Lake at approx. NZMS 260:R22:869-358
Southern Whanganui	Southern Whanganui Lakes (West_5)	Koitiata Stream	From the cross-river CMA boundary to a point 5 km upstream at approx. NZMS 260 S23:987-191
Lakes (West_5)		Waimahora Stream	From the cross-river CMA boundary to intersection with Santoft Rd at approx. NZMS 260 S23:001-154
(west_5)		Raumai Range Stream	From the cross-river CMA boundary to source
Northern Manawatu Lakes	Northern Manawatu Lakes	Kaikokopu Stream	From the cross-river CMA boundary to Lake Kaikokopu at approx. NZMS 260 S24:019-899
(West_6)	(West_6)	4 Mile Creek	From the cross-river CMA boundary to Lake Pukepuke at approx. NZMS 260 S24:024-937
Lake Papaitonga (West_8)	Lake Papaitonga (West_8)	Waiwiri Stream	From the cross-river CMA boundary to a point 500 m upstream at approx. NZMS 260 S25:939-618
Lake Horowhenua (West 9)	Hokio (Hoki_1b)	Hokio Stream	From the cross-river CMA boundary at NZMS 260 S25:2694967-6065799 to 100 m upstream



# Whitebait\* Migration (WM) Value



Figure B:6 Visual Guide to the Distribution of the Whitebait\* Migration (WM) Value





Table B.6: Whitebait Migration (WM) Value in the Region

Sub-zone*	River^	Locality Description				
	Manawatu River	From the cross-river CMA boundary at NZMS 260 S24:2700963-6076686 to the Foxton Shannon Road bridge at approx. NZMS 260 S24:133-727				
Coastal Manawatu (Mana_13a)	Holben Parade Creek	From the confluence with the Manawatu River at approx. NZMS 260 S24:981-789 to the intersection with Seabury Avenue at approx. NZMS 260 S24:986-800				
	Whitebait Creek	From the confluence with the Manawatu River at approx. NZMS 260 S24:982-791 to source				
Tidal Rangitikei (Rang_4b)	Rangitikei River	From the cross-river CMA boundary at NZMS 260 S23:2700960-6100119 to a point 100 m upstream				
Lower Whanganui	Kauarapaoa Stream	From the confluence with the Whanganui River at approx. NZMS 260 R22:886-537 to the intersection with McNab's Access Road at approx. NZMS 260 S22:900-559				
(Whai_7a)	Mateongaonga Stream	From the confluence with the Whanganui River at approx. NZMS 260 R22:876-434 to the intersection with Riverbank Road at approx. NZMS 260 R22:877-433				
Lower/Coastal Whanganui (Whai_7a and Whai_7b)	Whanganui River	From the cross-river CMA boundary at NZMS 260 R22:2684857-6138015 to Parikino at approx.  NZMS 260 S22:936-551				
Coastal Whanganui	Stream opposite Corliss Island	From the confluence with the Whanganui River at approx. NZMS 260 R22:835-374 to the intersection with Wikitoria Road at approx. NZMS 260 R22:849-371				
(WHal_7D)	Omapu Stream	From the cross-river CMA boundary to a point 1 km upstream at approx. NZMS 260 R22:750-441				
Matarawa (Whai_7d)	Matarawa Stream	From the confluence with the Whanganui River at approx. NZMS 260 R22:858-398 to the intersection with lkitara Road at approx. NZMS 260 R22:869-409				
Coastal Whangaehu (Whau_4)	Whangaehu River	From the cross-river CMA boundary at NZMS 260 S23:2690359-6128748 to the SH3 bridge at approx.  NZMS 260 S22:950-310				
Lower Ohau	Ohau River	From the cross-river CMA boundary at NZMS 260 S25:2692921-6059503 to approx. NZMS 260 S25:948-579				
(Ohau_1b)	Lake Waitaha Drain	From the confluence with the Ohau River at approx. NZMS 260 S25:946-580 to the Lake Waitaha outlet at approx. NZMS 260 S25:954-605				
Lower Akitio	Akitio River	From the cross-river CMA boundary at NZMS 260 U25:2799657-6061852 to a point 100 m upstream				
	Coastal Manawatu (Mana_13a)  Tidal Rangitikei (Rang_4b)  Lower Whanganui (Whai_7a)  Lower/Coastal Whanganui (Whai_7a and Whai_7b)  Coastal Whanganui (Whai_7b)  Matarawa (Whai_7d)  Coastal Whangaehu (Whau_4)  Lower Ohau (Ohau_1b)	Coastal Manawatu (Mana_13a)  Holben Parade Creek  Whitebait Creek  Tidal Rangitikei (Rang_4b)  Lower Whanganui (Whai_7a)  Mateongaonga Stream  Lower/Coastal Whanganui (Whai_7a and Whai_7b)  Coastal Whanganui (Whai_7b)  Tomapu Stream  Matarawa (Whai_7d)  Coastal Whangaehu (Whai_7d)  Coastal Whangaehu (Whai_1b)  Coastal Whangaehu (Whai_1c)  Lower Ohau (Ohau_1b)  Lake Waitaha Drain				



Water Management Zone*	Sub-zone*	River^	Locality Description
(Akit_1)	(Akit_1b)	Wakawaihine Stream	From the confluence with the Akitio River at approx. NZMS 260 U25:985-657 to a point approx. 2 km upstream at approx. NZMS 260 U25:989-670
Northern Coastal (West_1)	Northern Coastal (West_1)	Okehu Stream	From the cross-river CMA boundary to the intersection with SH3 at approx. NZMS 260 R22:717-510
Kai lwi (West_2)	Kai lwi (West_2)	Kai lwi Stream	From the cross-river CMA boundary at NZMS 260 R22:2672262-6145059 to the intersection with SH3 at approx. NZMS 260 R22:749-492
Mowhanau (West_3)	Mowhanau (West_3)	Mowhanau Stream	From the cross-river CMA boundary at NZMS 260 R22:2672640-6144895 to approx. NZMS 260 R22:736-452
Kaitoke Lakes (West_4)	Kaitoke Lakes (West_4)	Kaitoke Stream	From the cross-river CMA boundary to Kaitoke Lake at approx. NZMS 260 R22:869-358
Southern Whanganui	Southern Whanganui Lakes (West_5)	Koitiata Stream	From the cross-river CMA boundary to a point 5 km upstream at approx. NZMS 260 S23:987-191
Lakes		Waimahora Stream	From the cross-river CMA boundary to the intersection with Santoft Rd at approx. NZMS 260 S23 001-154
(West_5)		Raumai Range Stream	From the cross-river CMA boundary at approx. NZMS 260:S23:979-081 to source
Northern Manawatu	Northern Manawatu Lakes	Kaikokopu Stream	From the cross-river CMA boundary to Lake Kaikokopu at approx. NZMS 260 S24:019-899
Lakes (West_6)	(West_6)	4 Mile Creek	From the cross-river CMA boundary to a point 100 m upstream at approx. NZMS 260 S24:024-937
Lake Papaitonga (West_8)	Lake Papaitonga (West_8)	Waiwiri Stream	From the cross-river CMA boundary to a point 500 m upstream at approx. NZMS 260 S25:939-618
Lake Horowhenua (Hoki_1)	Hokio (Hoki_1b)	Hokio Stream	From the cross-river CMA boundary at NZMS 260 S25:2694967-6065799 to Lake Horowhenua



# Sites of Significance - Cultural (SOS-C)

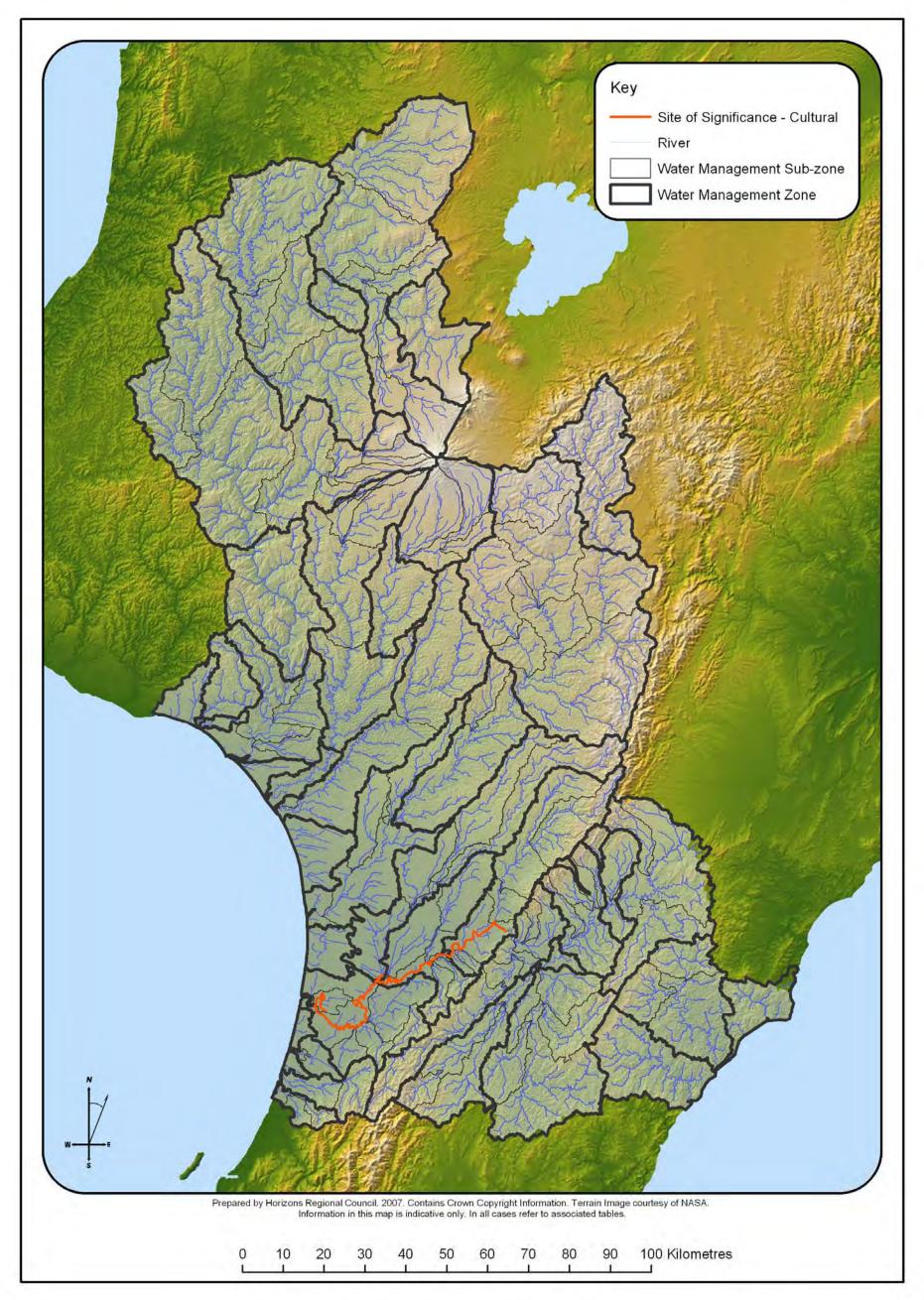


Figure B:7 Visual Guide to the Distribution of the Sites of Significance - Cultural (SOS-C) Value





Table B.7: Sites of Significance - Cultural (SOS-C) Value in the Region

Water Management Zone*	Sub-zone*	River^	Locality Description <sup>1</sup>	Reason	lwi
Middle, Lower and Coastal Manawatu (Mana_10, Mana_11 and Mana_13)	Middle, Lower and Coastal Manawatu (Mana_10a, Mana_11a and Mana_13a)	Manawatu River	Specific <i>sites</i> * within the reach from the cross-river CMA boundary at NZMS 260 S24:2700963-6076686 to approx. NZMS 260 T24:477-949	Density of cultural and historical sites of significance including wāhi tapu* and taonga*	Rangitaane o Manawatu
Middle Manawatu (Mana_10)	Lower Pohangina (Mana_10d)	Pohangina River	Specific <i>sites</i> * within the reach from the confluence with the Manawatu River at approx. NZMS 260 T24:450-966 to approx. NZMS 260 T24:450-973	Density of cultural and historical sites of significance including wāhi tapu* and taonga*	Rangitaane o Manawatu
Lower Oroua (Mana_12)	Lower Oroua (Mana_12c)	Oroua River	Specific <i>sites*</i> within the reach from approx. NZMS 260 S24:164-825 to a point approx. 150 m upstream of the SH56 bridge at approx. NZMS 260 S24:176-842	Density of cultural and historical sites of significance including wāhi tapu* and taonga*	Rangitaane o Manawatu
Coastal Manawatu (Mana_13)	Foxton Loop (Mana_13f)	Foxton Loop	Specific <i>sites</i> * within the reach from the confluence with the Manawatu River at approx. NZMS 260 S24:010-768 to source	Density of cultural and historical sites of significance including wāhi tapu* and taonga*	Rangitaane o Manawatu

<sup>1</sup> Details of the particular location of the  $\it sites^*$  are available from Rangitaane o Manawatu.





# **Trout Fishery (TF) Value**

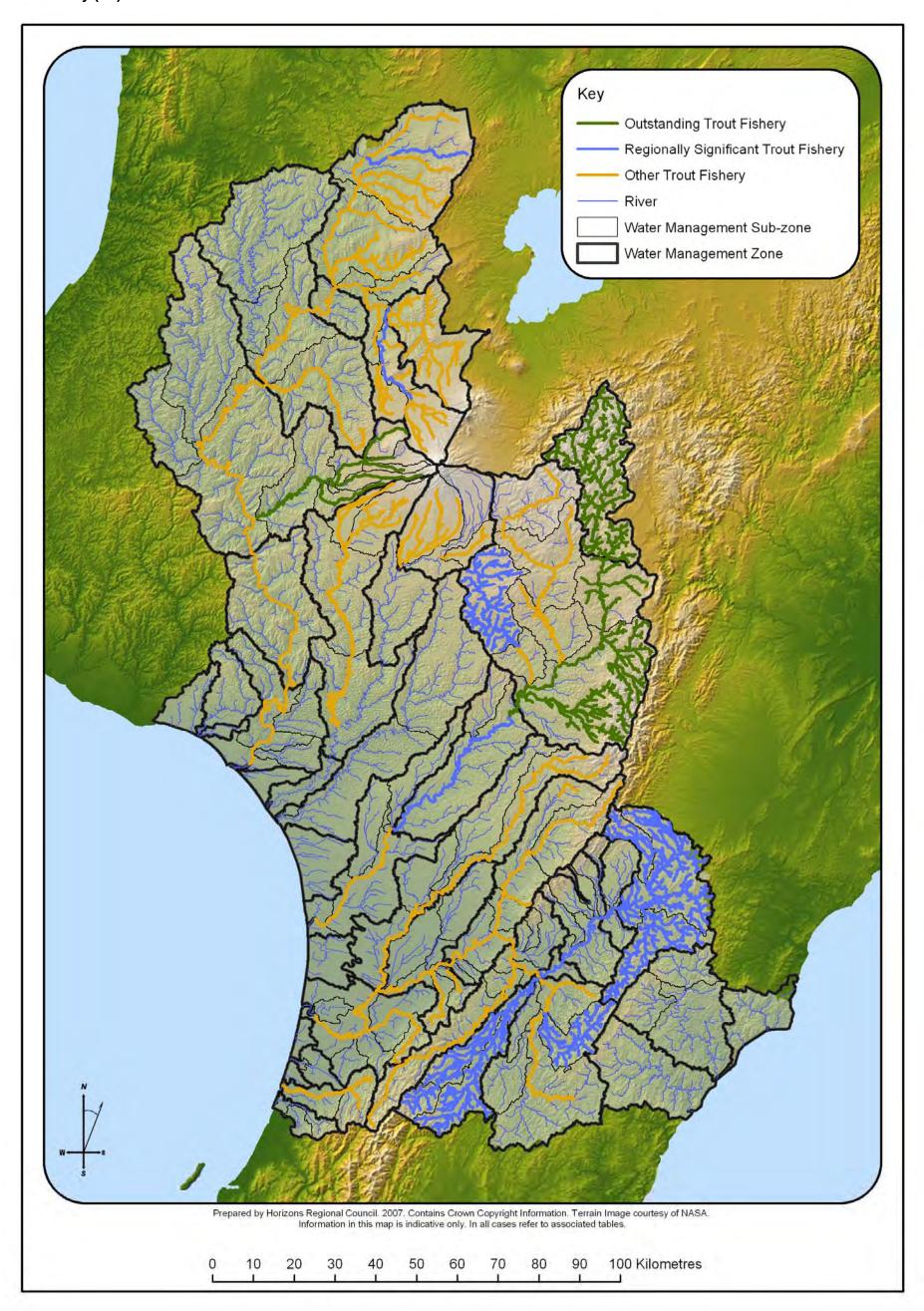


Figure B:8 Visual Guide to the Distribution of the Trout Fishery (TF) Value





Table B.8: Trout Fishery (TF) Value in the Region

Water Management Zone*	Sub-zone*	River^	Locality Description	Classification
Upper Manawatu, Weber-Tamaki, Tamaki-Hopelands and Hopelands-Tiraumea (Mana_1, Mana_2, Mana_3, Mana_5 and Mana_6)	Upper Manawatu, Mangatewainui and Mangatoro, Weber-Tamaki, Tamaki- Hopelands and Hopelands-Tiraumea (Mana_1a, Mana_1b, Mana_1c, Mana_2a, Mana_3, Mana_5a and Mana_6)	Manawatu River	From the confluence with the Tiraumea River at approx. NZMS 260 T24:553-871 to source including all tributaries from the Weber Road recorder at approx. NZMS 260 U23:747-027 to source	Regionally Significant
	Upper and Lower Tiraumea (Mana_7a and Mana_7b)	Tiraumea River	From the confluence with the Manawatu River at approx. NZMS 260 T24:553-871 to source	Other Trout Fishery
Tiraumea (Mana_7)	Lower Tiraumea (Mana_7b)	Makairo Stream	From approx. NZMS 260 T24:598-831 to source	Other Trout Fishery
	Makuri (Mana_7d)	Makuri River and tributaries	From the confluence with the Tiraumea River at approx. NZMS 260 T24:568-771 to source	Regionally Significant
Mangatainoka (Mana_8)	Upper, Middle and Lower Mangatainoka and Makakahi (Mana_8a, Mana_8b, Mana_8c and Mana_8d)	Mangatainoka River and tributaries	From the confluence with the Tiraumea River at approx. NZMS 260 T24:556-854 to source	Regionally Significant
Upper Gorge	Upper Gorge (Mana_9a)	Manawatu River	From approx. NZMS 260 T24:495-938 to the confluence with the Tiraumea River at approx. NZMS 260 T24:553-871	Other Trout Fishery
(Mana_9)	Upper and Lower Mangahao (Mana_9d and Mana_9e)	Mangahao River	From the confluence with the Manawatu River at approx. NZMS 260 T24:496-892 to source	Other Trout Fishery
	Middle Manawatu (Mana_10a)	Manawatu River	From approx. NZMS 260 T24:332-890 to approx. NZMS 260 T24:495-938	Other Trout Fishery
Middle Manawatu (Mana_10)	Upper, Middle and Lower Pohangina (Mana_10b, Mana_10c and Mana_10d)	Pohangina River	From the confluence with the Manawatu River at approx. NZMS 260 T24:449-966 to source	Other Trout Fishery
	Middle Pohangina (Mana_10c)	Makiekie (Coal) Creek	From the confluence with the Pohangina River at approx. NZMS 260 T23:528-166 to source	Other Trout Fishery
Lower Manawatu (Mana_11)	Lower Manawatu (Mana_11a)	Manawatu River	From approx. NZMS 260 T24:332-890 to Oroua confluence at approx. NZMS 260 S24:164-825	Other Trout Fishery
	Turitea (Mana_11b)	Turitea Stream	From approx. 800 m downstream of the Old West Road bridge at approx. NZMS 260 T24:331-875 to approx. NZMS 260 T24:363-825	Other Trout Fishery



Water Management Zone*	Sub-zone*	River^	Locality Description	Classification
	Kahuterawa (Mana_11c)	Kahuterawa Stream	From the confluence with the Manawatu River at approx. NZMS 260 S24:293-871 to source	Other Trout Fishery
	Upper, Middle and Lower Oroua (Mana_12a, Mana_12b and Mana_12c)	Oroua River	From the confluence with the Manawatu River at approx. NZMS 260 S24:164-826 to approx. NZMS 260 U22:729-400	Other Trout Fishery
Oroua (Mana_12)	Upper Oroua (Mana_12a)	Mangiora Stream	From the confluence with the Oroua River at approx. NZMS 260 T22:577-379 to source	Other Trout Fishery
	Makino (Mana_12d)	Makino Stream	From the confluence with the Oroua River at approx. NZMS 260 S23:243-005 to approx. NZMS 260 S23:260-037	Other Trout Fishery
Coastal Manawatu (Mana_13)	Coastal Manawatu (Mana_13a)	Manawatu River	From 100 m upstream of the cross-river CMA boundary at NZMS 260 S24:2700963-6076686 to the confluence with the Oroua River at approx. NZMS 260 S24:164-825	Other Trout Fishery
(Maria_13)	Upper and Lower Tokomaru (Mana_13c and Mana_13d)	Tokomaru River	From the confluence with the Manawatu River at approx. NZMS 260 S24:132-727 to source	Other Trout Fishery
Upper Rangitikei (Rang_1)	Upper Rangitikei (Rang_1)	Rangitikei River and tributaries	From the Makahikatoa Stream confluence at approx. NZMS 260 U21:725-887 to source	Outstanding
Middle Rangitikei (Rang_2)	Middle Rangitikei (Rang_2a)	Rangitikei River	From approx. NZMS 260 U21:713-707 to the confluence with the Makahikatoa Stream at approx. NZMS 260 U21:725-887	Outstanding
		Porotaiana Stream	From the confluence with the Rangitikei River at approx. NZMS 260 U21:714-878 to source	Outstanding
		Mangaururoa Stream	From the confluence with the Rangitikei River at approx. NZMS 260 U21:710-852 to source	Outstanding
		Whangaipotiki Stream	From the confluence with the Rangitikei River at approx. NZMS 260 U21:700-819 to source	Outstanding
		Mangaohane Stream	From the confluence with the Rangitikei River at approx. NZMS 260 U21:707-818 to source	Outstanding
		Makomiko East Stream	From the confluence with the Rangitikei River at approx. NZMS 260 U21:709-792 to source	Outstanding
		Tamatipama Stream	From the confluence with the Makomiko East Stream at approx. NZMS 260 U21:681-802 to source	Outstanding
		Waiakaha Stream	From the confluence with the Rangitikei River at approx. NZMS 260 U21:707-785 to source	Outstanding



Water Management Zone*	Sub-zone*	River^	Locality Description	Classification
		Pokopoko Stream	From the confluence with the Rangitikei River at approx. NZMS 260 U21:722-758 to source	Outstanding
		Rangitikei River	From the confluence with the Mangawharariki River at approx. NZMS 260 T22:504-519 to approx. NZMS 260 U21:713-707	Outstanding
	Pukeokahu-Mangaweka (Rang_2b)	Whakaurekou River and tributaries	From the confluence with the Rangitikei River at approx. NZMS 260 U21:712-690 to source	Outstanding
		Kawhatau River and tributaries	From the confluence with the Rangitikei River at approx. NZMS 260 T22:504-551 to source	Outstanding
	Upper, Middle and Lower Moawhango (Rang_2c, Rang_2d and Rang_2e)	Moawhango River	From the confluence with the Rangitikei River at approx. NZMS 260 T21:609-623 to source	Other Trout Fishery
	Middle Moawhango (Rang_2d)	Aorangi Stream	From the confluence with the Moawhango River at approx. NZMS 260 T21:595-858 to source	Other Trout Fishery
	Lower Moawhango (Rang_2e)	Tikirere Stream	From the confluence with the Moawhango River at approx. NZMS 260 T21:559-741 to source	Other Trout Fishery
	Upper Hautapu (Rang_2f)	Hautapu River and tributaries	From the confluence with the Oraukura Stream at approx. NZMS 260 T21:509-670 to source	Regionally Significant
	Lower Hautapu (Rang_2g)	Hautapu River	From the confluence with the Rangitikei River at approx. NZMS 260 T22:528-573 to the Oraukura Stream confluence at approx. NZMS 260 T22:509-670	Other Trout Fishery
Lower Rangitikei (Rang_2)	ei Lower Rangitikei (Rang_3a)	Rangitikei River	From the Mangarere Bridge at approx. NZMS 260 T22:483-496 to the confluence with the Mangawharariki River at approx. NZMS 260 T22:504-519	Outstanding
(Nang_z)	(ivarig_sa)	Rangitikei River	From NZMS 260 S23:200-221 to the Mangarere Bridge at approx. NZMS 260 T22:438-496	Regionally Significant
Coastal Rangitikei (Rang_4)	Coastal/Tidal Rangitikei (Rang_4a and Rang_4b)	Rangitikei River	From 100 m upstream of the cross-river CMA boundary at NZMS 260 S23:2700960-6100119 to approx. NZMS 260 S23:200-221	Other Trout Fishery



Water Management Zone*	Sub-zone*	River^	Locality Description	Classification		
Upper Whanganui, Cherry Grove, Te Maire, Middle Whanganui, Pipiriki and Paetawa (Whai_1, Whai_2, Whai_3, Whai_4, Whai_5 and Whai_6)	Upper Whanganui, Cherry Grove, Te Maire, Middle Whanganui, Pipiriki and Paetawa (Whai_1, Whai_2a, Whai_3, Whai_4a, Whai_5a and Whai_6)	Whanganui River	From approx. NZMS 260 S22:937-563 to source	Other Trout Fishery		
Upper Whanganui (Whai_1)	Upper Whanganui (Whai_1)	Otamangakau Dam	From the confluence with the Whanganui River at approx. NZMS 260 T19:367-409 to T19:375-414	Other Trout Fishery		
		Otamangakau Canal	From the confluence with the Whanganui River at approx. NZMS 260 T19:367-409 to source	Other Trout Fishery		
		Okupata Stream	From the confluence with the Whanganui River at approx. NZMS 260 S19:289-406 to source	Other Trout Fishery		
		Mangatepopo Stream	From the confluence with the Okupata Stream at approx. NZMS 260 S19:287-397 to source	Other Trout Fishery		
		Waione Stream	From the confluence with the Whanganui River at approx. NZMS 260 S19:276-427 to source	Other Trout Fishery		
		Waipari Stream	From the confluence with the Whanganui River at approx. NZMS 260 S19:269-455 to source	Other Trout Fishery		
		Waione Stream	From the confluence with the Waipari Stream at approx. NZMS 260 S18:282-516 to source	Other Trout Fishery		
		Waipungapunga Stream	From the confluence with the Waipari Stream at approx. NZMS 260 S19:287-490 to source	Other Trout Fishery		
		_	Waionenui Stream	From the confluence with the Waipari Stream at approx. NZMS 260 S19:288-475 to source	Other Trout Fishery	
					Waione Stream	From the confluence with the Waipari Stream at approx. NZMS 260 S19:282-464 to source
		Mako Stream	From the confluence with the Whanganui River at approx. NZMS 260 S19:231-455 to source	Other Trout Fishery		
		Taringapupu Stream	From the confluence with the Whanganui River at approx. NZMS 260 S19:205-477 to source	Other Trout Fishery		
		Herungaweka Stream	From the confluence with the Taringapupu Stream at approx. NZMS 260 S18:229-511 to source	Other Trout Fishery		



Water Management Zone*	Sub-zone*	River^	Locality Description	Classification
		Paewaru Stream	From the confluence with the Taringapupu Stream at approx. NZMS 260 S19:216-488 to source	Other Trout Fishery
		Papanui Stream	From the confluence with the Whanganui River at approx. NZMS 260 S19:192-485 to source	Other Trout Fishery
Cherry Grove (Whai_2)	Cherry Grove (Whai_2a)	Kakahi Stream	From the confluence with the Whanganui River at approx. NZMS 260 S19:151-497 to source	Other Trout Fishery
	Upper and Lower Whakapapa (Whai_2b and Whai_2c)	Whakapapa River	From the confluence with the Whanganui River at approx. NZMS 260 S19:188-495 to source	Regionally Significant Trout Fishery
		Whakapapaiti Stream	From the confluence with the Whakapapa River at approx. NZMS 260 S19:243-268 to source	Other Trout Fishery
	Upper Whakapapa (Whai_2b)	Whakapapanui Stream	From the confluence with the Whakapapa River at approx. NZMS 260 S19:243-268 to source	Other Trout Fishery
		Makahikatoa Stream	From the confluence with the Whakapapanui Stream at approx. NZMS 260 S19:273-244 to source	Other Trout Fishery
		Taranaki Stream	From the confluence with the Makahikatoa Stream at approx. NZMS 260 S19:296-235 to source	Other Trout Fishery
		Pukeonaki Stream	From the confluence with the Whakapapanui Stream at approx. NZMS 260 S19:269-255 to source	Other Trout Fishery
		Tawahi Stream	From the confluence with the Whakapapaiti Stream at approx. NZMS 260 S19:242-265 to approx. NZMS 260 S19:242-256	Other Trout Fishery
		Papamanuka Stream	From the confluence with the Whakapapa Stream at approx. NZMS 260 S19:234-288 to approx. NZMS 260 S19:277-281	Other Trout Fishery
	Lower Whakapapa (Whai_2c)	Unnamed Tributary of the Whakapapa River	From the confluence with the Whakapapa River at approx. NZMS 260 S19:174-416 to source	Other Trout Fishery
		Otamawairua Stream	From the confluence with the Whakapapa River at approx. NZMS 260 S19:193-324 to source	Other Trout Fishery
	Piopiotea Stream (Whai_2d)	Piopiotea Stream and tributaries	From the confluence with the Whakapapa River at approx. NZMS 260 S19:174-356 to source	Other Trout Fishery
	Pungapunga (Whai_2e)	Pungapunga River	From approx. NZMS 260 S18:124-544 to approx. NZMS 260 S18:266-577	Other Trout Fishery



Water Management Zone*	Sub-zone*	River^	Locality Description	Classification
	Upper and Lower Ongarue (Whai_2f and Whai_2g)	Ongarue River	From the confluence with the Whanganui River at approx. NZMS 260 S18:055-544 to the confluence with the Waimiha Stream at approx. NZMS 260 S17:132-862	Other Trout Fishery
		Ongarue River	From the confluence with the Waimiha Stream at approx. NZMS 260 S17:132-862 to source	Regionally Significant Trout Fishery
		Waimiha Stream	From the confluence with the Ongarue River at approx. NZMS 260 S17:132-862 to source	Other Trout Fishery
	Upper Ongarue (Whai_2f)	Waione Stream	From the confluence with the Ongarue River at approx. NZMS 260 S17:132-862 to source	Other Trout Fishery
		Okauaka Stream	From the confluence with the Ongarue River at approx. NZMS 260 S17:188-864 to source	Other Trout Fishery
		Maramataha River	From the confluence with the Ongarue River at approx. NZMS 260 S17:116-806 to source	Other Trout Fishery
	Lower Ongarue	Mangakahu Stream	From the confluence with the Ongarue River at approx. NZMS 260 S18:087-736 to source	Other Trout Fishery
	(Whai_2g)	Taringamotu River and tributaries	From the confluence with the Ongarue River at approx. NZMS 260 S18:046-582 to source	Other Trout Fishery
Middle Whanganui (Whai_4)	Retaruke (Whai_4d)	Retaruke River	From the confluence with the Whanganui River at approx. NZMS 260 R19:889-309 to source	Other Trout Fishery
	Makatote (Whai_5e)	Makatote River	From the confluence with the Manganui o te Ao River at approx. NZMS 260 S20:129-120 to source	Outstanding Trout Fishery
	Waimarino (Whai_5f)	Waimarino Stream	From the confluence with the Manganui o te Ao River at approx. NZMS 260 S20:129-120 to source	Outstanding Trout Fishery
Pipiriki (Whai_5)	Mangaturuturu (Whai_5g)	Mangaturuturu River	From the confluence with the Manganui o te Ao River at approx. NZMS 260 S20:056-067 to source	Outstanding Trout Fishery
, -,	Upper, Middle and Lower Manganui o te Ao (Whai_5d, Whai_5g and Whai_5i)	Manganui o te Ao River	From the confluence with the Whanganui River at approx. NZMS 260 R20:860-979 to source	Outstanding Trout Fishery
	Orautoha (Whai_5j)	Orautoha Stream	From the confluence with the Manganui o te Ao River at approx. NZMS 260 S20:026-067 to source	Outstanding Trout Fishery
Lower Whanganui (Whai_7)	Lower Whanganui (Whai_7a)	Whanganui River	From approx. NZMS 260 R22:861-422 to approx. NZMS 260 S22:938-563	Other Trout Fishery



Water Management Zone*	Sub-zone*	River^	Locality Description	Classification
	Coastal Whanganui (Whai_7b)	Whanganui River	From approx. NZMS 260 R22:848-381 to approx. NZMS 260 R22:861-422	Other Trout Fishery
Upper Whangaehu	Waitangi (Whau_2b)	Waitangi Stream	From the confluence with the Whangaehu River at approx. NZMS 260 T21:315-888 to source	Other Trout Fishery
(Whau_2)	Tokiahuru (Whau_2c)	Tokiahuru Stream and tributaries	From the confluence with the Whangaehu River at approx. NZMS 260 S21:218-865 to source	Other Trout Fishery
	Upper Makotuku, Lower Makotuku and Makara (Whau_3b, Whau_3c and Whau_3f)	Makotuku River and tributaries including Makara Stream and tributaries	From the confluence with the Mangawhero River at approx. NZMS 260 S20:079-902	Other Trout Fishery
Lower Whangaehu (Whau_3)	Upper Mangawhero (Whau_3d)	Mangawhero River including the Taonui Stream and all tributaries upstream of the Taonui Stream	From the confluence with the Makotuku River at approx. NZMS 260 S20:079-902	Other Trout Fishery
	Lower Mangawhero and Lower Whangaehu (Whau_3a and Whau_3e)	Mangawhero River	From the confluence with the Whangaehu River at approx. NZMS 260 S22:065-470 to the confluence with the Makotuku River at approx. NZMS 260 S20:079-902	Other Trout Fishery
Mattalia Labaa	Mattalia I alica	Lake Wiritoa	Lake Wiritoa at approx. NZMS 260 R22:877-350	Other Trout Fishery
Kaitoke Lakes (West 4)	Kaitoke Lakes (West_4)	Lake Kohata	Lake Kohata at approx. NZMS 260 R22:885-347	Other Trout Fishery
, ,	( , , , , , , , , , , , , , , , , , , ,	Lake Pauri	Lake Pauri at approx. NZMS 260 R22:894-342	Other Trout Fishery
Ohau (Ohau 1)	Upper and Lower Ohau (Ohau_1a and Ohau_1b)	Ohau River	From the cross-river CMA boundary at NZMS 260 S25:2692921-6059503 to source including the Makahika Stream and tributaries and an unnamed tributary at approx. NZMS 260 S25:974-585	Other Trout Fishery





## **Trout Spawning (TS) Value**

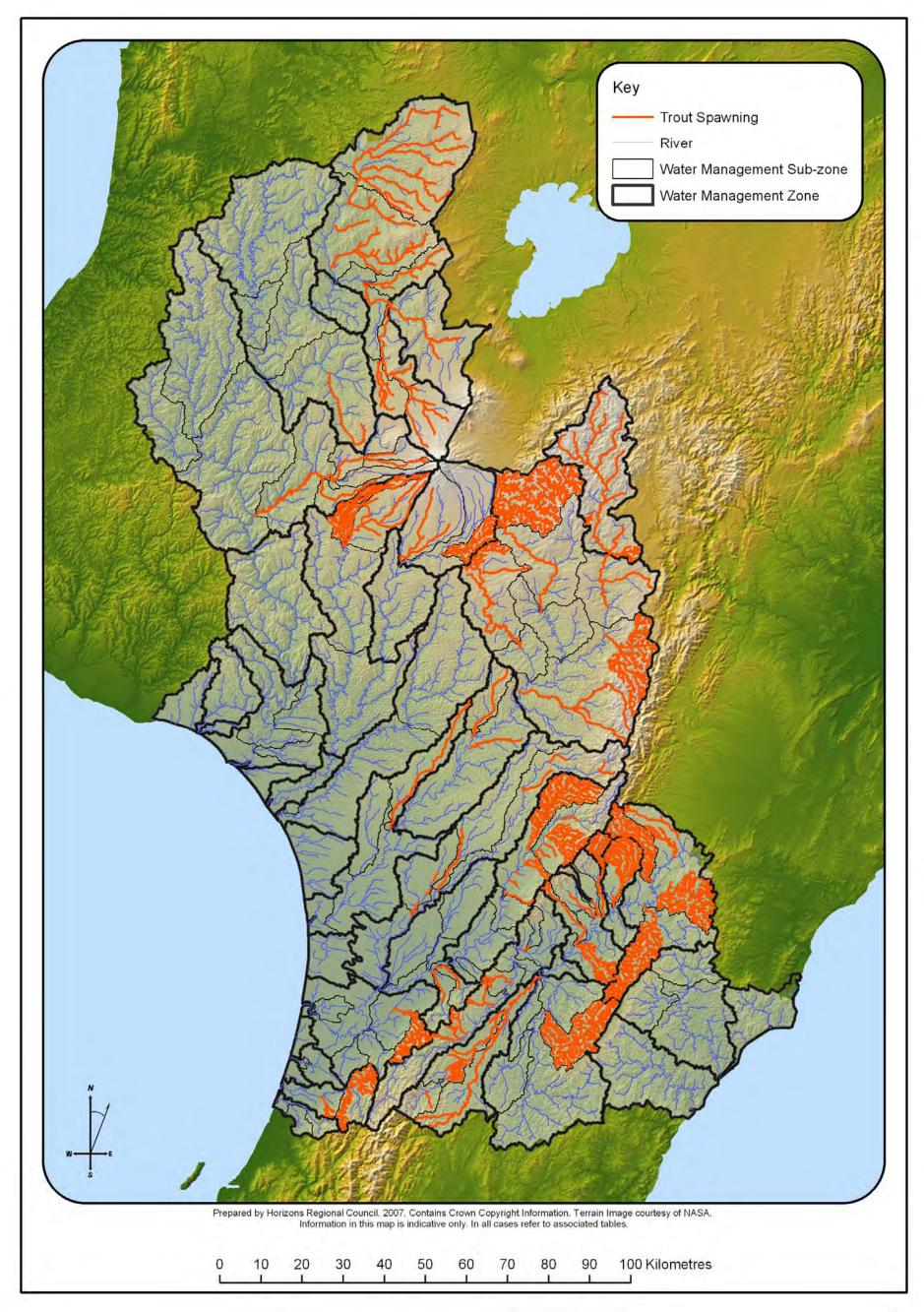


Figure B:9 Visual Guide to the distribution of the Trout Spawning (TS) Value





Table B.9 Trout Spawning (TS) Value in the Region

Water Management Zone*	Sub-zone*	River^	Locality Description
		Manawatu River	From the confluence with the Kahututaeatua Stream at approx. NZMS 260 U23:891-194 to source
	Upper Manawatu	Mangarangiora Stream and tributaries	From the confluence with the Manawatu River at approx. NZMS 260 U23:879-145 to source
	(Mana_1a)	Mahurauiti Stream	From the confluence with the Manawatu River at approx. NZMS 260 U23:853-235 to the confluence with the Mahurunui Stream (Stoney Creek) at approx. NZMS 260 U23:850-244
Upper Manawatu		Mangapuaka Stream and tributaries	From the confluence with the Manawatu River at approx. NZMS 260 U23:841-044 to source
(Mana_1)	Mangatewainui (Mana_1b)	Mangatewainui River and tributaries	From the confluence with the Manawatu River at approx. NZMS 260 U23:829-085 to source
	Mangatoro (Mana_1c)	Mangatoro River	From the confluence with the Manawatu River at approx. NZMS 260 U23:807-026 to the confluence with the Mangamarie Stream at approx. NZMS 260 U24:838-991
	(Wana_rc)	Mangatoro River and tributaries	From the confluence with the Mangamarie Stream at approx. NZMS 260 U24:838-991 to source
	Mangatera (Mana 2b)	Mangatera Stream	From the confluence with the Manawatu River at approx. NZMS 260 U23:736-025 to approx. NZMS 260 U23:756-079
Weber - Tamaki (Mana_2)		Mangatera Stream and tributaries	From approx. NZMS 260 U23:756-079 to source
	·	Tapuata Stream	From the confluence with the Mangatera Stream at approx. NZMS 260 U23:738-044 to approx. NZMS 260 U23:732-052
Upper Tamaki (Mana_3)	Upper Tamaki (Mana_3)	Tamaki River and tributaries	From approx. NZMS 260 U23:706-100 to source.
Tamaki - Hopelands	Tamaki - Hopelands	Otawhao Stream and tributaries	From the confluence with the Manawatu River at approx. NZMS 260 T24:651-935 to source
(Mana_5)	(Mana_5a)	Totara Stream and tributaries	From the confluence with the Manawatu River at approx. NZMS 260 T24:647-929 to source
	Lower Tamaki (Mana_5b)	Tamaki River	From the confluence with the Manawatu River at approx. NZMS 260 U23:708-002 to approx. NZMS 260 U23:706-100
	Lower Kumeti (Mana_5c)	Kumeti Stream	From the confluence with the Manawatu River at approx. NZMS 260 T23:697-005 to approx. NZMS 260 T23:681-041
	Oruakeretaki (Mana_5d)	Oruakeretaki Stream	From the confluence with the Manawatu River at approx. NZMS 260 T24:690-999 to the confluence with the Mangapukakakahu Stream at approx. NZMS 260 T23:628-058



Water Management Zone*	Sub-zone*	River^	Locality Description
	Raparapawai (Mana_5e)	Raparapawai Stream	From the confluence with the Manawatu River at approx. NZMS 260 T24:641-931 to source
Tiraumea (Mana_7)	Makuri (Mana_7d)	Makuri River and tributaries	From the confluence with the Tiraumea River at approx. NZMS 260 T24:568-771 to source
	Upper Mangatainoka (Mana_8a)	Makotukutuku Stream	From the confluence with the Mangatainoka River at approx. NZMS 260 S25:279-576 to source
	Middle and Lower Mangatainoka (Mana_8b and Mana_8c)	Mangatainoka River	From approx. NZMS 260 T24:558-857 to the confluence with the Mangaroa Stream at approx. NZMS 260 T25:324-627
		Mangaraupiu Stream	From the confluence with the Mangatainoka River at approx. NZMS 260 T25:366-655 to approx. NZMS 260 T25:322-665
Mangatainoka (Mana_8)	Middle Mangatainoka (Mana_8b)	Unnamed Tributary of the Mangatainoka River and tributaries	From the confluence with the Mangatainoka River at approx. NZMS 260 T25:369-654 to source
, -,		Hukanui Stream	From the confluence with the Mangatainoka River at approx. NZMS 260 T25:396-680 to approx. NZMS 260 T25:341-676
		Mangamaire Stream	From the confluence with the Mangatainoka River at approx. NZMS 260 T24:451-762 to approx. NZMS 260 T24:433-742
	Makakahi (Mana_8d)	Makakahi River	From the confluence with the Mangatainoka River at approx. NZMS 260 T24:475-775 to source
		Bruce Stream	From the confluence with the Makakahi River at approx. NZMS 260 T25:346-524 to source
	Mangapapa (Mana_9b)	Mangapapa Stream	From the confluence with the Mangaatua Stream at approx. NZMS 260 T24:514-922 to approx. NZMS 260 T24:527-931
		Unnamed Tributary	From the confluence with the Mangahao River at approx. NZMS 260 T24:348-700 to source
		Unnamed Tributary	From the confluence with the Mangahao River at approx. NZMS 260 T24:364-704 to source
Upper Gorge (Mana_9)	Upper Mangahao (Mana_9d)	Orangane Stream	From the confluence with the Mangahao River at approx. NZMS 260 T24:377-716 to source
(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(Iviana_7u)	Matarua Creek	From the confluence with the Mangahao River at approx. NZMS 260 T24:445-788 to source
		Unnamed Tributary	From the confluence with the Matarua Creek at approx. NZMS 260 T24:422-793 to source
	Lower Mangahao (Mana_9e)	Makaretu Creek	From the confluence with the Mangahao River at approx. NZMS 260 T24:484-844 to source



Water Management Zone*	Sub-zone*	River^	Locality Description
		Pohangina River	From the confluence with the Whangapuna Stream at approx. NZMS 260 T23:605-240 to approx. NZMS 260 T23:647-236
		Konewa Stream and tributaries	From the confluence with the Pohangina River at approx. NZMS 260 T23:575-203 to source
		Makawakawa Stream and tributaries	From the confluence with the Pohangina River at approx. NZMS 260 T23:568-199 to source
	Upper Pohangina (Mana_10b)	Te Ekaou Stream	From the confluence with the Pohangina River at approx. NZMS 260 T23:562-180 to approx. NZMS 260 T23:594-150
		Porewa Stream	From the confluence with the Pohangina River at approx. NZMS 260 T23:549-163 to approx. NZMS 260 T23:579-147
Middle Manawatu (Mana_10)		Opawe Stream	From the confluence with the Pohangina River at approx. NZMS 260 T23:544-161 to approx. NZMS 260 T23:556-144
		Makiekie (Coal) Creek and tributaries	From the confluence with the Pohangina River at approx. NZMS 260 T23:528-165 to source
	Middle Pohangina (Mana_10c)	Ohinetapu Stream and tributaries	From the confluence with the Pohangina River at approx. NZMS 260 T23:517-131 to source
		Mi Maranganui Stream	From the confluence with the Pohangina River at approx. NZMS 260 T23:492-112 to approx. NZMS 260 T23:504-107
		Te Awaoteatua Stream	From the confluence with the Pohangina River at approx. NZMS 260 T23:480-090 to approx. NZMS 260 T23:499-077
		Makohine Stream	From the confluence with the Pohangina River at approx. NZMS 260 T23:469-058 to source
Lower Manawatu	Turitea (Mana_11b)	Turitea Stream	From the confluence with the Manawatu River at approx. NZMS 260 T24:302-879 to approx. NZMS 260 T24:357-827
(Mana_11)	Kahuterawa (Mana_11c)	Kahuterawa Stream	From the confluence with the Manawatu River at approx. NZMS 260 S24:293-870 to approx NZMS 260 T24:317-796
Oroua (Mana_12)		Oroua River	From the confluence with the Tunupo Creek at approx. NZMS 260 T22:699-356 to approx. NZMS 260 U22:715-378
	Upper Oroua	Tunupo Creek	From the confluence with the Oroua River at approx. NZMS 260 T22:699-356 to source
	(Mana_12a)	Mangahuia Stream	From the confluence with the Oroua River at approx. NZMS 260 T22:577-378 to the confluence with Scandlyn Creek at approx. NZMS 260 T22:621-384
		Mangapikopiko Stream	From the confluence with the Oroua River at approx. NZMS 260 T22:515-307 to source



Water Management Zone*	Sub-zone*	River^	Locality Description
	Kiwitea (Mana_12c)	Kiwitea Stream	From the confluence with the Oroua River at approx. NZMS 260 T23:308-066 to approx. NZMS 260 T23:363-215
			From approx. NZMS 260 S23:294-088 to approx. NZMS 260 T23:307-111
	Makino	Makino Stream	From approx. NZMS 260 S23:279-058 to approx. NZMS 260 S23:286-069
	(Mana_12d)		From the confluence with the Oroua River at approx. NZMS 260 S23:243-005 to approx. NZMS 260 S23:259-037
Coastal Manawatu (Mana_13)	Upper and Lower Tokomaru (Mana_13c and Mana_13d)	Tokomaru River and tributaries	From the confluence with the Linton Drain at approx. NZMS 260 S24:196-774 to source
		Ecology Stream	From the confluence with the Rangitikei River at approx. NZMS 260 T20:691-176 to source
		Otamatenui Stream	From the confluence with the Rangitikei River at approx. NZMS 260 T20:672-107 to source
		Makomiko Stream	From the confluence with the Otamatenui Stream at approx. NZMS 260 T20:650-120 to source
		Mangamaire River	From the confluence with the Rangitikei River at approx. NZMS 260 T20:691-090 to source
Upper Rangitikei	Upper Rangitikei	Waingakia Stream	From the confluence with the Rangitikei River at approx. NZMS 260 U20:715-053 to source
(Rang_1)	(Rang_1)	Oturua Stream	From the confluence with the Rangitikei River at approx. NZMS 260 U20:716-014 to source
		Otarere Stream and tributaries	From the confluence with the Okorotehehe Stream at approx. NZMS 260 T20:684-988 to source
		Mangamarahia Stream	From the confluence with the Rangitikei River at approx. NZMS 260 U21:723-889 to approx. NZMS 260 U20:756-954
		Makahikatoa Stream including all tributaries	From the confluence with the Rangitikei River at approx. NZMS 260 U21:725-887 to source
Middle and Upper Rangitikei (Rang_1 and Rang_2)	Middle and Upper Rangitikei (Rang_1 and Rang_2a)	Rangitikei River	From the confluence with the Pokopoko Stream at approx. NZMS 260 U24:721-758 to source
Middle Rangitikei (Rang_2)	Middle Rangitikei (Rang_2a)	Mangaohane Stream	From the confluence with the Rangitikei River at approx. NZMS 260 U21:707-818 to source
	Pukeokahu - Mangaweka (Rang_2b)	Whakaurekou River	From the confluence with the Rangitikei River at approx. NZMS 260 U21:712-690 to the confluence with the Mangatera River and Maropea River at approx. NZMS 260 U21:749-655



Water Management Zone*	Sub-zone*	River^	Locality Description
		Mangatera River and Maropea River and tributaries	From the confluence with the Whakaurekou River at approx. NZMS 260 U21:749-655 to source
		Kawhatau River	From the confluence with the Rangitikei River at approx. NZMS 260 T22:504-551 to source
		Pourangaki River	From the confluence with the Mangakukeke Stream at approx. NZMS 260 T22:635-507 to source
		Mangakukeke Stream	From the confluence with the Kawhatau River at approx. NZMS 260 T22:634-508 to approx. NZMS 260 T22:677-486
	Upper Moawhango (Rang_2c)	Moawhango River and tributaries	From approx. NZMS 260 T20:468-948 to source
	Middle Moawhango (Rang_2d)	Moawhango River	From the confluence with the Tikirere Stream at approx. NZMS 260 T21:559-741 to approx. NZMS 260 T20:468-948
	Upper Hautapu	Waiouru Stream and tributaries	From the confluence with the Hautapu River at approx. NZMS 260 T21:410-838 to source
	(Rang_2f)	Unnamed Tributary of the Hautapu River	From the confluence with the Hautapu River at approx. NZMS 260 T21:407-810 to source
	Upper and Lower Hautapu (Rang_2f and Rang_2g)	Hautapu River	From the confluence with the Otaihape Stream at approx. NZMS 260 T21:506-656 to source
Lower Rangitikei	Lower Rangitikei (Rang_3a)	Mangamako Stream	From the confluence with the Rangitikei River at approx. NZMS 260 T22:389-415 to source
(Rang_3)	Makohine (Rang_3b)	Makohine Stream	From the confluence with the Rangitikei River at approx. NZMS 260 T22:390-440 to source
Coastal Rangitikei (Rang_4)	Porewa (Rang_4c)	Porewa Stream	From the confluence with the Rangitikei River at approx. NZMS 260 S23:191-215 to source
Upper Whanganui	Upper Whanganui	Whanganui River	From the confluence with the Whakapapa River at approx. NZMS 260 S19:188-495 to approx. NZMS 260 T19:358-411
(Whai_1)	(Whai_1)	Mangatepopo Stream	From the confluence with the Whanganui River at approx. NZMS 260 S19:289-405 to approx. NZMS 260 T19:308-360
Cherry Grove (Whai_2)	Cherry Grove (Whai_2a)	Whanganui River	From the confluence with the Pungapunga River at approx. NZMS 260 S18:124-544 to the confluence with the Whakapapa River at approx. NZMS 260 S19:188-495
	Upper and Lower Whakapapa (Whai_2b and Whai_2c)	Whakapapa River	From the confluence with the Whanganui River at approx. NZMS 260 S19:188-495 to the confluence with the Whakapapanui Stream and the Whakapapaiti Stream at approx. NZMS 260 S19:243-268



Water Management Zone*	Sub-zone*	River^	Locality Description
		Whakapapanui Stream	From the confluence with the Whakapapa River and the Whakapapaiti Stream at approx. NZMS 260 S19:243-268 to source
		Whakapapaiti Stream	From the confluence with the Whakapapa River and the Whakapapanui Stream at approx.  NZMS 260 S19:243-268 to source
	Upper Whakapapa (Whai_2b)	Mahikatoa Stream	From the confluence with the Whakapapanui Stream at approx. NZMS 260 S19:273-245 to the confluence with the Taranaki Stream at approx. NZMS 260 S19:295-236
		Taranaki Stream	From the confluence with the Mahikatoa Stream at approx. NZMS 260 S19:295-236 to source
		Pukeonaki Stream	From the confluence with the Whakapapanui Stream at approx. NZMS 260 S19:269-255 to source
		Papamanuka Stream	From the confluence with the Whakapapa River at approx. NZMS 260 S19:233-288 to approx. NZMS 260 S19:258-283
	Lower Whakapapa (Whai_2c)	Otamawairua Stream	From the confluence with the Whakapapa River at approx. NZMS 260 S19:195-324 to source
		Piopiotea Stream	From the confluence with the Whakapapa River at approx. NZMS 260 S19:174-356 to source
		Makaretu Stream	From the confluence with the Piopiotea Stream at approx. NZMS 260 S19:172-284 to source
	Piopiotea	Pukerimu Stream	From the confluence with the Piopiotea Stream at approx. NZMS 260 S19:168-285 to source
	(Whai_2d)	Tepure Stream	From the confluence with the Piopiotea Stream at approx. NZMS 260 S19:159-327 to approx. NZMS 260 S19:198-270
		Unnamed Tributary of the Tepure Stream	From the confluence with the Tepure Stream at approx. NZMS 260 S19:181-299 to source
		Pungapunga River	From the confluence with the Whanganui River at approx. NZMS 260 S18:124-544 to source
	Pungapunga (Whai_2e)	Waituhi Stream	From the confluence with the Pungapunga River at approx. NZMS 260 S18:278-592 to approx. NZMS 260 T18:301-587
		Pungapunga River Tributary	From the confluence with the Pungapunga River at approx. NZMS 260 S18:261-580 to source
		Hauwai Stream	From the confluence with the Pungapunga River at approx. NZMS 260 S18:239-573 to source
		Whangapuoto Stream	From the confluence with the Pungapunga River at approx. NZMS 260 S18:165-542 to source
	Upper Ongarue	Unnamed Tributary of the Ongarue River	From the confluence with the Ongarue River at approx. NZMS 260 S17:286-880 to source



Water Management Zone*	Sub-zone*	River^	Locality Description
	(Whai_2f)	Okauaka Stream	From the confluence with the Ongarue River at approx. NZMS 260 S17:187-865 to source
		Kahoho Stream	From the confluence with the Waimiha Stream at approx. NZMS 260 T17:310-965 to source
		Waimiha Stream	From the confluence with the Ongarue River at approx. NZMS 260 S17:132-862 to source
		Maramataha River	From the confluence with the Ongarue River at approx. NZMS 260 S17:116-806 to source
		Unnamed Tributary of the Maramataha River	From the confluence with the Maramataha River at approx. NZMS 260 S18:273-793 to source
		Piropiro Stream	From the confluence with the Maramataha River at approx. NZMS 260 S17:251-804 to source
		Te Rerengaohoro Stream	From the confluence with the Maramataha River at approx. NZMS 260 S18:238-807 to approx. NZMS 260 S18:239-802
		Waione Stream	From the confluence with the Ongarue River at approx. NZMS 260 S18:118-799 to source
		Mangatukutuku Stream	From the confluence with the Waione Stream at approx. NZMS 260 S18:127-796 to source
		Waikoura Stream	From the confluence with the Mangatukutuku Stream at approx. NZMS 260 S18:174-761 to source
	Upper and Lower Ongarue (Whai_2f and Whai_2g)	Ongarue River	From the confluence with the Mangakahu Stream at approx. NZMS 260 S18:087-736 to source
	Lower Ongarue	Mangakahu Stream	From the confluence with the Ongarue River at approx. NZMS 260 S18:087-736 to source
	(Whai_2g)	Otataka Stream	From the confluence with the Mangakahu Stream at approx. NZMS 260 S18:182-701 to source
		Unnamed Tributary of the Taringamotu River	From the confluence with the Mangakahu Stream at approx. NZMS 260 S18:143-729 to source
		Kakimotu Stream	From the confluence with the Mangakahu Stream at approx. NZMS 260 S18:140-729 to source
		Uepango Stream	From the confluence with the Ongarue River at approx. NZMS 260 S18:053-683 to source
		Taringamotu River	From the confluence with the Ongarue River at approx. NZMS 260 S18:047-582 to source
		Unnamed Tributary of the Taringamotu River	From the confluence with the Taringamotu River at approx. NZMS 260 S18:243-631 to source
		Unnamed Tributary of the Taringamotu River	From the confluence with the Taringamotu River at approx. NZMS 260 S18:229-618 to source
		Tutaeti Stream	From the confluence with the Taringamotu River at approx. NZMS 260 S18:205-598 to source



Water Management Zone*	Sub-zone*	River^	Locality Description
		Maraetohu Stream	From the confluence with the Taringamotu River at approx. NZMS 260 S18:190-593 to source
		Unnamed Tributary of the Taringamotu River	From the confluence with the Taringamotu River at approx. NZMS 260 S18:154-611 to source
		Wharariki Stream	From the confluence with the Taringamotu River at approx. NZMS 260 S18:143-613 to source
		Upokomatu Stream	From the confluence with the Taringamotu River at approx. NZMS 260 S18:110-626 to source
		Te Tomo Stream	From the confluence of the Upokomatu Stream at approx. NZMS 260 S18:157-664 to source
		Piawa Stream	From the confluence of the Upokomatu Stream at approx. NZMS 260 S18:115-635 to source
		Ngakonui Stream	From the confluence with the Taringamotu River at approx. NZMS 260 S18:101-622 to source
Middle Whanganui (Whai_4)	Retaruke (Whai_4d)	Retaruke River	From the confluence with the Kaitieke Stream at approx. NZMS 260 S19:041-326 to source
	Upper, Middle and Lower Manganui o te Ao (Whai_5d, Whai_5g and Whai_5i)	Manganui o te Ao River	From the confluence with the Whanganui River at approx. NZMS 260 R20:860-979 to source
Pipiriki (Whai_5)	Makatote (Whai_5e)	Makatote River	From the confluence with the Manganui o te Ao River at approx. NZMS 260 S20:128-119 to approx. NZMS 260 S20:201-129
	Orautoha (Whai_5j)	Orautoha Stream	From the confluence with the Manganui o te Ao River at approx. NZMS 260 S20:026-067 to approx. NZMS 260 S20:156-063
	Waitangi (Whau_1b)	Waitangi Stream and tributaries	From the confluence with the Whangaehu River at approx. NZMS 260 T21:315-888 to source
Upper Whangaehu		Omarae Stream	From the confluence with the Waitaiki Stream at approx. NZMS 260 S20:265-921 to source
(Whau_1)	Tokiahuru (Whau_1c)	Waitaiki Stream	From the confluence with the Tokiahuru Stream at approx. NZMS 260 S21:235-880 to approx. NZMS 260 S20:273-929
	(655)	Tokiahuru Stream	From the confluence with the Whangaehu River at approx. NZMS 260 S21:218-865 to approx. NZMS 260 T20:334-956
Lower Whangaehu (Whau_3)	Upper Makotuku, Lower Makotuku and Makara (Whau_3b, Whau_3c and Whau_3f)	Makotuku River and tributaries including Makara Stream and tributaries	From the confluence with the Mangawhero River at approx. NZMS 260 S20:079-902 to source
	Upper Mangawhero	Mangawhero River	From the confluence with the Makotuku River at approx. NZMS 260 S20:079-902 to source



Water Management Zone*	Sub-zone*	River^	Locality Description
	(Whau_3d)	Mangateitei Stream	From the confluence with the Mangawhero River at approx. NZMS 260 S20:158-961 to source
		Taonui Stream	From the confluence with the Mangawhero River at approx. NZMS 260 S20:121-956 to approx. NZMS 260 S20:159-020
		Makaranui Stream	From the confluence with the Mangawhero River at approx. NZMS 260 S20:116-953 to approx. NZMS 260 S20:165-932
	Upper Ohau	Makahika Stream and tributaries	From the confluence with the Ohau River at approx. NZMS 260 S25:090-585 to source
Ohau River	(Ohau_1a)	Makaretu Stream and tributaries	From the confluence with the Ohau River at approx. NZMS 260 S25:083-579 to source
(Ohau_1)	Lower Ohau (Ohau_1b)	Makorokio Stream and tributaries	From the confluence with the Ohau River at approx. NZMS 260 S25:018-563 to source





## Water<sup>^</sup> Supply (WS) Value

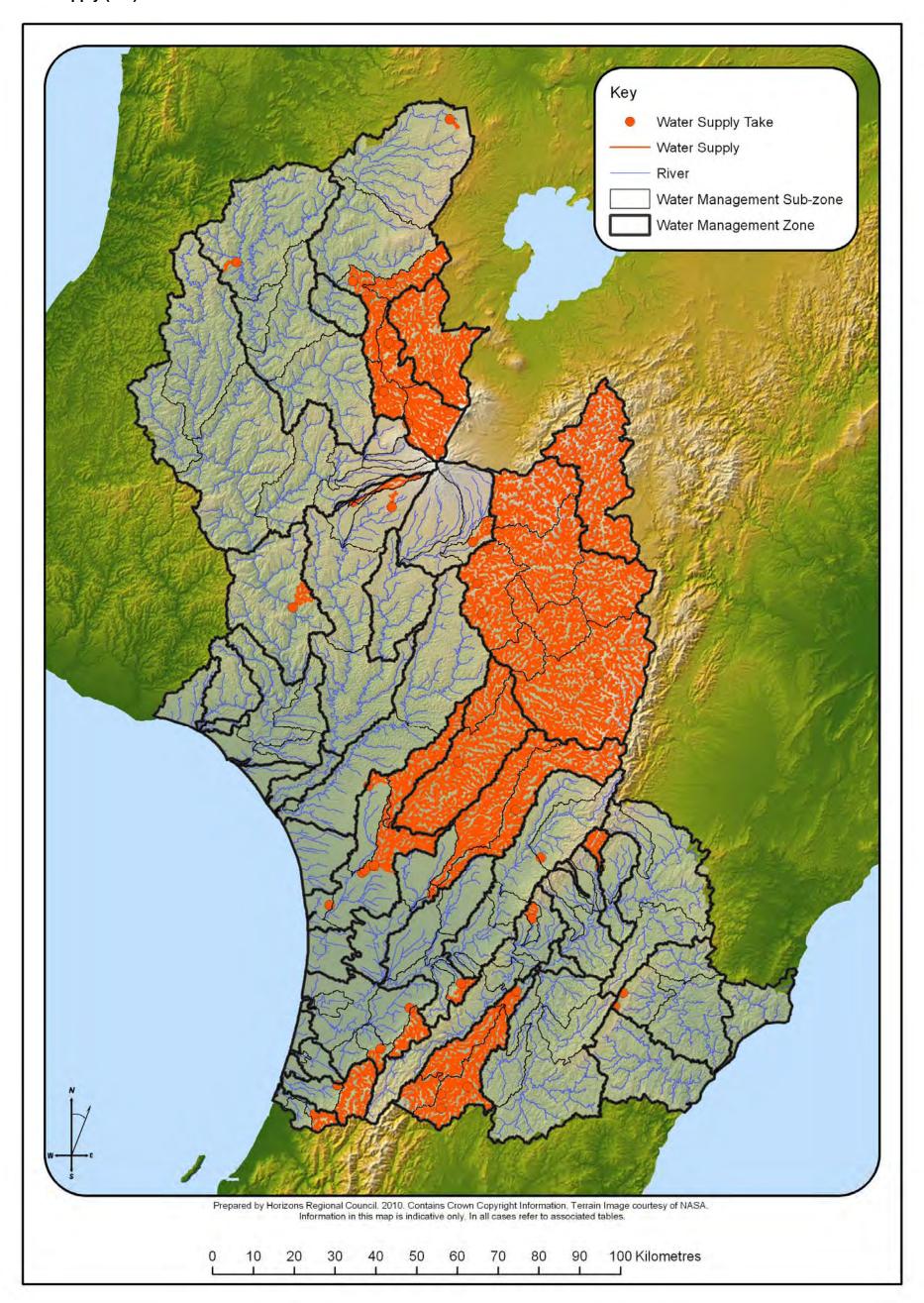


Figure B:10 Visual Guide to the Location of Existing Surface Water Takes for the Water^ Supply (WS) Value





Water Management Zone*	Sub-zone*	River^	Description	Water^ Supply
Upper Tamaki (Mana_3)	Upper Tamaki (Mana_3)	Tamaki River	Including all tributaries upstream of a point at approx. NZMS 260 U23:709-114	Dannevirke
	Upper Mangatainoka (Mana_8a)	Mangatainoka River and tributaries	From Larsons Road at approx. NZMS 260 T25:308-595 to source	Pahiatua
	Middle Mangatainoka (Mana_8b)	Mangatainoka River and tributaries	From the Makakahi confluence at approx. NZMS 260 T24:475-775 to source	Pahiatua
Mangatainoka (Mana_8)	Lower Mangatainoka (Mana_8c)	Mangatainoka River and tributaries	From a point at approx. NZMS 260 T24:504-808 to source	Pahiatua
(Wana_o)			From the confluence with the Mangatainoka River at approx. NZMS 260 T24:475-775 to source	Pahiatua
	Makakahi (Mana_8d)	Makakahi River and tributaries	From a point at approx. NZMS 260 T25:318-520 to source	Eketahuna, Pleckville and Pahiatua
			From a point at approx. NZMS 260 T25:384-572 to source	Pleckville and Pahiatua
Upper Gorge (Mana-9)	Mangapapa (Mana_9b)	Mangapapa Stream and tributaries	From a point at approx. NZMS 260 T24:543-986 to source	Dannevirke
Middle Manawatu (Mana_10)	Middle Pohangina (Mana_10c)	Highland Home Christian Camp Stream and tributaries	From a point at approx. NZMS 260 T24:564-137 to source	Highland Home Christian Camp
Lower Manawatu (Mana_11)	Turitea (Mana_11b)	Turitea Stream and tributaries	From a point at approx. NZMS 260 T25:368-827 to source	Palmerston North
Oroua (Mana_12)	Upper Oroua (Mana_12a)	Oroua River and tributaries	From Almadale at approx. NZMS 260 T23:365-113 to source	Manawatu Beef Packers
			From a point at approx. NZMS 260 T23:502-254 to source	Kiwitea, Feilding, Oroua No. 1 and Manawatu Beef Packers
			From a point at approx. NZMS 260 T23:422-156 to source	Feilding, Oroua No. 1 and Manawatu Beef Packers



Water Management Zone*	Sub-zone*	River^	Description	Water <sup>^</sup> Supply
			From a point at approx. NZMS 260 T23:364-113 to source	Oroua No. 1 and Manawatu Beef Packers
	Middle Oroua (Mana_12b)	Oroua River and tributaries	From a point approx. NZMS 260 S23:297-045 to source	Manawatu Beef Packers
	Kiwitea	Kiwitea Stream and tributaries	From the confluence with the Oroua River at approx. NZMS 260 S24:167-826 to source	Manawatu Beef Packers
	(Mana_12d)	Kiwitea Stream and tributaries	From a point at approx. NZMS 260 T23:369-239 to source	Waituna West and Manawatu Beef Packers
Coastal Manawatu	Lower Tokomaru (Mana_13c)	Tokomaru River and tributaries	Including all tributaries upstream of a point at approx. NZMS 260 S24:242-767	Tokomaru
(Mana_13)	Mangaore (Mana_13d)	Mangaore Stream and tributaries	From a point at approx. NZMS 260 S25:170-665	Shannon
Upper Rangitikei (Rang_1)	Upper Rangitikei (Rang_1)	Rangitikei River and tributaries	From the Makahikatoa Stream confluence at approx. NZMS 260 U21:726-888 to source	Mangaweka, Hunterville, Halcombe-Stanway, Sanson, Bulls and Ohakea
Middle Rangitikei (Rang_2)	Middle Dengitikei	Rangitikei River and tributaries	From Pukeokahu at approx. NZMS 260 U21:713-708 to source	Mangaweka, Hunterville, Halcombe-Stanway, Sanson, Bulls and Ohakea
	Middle Rangitikei (Rang_2a)	Reporoa Stream and tributaries	From a point at approx. NZMS 260 U21:774-740	Erewhon rural, Mangaweka, Hunterville, Halcombe-Stanway, Sanson, Bulls and Ohakea



Water Management Zone*	Sub-zone*	River^	Description	Water^ Supply
	Pukeokahu - Mangaweka	Rangitikei River and tributaries	From Mangaweka at approx. NZMS 260 T22:504-513 to source	Mangaweka, Hunterville, Halcombe-Stanway, Sanson, Bulls and Ohakea
	(Rang_2b)		From a point at approx. NZMS 260 U22:707-589 to source	Omatane, Mangaweka, Hunterville, Halcombe-Stanway, Sanson, Bulls and Ohakea
			From Taihape at approx. NZMS 260 T21:506-670 to source	Mangaweka, Hunterville, Halcombe-Stanway, Sanson, Bulls and Ohakea
	Upper Hautapu		From a point at approx. NZMS 260 T21:407-811 to source	Irirangi, Taihape, Mangaweka, Hunterville, Halcombe-Stanway, Sanson, Lake Alice, Bulls and Ohakea
	(Rang_2f)		From a point at approx. NZMS 260 T21:420-738 to source	Taihape, Mangaweka, Hunterville, Halcombe-Stanway, Sanson, Lake Alice, Bulls and Ohakea
		Waiouru Stream	From a point at approx. NZMS 260 T21:435-896 to source	Waiouru, Irirangi, Taihape, Mangaweka, Hunterville, Halcombe-Stanway, Sanson, Lake Alice, Bulls and Ohakea



Water Management Zone*	Sub-zone*	River^	Description	Water^ Supply
	Lower Hautapu (Rang_2g)	Hautapu River and tributaries	From the confluence with the Rangitikei River at approx. NZMS 260 T22:529-574 to source	Mangaweka, Hunterville, Halcombe-Stanway, Sanson, Bulls and Ohakea
	Lower Rangitikei	Rangitikei River and	From Onepuhi at approx. NZMS 260 S23:201-222 to source	Halcombe-Stanway, Sanson, Bulls and Ohakea
Lower Rangitikei (Rang_3)	(Rang_3a)	tributaries	From a point at approx. NZMS 260 T22:360-372 to source	Hunterville, Halcombe-Stanway, Sanson, Bulls and Ohakea
	Makohine (Rang_3b)	Makohine Stream and tributaries	From the confluence with the Rangitikei River at approx. NZMS 260 T22:400-443 to source	Hunterville, Halcombe-Stanway, Sanson, Bulls and Ohakea
			From a point at approx. NZMS 260 S23:198-221 to source	Halcombe-Stanway, Sanson, Bulls and Ohakea
	Coastal Rangitikei (Rangi_4a)	Rangitikei River	From a point at approx. NZMS 260 S23:154-118 to source	Sanson, Bulls and Ohakea
Coastal Rangitikei			From a point at approx. NZMS 260 S23:132-105 to source	Bulls and Ohakea
(Rang_4)			From a point at approx. NZMS 260 S23:125-099 to source	Ohakea
	Tidal Rangitikei (Rang_4b)	Flock House Drain No 1	From a point at approx. NZMS 260 S23:045-019 to source	Flock House
	Porewa (Rang_4c)	Porewa Stream and tributaries	From the Rangitikei confluence at approx. NZMS 260 S24:033-985 to source	Sanson, Bulls and Ohakea
	Tutaenui (Rang_4d)	Tutaenui Stream and tributaries	From a point at approx. NZMS 260 S22:144-137 to source	Marton
Upper Whanganui (Whai_1)	Upper Whanganui (Whai_1)	Whanganui River and tributaries	From the Whakapapa confluence at approx. NZMS 260 S19:189-499 to source	Piriaka and Taumarunui
		Mangatepopo Stream and tributaries	From a point at approx. NZMS 260 T19:313-361 to source	Taurewa Outdoor Pursuits Centre, Piriaka and Taumarunui



Water Management Zone*	Sub-zone*	River^	Description	Water^ Supply
		Tawahitikuri Stream and tributaries	From a point at approx. NZMS 260 T19:309-326 to source	Taurewa Camp, Piriaka and Taumarunui
	Cherry Grove (Whai_2a)	Whanganui River	From a point at approx. NZMS 260 S18:134-506 to source	Piriaka and Taumarunui
	(VVIIdi_Zd)		From a point at approx. NZMS 260 S18:102-556 to source	Taumarunui
		Whakapapa River and tributaries	From footbridge at approx. NZMS 260 S19:226-293 to source	Piriaka and Taumarunui
	Upper Whakapapa (Whai_2b)	Makahikatoa Stream and tributaries	From a point at approx. NZMS 260 T20:300-177 to source	Whakapapa Village, Piriaka and Taumarunui
		Mangahuia Stream and tributaries	From a point at approx. NZMS 260 S19:236-205 to source	National Park, Piriaka and Taumarunui
Cherry Grove	Lower Whakapapa	Whakapapa River	From the Whanganui confluence at approx. NZMS 260 S19:189-499 to source	Piriaka and Taumarunui
(Whai_2)	(Whai_2c)	Deep Creek and tributaries	From a point at approx. NZMS 260 S19:190-402 to source	Owhango, Piriaka and Taumarunui
	Piopiotea (Whai_2d)	Piopiotea Stream	From the confluence with the Whakapapa River at approx. NZMS 260 S19:174-356 to source	Piriaka and Taumarunui
			From a point at approx. NZMS 260 S19:178-283 to source	Raurimu, Piriaka and Taumarunui
		Makaretu Stream and tributaries	From a point at approx. NZMS 260 S19:172-285 to source	Raurimu, Piriaka and Taumarunui
	Pungapunga	Pungapunga River	From the Whanganui confluence at approx. NZMS 260 S18:124-156 to source	Taumarunui
	(Whai_2e)	and tributaries	From a point at approx. NZMS 260 S18:197-550 to source	Ngapuke School
	Upper Ongarue (Whai_2f)	Whareana Stream and tributaries	From a point at approx. NZMS 260 T17:340-954 to source	Pureora
Middle Whanganui (Whai_4)	Upper Ohura (Whai_4b)	Mangaparare Stream and tributaries	From a point at approx. NZMS 260 R18:817-602 to source	Ohura
Paetawa (Whai_5)	Paetawa (Whai_5)	Motuaruhe Stream and tributaries	From a point at approx. NZMS 260 S21:955-752 to source	Matahiwi
Upper Whangaehu (Whau_1)	Waitangi (Whau_1b)	Waitangi Stream and tributaries	From a point at approx. NZMS 260 T20:397-914 to source	Waiouru Army Camp
Lower Whangaehu (Whau_3)	Upper Makotuku (Whau_3b)	Makotuku River and tributaries	From a point at approx. NZMS 260 S20:103-012 to source	Raetihi



Water Management Zone*	Sub-zone*	River^	Description	Water^ Supply
	Upper Mangawhero (Whau_3d)	Serpentine Stream and tributaries	From a point at approx. NZMS 260 S20:198-999 to source	Ohakune
Ohau	Upper Ohau (Ohau_1a)	Ohau River	From Rongomatane at approx. NZMS 260 S25:072-577 to source	Levin
(Ohau_1)	Lower Ohau (Ohau_1b)	Ohau River	From a point at approx. NZMS 260 S25:064-577 to source	Levin
Akitio (Akit_1)	Waihi	Puketoi Range Stream and tributaries	From a point at approx. NZMS 260 U24:746-771 to source	Pongaroa
	(Akit_1c) Waipuehu Stream Tributary and tributaries	From a point at approx. NZMS 260 U24:766-804 to source	Pongaroa	
Waikawa (West_9)	Waikawa (West_9a)	Waikawa Stream	Including all tributaries upstream of a point at approx. NZMS 260 S25:009-506	G A Martin



## Flood Control and Drainage (FC/D) Value

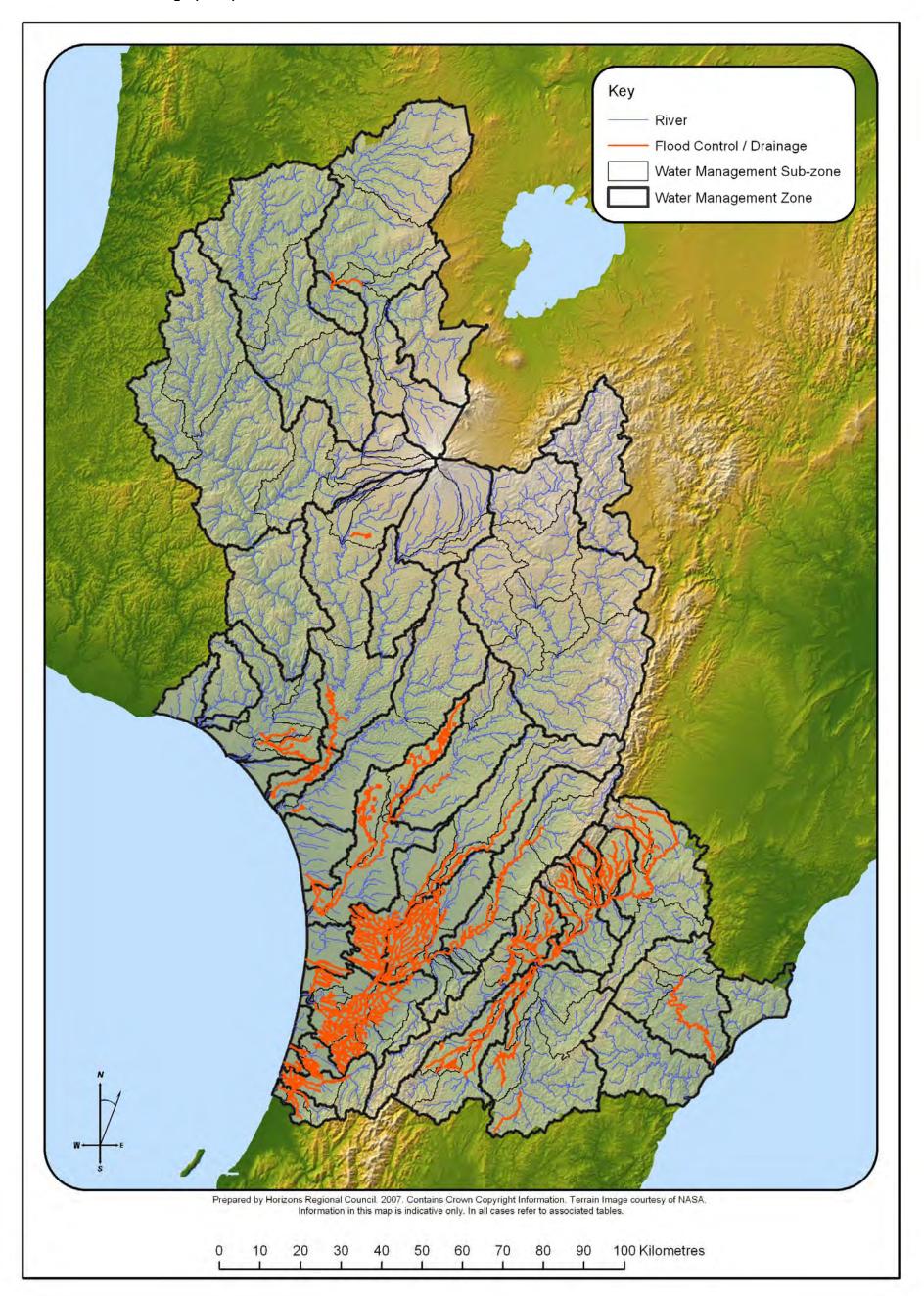


Figure B:11 Visual Guide to the Distribution of the Flood Control and Drainage (FC/D) Value





Table B.11: Flood Control and Drainage (FC/D) Value in the Region

Water Management Zone*	Sub-zone*	River^	Locality Description	Common Name of Scheme
Upper Manawatu, Weber-Tamaki, Tamaki-Hopelands, Hopelands-Tiraumea, Upper Gorge (Mana_1, Mana_2, Mana_5, Mana_6, Mana_9)	Upper Manawatu, Weber-Tamaki, Tamaki-Hopelands, Hopelands- Tiraumea, Upper Gorge (Mana_1a, Mana_2a, Mana_5a, Mana_6, Mana_9a)	Manawatu River	The Manawatu River from the Manawatu Gorge at approx. NZMS 260 T24:496-926 to approx. NZMS 260 U23:783-260	South East Ruahine, Eastern Manawatu, Upper Manawatu
		Mangarangiora Stream Tributary	At approx. NZMS 260 U23:830-219 to approx. NZMS 260 U23:813-227 and at approx. NZMS 260 U23:817-223 to approx. NZMS 260 U23:810-224	South East Ruahine
	Upper Manawatu (Mana_1a)	Mangarangiora Stream Tributary	At approx. NZMS 260 U23:828-216 to approx. NZMS 260 U23:805-224	South East Ruahine
		Makotuku Stream Tributary	At approx. NZMS 260 U23:844-171 to approx. NZMS 260 U23:840-190	South East Ruahine
Upper Manawatu (Mana_1)		Manawatu River Tributary	At approx. NZMS 260 U23:858-149 to approx. NZMS 260 U23:847-156 and at approx. NZMS 260 U23:849-156 to approx. NZMS 260 U23:847-153	South East Ruahine
		Dores Stream	From confluence with the Manawatu River at approx. NZMS 260 U23:788-039 to approx. NZMS 260 U23:791-116	South East Ruahine
		Manawatu River Tributary (drain)	At approx. NZMS 260 U23:844-142 to approx. NZMS 260 U23:839-148	South East Ruahine
	Mangatewainui	Mangatewainui River	From confluence with the Manawatu River at approx. NZMS 260 U23:829-086 to approx. NZMS 260 U23:753-230	South East Ruahine
	(Mana_1b)	Mangatewaiiti Stream	From confluence with the Mangatewaiiti Stream at approx. NZMS 260 U23:828-148 to approx. NZMS 260 U23:750-203	South East Ruahine
Weber-Tamaki	Mangatera	Mangatera Stream	From confluence with the Manawatu River at approx. NZMS 260 U23:737-025 to approx. NZMS 260 U23:743-167	South East Ruahine
(Mana_2)	(Mana_2b)	Whakaruatapu Stream	From confluence with the Mangatera Stream at approx. NZMS 260 U23:757-083 to approx. NZMS 260 U23:774-188	South East Ruahine
Weber-Tamaki (Mana_2)	Mangatera (Mana_2b)	Mangatera Cemetery Drain	From confluence with the Mangatera Stream at approx. NZMS 260 U23:756-080 to approx. NZMS 260 U23:752-082	South East Ruahine



Water Management Zone*	Sub-zone*	River^	Locality Description	Common Name of Scheme
			From confluence with the Mangatera Stream at approx. NZMS 260 U23:753-096 to approx. NZMS 260 U23:768-118	South East Ruahine
		Mangatera Stream Tributary	From confluence with the Mangatera Stream at approx. NZMS 260 U23:747-122 to approx. NZMS 260 U23:736-132	South East Ruahine
		Matamau Stream	From confluence with the Whakaruatapu Stream at approx. NZMS 260 U23:785-124 to approx. NZMS 260 U23:788-126	South East Ruahine
		Tapuata Stream	From confluence with the Mangatera Stream at approx. NZMS 260 U23:739-044 to approx. NZMS 260 U23:717-125	South East Ruahine
		Tapuata Stream Tributary	From confluence with the Tapuata Stream at approx. NZMS 260 U23:728-060 to approx. NZMS 260 U23:730-080	South East Ruahine
		Tapuata Stream Tributary	From confluence with the Tapuata Stream at approx.  NZMS 260 U23:738-075 to approx. NZMS 260 U23:729-101 and at approx. NZMS 260 U23:736-092 to approx.  NZMS 260 U23:733-095	South East Ruahine
		Makirikiri Stream	From SH2 Bridge at approx. NZMS 260 U23:725-050 to Armstrong Road at approx. NZMS 260 U23:718-110	South East Ruahine
		Makirikiri Stream Tributary	From confluence with the Makirikiri Stream at approx. NZMS 260 U23:720-055 to approx. NZMS 260 U23:714-066	South East Ruahine
		Makirikiri Stream Tributary	From confluence with the Makirikiri Stream at approx. NZMS 260 U23:714-073 to approx. NZMS 260 U23:714-093	South East Ruahine
		Makirikiri Stream Tributary	From confluence with the Makirikiri Stream at approx. NZMS 260 U23:715-078 to approx. NZMS 260 U23:724-084	South East Ruahine
		Makirikiri Stream Tributary	From confluence with the Makirikiri Stream at approx. NZMS 260 U23:719-087 to approx. NZMS 260 U23:716-095	South East Ruahine
		Makirikiri Stream Tributary	From confluence with the Makirikiri Stream at approx. NZMS 260 U23:720-088 to approx. NZMS 260 U23:725-092	South East Ruahine
Upper Kumeti, Tamaki-Hopelands (Mana_4 and Mana_5)	Upper Kumeti, Lower Kumeti (Mana_4, Mana_5c)	Mangapuaka/Kumeti Stream	From confluence with the Manawatu River at approx. NZMS 260 T23:698-005 to approx. NZMS 260 T23:628-109	South East Ruahine
Tamaki-Hopelands (Mana_5)	Lower Tamaki (Mana_5b)	Tamaki River	From confluence with the Manawatu River at approx. NZMS 260 U23:709-003 to approx. NZMS 260 T23:683-167	South East Ruahine
		Rokaiwhana Stream	From confluence with the Tamaki River at approx. NZMS 260 T23:697-091 to approx. NZMS 260 T23:660-139	South East Ruahine



Water Management Zone*	Sub-zone*	River^	Locality Description	Common Name of Scheme
		Rokaiwhana Stream Tributary	From confluence with the Rokaiwhana Stream at approx.  NZMS 260 T23:665-112 to approx. NZMS 260 T23:646-128 and at approx. NZMS 260 T23:649-120 to approx.  NZMS 260 T23:651-126	South East Ruahine
		Rokaiwhana Stream Tributary	From confluence with the Rokaiwhana Stream at approx. NZMS 260 T23:661-130 to approx. NZMS 260 T23:668-148	South East Ruahine
		Tamaki River Tributary	From confluence with the Tamaki River at approx. NZMS 260 U23:706-100 to approx. NZMS 260 U23:712-120	South East Ruahine
		Tamaki River Tributary	From confluence with the west branch of the Tamaki River at approx. NZMS 260 T23:682-162 to approx. NZMS 260 T23:679-162	South East Ruahine
		Tamaki River Tributary (drain)	At approx. NZMS 260 U23:708-063 to approx. NZMS 260 U23:707-074	South East Ruahine
		Tamaki River Tributary (drain)	At approx. NZMS 260 U23:705-019 to approx. NZMS 260 U23:706-033	South East Ruahine
	Lower Kumeti (Mana_5c)	Otamaraho Stream	From confluence with the Mangapuaka/Kumeti Stream at approx. NZMS 260 T23:694-023 to approx. NZMS 260 T23:641-121	South East Ruahine
		Mangapuaka/Kumeti Stream Tributary	From confluence with the Mangapuaka/Kumeti Stream at approx. NZMS 260 T23:692-026 to approx. NZMS 260 T23:676-041 and at approx. NZMS 260 T23:678-039 to approx. NZMS 260 T23:680-040	South East Ruahine
Tamaki-Hopelands (Mana_5)	Lower Kumeti (Mana_5c)	Otamaraho Stream Tributary	At approx. NZMS 260 T23:693-058 to approx. NZMS 260 T23:685-078 and at approx. NZMS 260 T23:692-062 to approx. NZMS 260 T23:691-075	South East Ruahine
	Oruakeretaki (Mana_5d)	Oruakeretaki Stream	From confluence with the Manawatu River at approx. NZMS 260 T24:690-999 to approx. NZMS 260 T23:607-069	South East Ruahine
		Otamarahu Stream	From confluence with the Oruakeretaki Stream at approx. NZMS 260 T23:648-038 to approx. NZMS 260 T23:626-096	South East Ruahine
		Oruakeretaki Stream Tributary	From confluence with the Oruakeretaki Stream at approx. NZMS 260 T23:629-053 to approx. NZMS 260 T23:601-064	South East Ruahine
		Mangapukakakahu Stream	From confluence with the Oruakeretaki Stream at approx. NZMS 260 T23:629-059 to approx. NZMS 260 T23:616-085	South East Ruahine



Water Management Zone*	Sub-zone*	River^	Locality Description	Common Name of Scheme
		Oruakeretaki Stream Tributary	From confluence with the Oruakeretaki Stream at approx. NZMS 260 T23:619-068 to approx. NZMS 260 T23:617-078	South East Ruahine
		Raparapawai Stream	From confluence with the Manawatu River at approx. NZMS 260 T24:642-932 to approx. NZMS 260 T23:587-050	South East Ruahine
	Raparapawai (Mana_5e)	Raparapawai Stream Tributary	From confluence with the Raparapawai Stream at approx. NZMS 260 T24:649-983 to approx. NZMS 260 T24:618-989 and at approx. NZMS 260 T24:624-985 to approx. NZMS 260 T24:624-983 and at approx. NZMS 260 T24:622-984 to approx. NZMS 260 T24:621-983	South East Ruahine
		Raparapawai Stream Tributary	At approx. NZMS 260 T23:612-013 to approx. NZMS 260 T23:608-021 and at approx. NZMS 260 T23:612-013 to approx. NZMS 260 T23:602-015	South East Ruahine
	Raparapawai (Mana_5a)	Manawatu River Tributary	From confluence with the Manawatu River at approx. NZMS 260 T24:623-916 to approx. NZMS 260 T24:628-946	South East Ruahine
Upper Gorge (Mana_9)	Mangapapa (Mana_9b)	Mangapapa Stream	From confluence with the Mangaatua Stream at approx.  NZMS 260 T24:514-922 to approx. NZMS 260 T23:553-008 and at approx. NZMS 260 T23:549-000 to approx.  NZMS 260 T23:542-007 and at approx. NZMS 260 T23:552-005 to approx. NZMS 260 T23:551-007	South East Ruahine
Upper Gorge (Mana_9)	Mangapapa (Mana_9b)	Mangapapa Stream Tributary (drain)	At approx. NZMS 260 T24:538-945 to approx. NZMS 260 T24:542-943	South East Ruahine
	Mangaatua (Mana_9c)	Mangaatua Stream	From confluence with the Manawatu River at approx. NZMS 260 T24:495-926 to approx. NZMS 260 T23:567-045	South East Ruahine
		Mangamanaia Stream	From confluence with the Mangaatua Stream at approx. NZMS 260 T24:501-924 to approx. NZMS 260 T24:518-957	South East Ruahine
		Mangaatua Stream Tributary (drain)	From confluence with the Mangaatua Stream at approx. NZMS 260 T24:524-919 to approx. NZMS 260 T24:538-916	South East Ruahine



Water Management Zone*	Sub-zone⁺	River^	Locality Description	Common Name of Scheme
		Mangaatua Stream Tributary and associated drainage network	From confluence with the Mangaatua Stream at approx.  NZMS 260 T24:528-915 to approx. NZMS 260 T24:556-891 and at approx. NZMS 260 T24:552-899 to approx.  NZMS 260 T24:553-900 and at approx. NZMS 260 T24:530-910 to approx. NZMS 260 T24:574-882 and at approx.  NZMS 260 T24:531-908 to approx. NZMS 260 T24:541-895 and at approx. NZMS 260 T24:542-896 and at approx. NZMS 260 T24:532-908 to approx. NZMS 260 T24:531-907	South East Ruahine
		Mangaatua Stream Tributary	From confluence with the Mangaatua Stream at approx. NZMS 260 T24:581-964 to approx. NZMS 260 T24:592-968 and at approx. NZMS 260 T24:586-965 to approx. NZMS 260 T24:590-962	South East Ruahine
		Mangaatua Stream Tributary	From confluence with the Mangaatua Stream at approx. NZMS 260 T24:589-971 to approx. NZMS 260 T24:594-973	South East Ruahine
		Coppermine Stream	From confluence with the Mangaatua Stream at approx. NZMS 260 T23:577-013 to approx. NZMS 260 T23:562-027	South East Ruahine
	Mangaatua (Mana_9c)	Mangaatua Stream Tributary	At approx. NZMS 260 T24:518-928 to approx. NZMS 260 T24:521-931	South East Ruahine
Upper Gorge (Mana_9)		Mangaatua Stream Tributary (drain)	At approx. NZMS 260 T24:548-905 to approx. NZMS 260 T24:556-905 and at approx. NZMS 260 T24:551-906 to approx. NZMS 260 T24:554-902	South East Ruahine
		Mangaatua Stream Tributary (drain)	At approx. NZMS 260 T24:555-923 to approx. NZMS 260 T24:567-936 and at approx. NZMS 260 T24:563-928 to approx. NZMS 260 T24:563-934	South East Ruahine
		Mangaatua Stream Tributary	At approx. NZMS 260 T24:583-932 to approx. NZMS 260 T24:599-953 and at approx. NZMS 260 T24:593-942 to approx. NZMS 260 T24:607-943	South East Ruahine
		Mangaatua Stream Tributary	At approx. NZMS 260 T24:579-974 to approx. NZMS 260 T24:583-979	South East Ruahine
		Mangaatua Stream Tributary	At approx. NZMS 260 T24:577-985 to approx. NZMS 260 T24:584-985	South East Ruahine
Tamaki-Hopelands, Hopelands-Tiraumea (Mana_5, Mana_6)	Tamaki-Hopelands, Hopelands-Tiraumea (Mana_5a, Mana_6)	Armistead Drain 31	At approx. NZMS 260 T24:613-896 to approx. NZMS 260 T24:610-906	Upper Manawatu



Water Management Zone*	Sub-zone*	River^	Locality Description	Common Name of Scheme
Hopelands-Tiraumea (Mana_6)	Hopelands-Tiraumea (Mana_6)	Murphy Drain 29	At approx. NZMS 260 T24:600-885 to approx. NZMS 260 T24:607-896	Upper Manawatu
		Jackson and Murphy Drain 28	At approx. NZMS 260 T24:600-889 to approx. NZMS 260 T24:588-921	Upper Manawatu, South East Ruahine
		Armistead and Jackson Drain 30	At approx. NZMS 260 T24:599-890 to approx. NZMS 260 T24:603-896	Upper Manawatu
		Manawatu River Tributary (drain)	From confluence of the Manawatu River at approx. NZMS 260 T24:557-872 to approx. NZMS 260 T24:564-881	South East Ruahine
Tiraumea (Mana_7)	Upper Tiraumea (Mana_7a)	Ihuraua River	At approx. NZMS 260 T25:516-547 to approx. NZMS 260 T25:453-450	Ihuraua
Tiraumea (Mana_7)	Lower Tiraumea (Mana_7b)	Tiraumea River	At approx. NZMS 260 T24:558-857 to approx. NZMS 260 T24:557-854	Mangatainoka
	Mangaone River (Mana_7c)	Mangaone River	At approx. NZMS 260 T25:514-666 to approx. NZMS 260 T25:452-616	Mangaone-Tawataia
		Tawataia Creek	From confluence with the Mangaone River at approx. NZMS 260 T25:471-637 to approx. NZMS 260 T25:470-563	Mangaone-Tawataia
		Tawataia Mangaone Scheme Detention Dam	100 metres upstream and downstream of approx. NZMS 260 T25:476-581	Mangaone-Tawataia
		Schnell-Hislop Drain 141	From confluence with the Tawataia Stream at approx. NZMS 260 T25:472-601 to source	Mangaone-Tawataia
		Schnell-Cooper Drain 190	From confluence with the Tawataia Stream at approx. NZMS 260 T25:466-612 to source	Mangaone-Tawataia
		Rongomai Drain 10 (part)	At approx. NZMS 260 T25:461-637 to approx. NZMS 260 T25:460-635	Mangaone-Tawataia
		Rongomai Drain 10 (part)	From confluence with the Mangaone River at approx. NZMS 260 T25:487-635 to approx. NZMS 260 T25:467-639 and to approx. NZMS 260 T25:468-646	Mangaone-Tawataia
		Rongomai Drain 10 (part)	At approx. NZMS 260 T25:495-638 to approx. NZMS 260 T25:488-629	Mangaone-Tawataia
		Cattle Creek Drain 10a	At approx. NZMS 260 T25:479-635 to approx. NZMS 260 T25:479-614	Mangaone-Tawataia



Water Management Zone*	Sub-zone*	River^	Locality Description	Common Name of Scheme
		Simpson Drain 136	From confluence with the Mangaone River at approx. NZMS 260 T25:495-640 to approx. NZMS 260 T25:499-629 (east branch) and to approx. NZMS 260 T25:500-633 (west branch)	Mangaone-Tawataia
		Evans Drain 120	At approx. NZMS 260 T25:502-642 to approx. NZMS 260 T25:498-640	Mangaone-Tawataia
		MWRC Drain 237	At approx. NZMS 260 T25:472-571 to approx. NZMS 260 T25:470-571	Mangaone-Tawataia
Tiraumea	Mangaramarama (Mana_7e)	Mangaramarama Creek	From confluence with the Tiraumea River at approx. NZMS 260 T24:557-854 to approx. NZMS 260 T25:485-657	Mangatainoka
(Mana_7)		Greaves - Eames Drain	From confluence with the Mangaramarama Creek at approx. NZMS 260 T24:524-790 to approx. NZMS 260 T24:528-782	Mangatainoka
Tiraumea Mangatainoka (Mana_7, Mana_8)	Mangaramarama, Lower Mangatainoka (Mana_7e, Mana_8c)	Harveys Drains (part)	From confluence with the Mangaramarama Creek at approx. NZMS 260 T24:548-836 to source	Mangatainoka
Mangatainoka (Mana_8)	Lower, Middle and Upper Mangatainoka, (Mana_8a, Mana_8b, Mana_8c)	Mangatainoka River	From confluence with the Tiraumea River at approx. NZMS 260 T24:557-854 to approx. NZMS 260 T25:308-595	Mangatainoka
	Middle Mangatainoka (Mana_8b)	Mangamaire Stream	From confluence with the Mangatainoka River at approx. NZMS 260 T24:452-763 to approx. NZMS 260 T24:448-761	Mangatainoka
		Kamo Edwards Drain	From confluence with Mangatainoka River at approx. NZMS 260 T24:431-705 to source	Mangatainoka
		Bailie Avery Drain	From confluence with the Mangatainoka River at approx. NZMS 260 T25:407-697 to approx. NZMS 260 T25:390-685	Mangatainoka
		Hobbs, Avery, Manderson Drain	From confluence with the Mangatainoka River at approx. NZMS 260 T25:407-695 to approx. NZMS 260 T25:399-689	Mangatainoka
		Basset - Sowry Drain	At approx. NZMS 260 T25:390-676 to approx. NZMS 260 T25:380-673	Mangatainoka
		Berkett Drain	From confluence with the Mangatainoka River at approx. NZMS 260 T25:377-652 to source	Mangatainoka
		Nireaha Drain Network (part)	From confluence with the Mangatainoka River at approx. NZMS 260 T25:369-654 to approx. NZMS 260 T25:364-643	Mangatainoka



Water Management Zone*	Sub-zone*	River^	Locality Description	Common Name of Scheme
		Nireaha Drain Network (part)	From Nireaha Road bridge at approx. NZMS 260 T25:358-629 to source	Mangatainoka
		Mangaroa Stream	From confluence with the Mangatainoka River at approx. NZMS 260 T25:324-627 to approx. NZMS 260 S25:284-609	Mangatainoka
	Middle Mangatainoka (Mana_8b)	Kakariki Drains (part)	From confluence with the Mangaraupiu Stream at approx. NZMS 260 T25:326-660 to source	Mangatainoka
		Kakariki Drains (part)	At approx. NZMS 260 T25:329-666 to approx. NZMS 260 T25:325-667	Mangatainoka
		Kakariki Drains (part)	At approx. NZMS 260 T25:321-662 to approx. NZMS 260 T25:319-661	Mangatainoka
	Lower Mangatainoka (Mana_8c)	Mangatainoka River Tributary and part Harveys Drains	From confluence with Mangatainoka River at approx.  NZMS 260 T24:542-846 to approx. NZMS 260 T24:540-826 and at approx. NZMS 260 T24:541-840 to approx.  NZMS 260 T24:543-837	Mangatainoka
Mangatainoka (Mana_8)		Mangatainoka Tributary and Brewery Drain	From confluence with the Mangatainoka River at approx. NZMS 260 T24:534-834 to approx. NZMS 260 T24:530-825	Mangatainoka
		Huxley Street Drain	At approx. NZMS 260 T24:523-822 to approx. NZMS 260 T24:515-803	Mangatainoka
		Pahiatua North Drain Network	At approx. NZMS 260 T24:528-813 to source	Mangatainoka
		Pukemiku Road Drain Network	From confluence with the Mangatainoka River at approx. NZMS 260 T24:512-815 to source	Mangatainoka
		Donald and Grubner Drain	From confluence with the Mangatainoka River at approx. NZMS 260 T24:500-802 to approx. NZMS 260 T24:500-794	Mangatainoka
		Town Creek	At approx. NZMS 260 T24:502-792 to approx. NZMS 260 T24:498-782	Mangatainoka
Mangatainoka (Mana_8)	Makakahi (Mana_8d)	Makakahi River	From confluence with the Mangatainoka River at approx. NZMS 260 T24:475-775 to approx. NZMS 260 T25:382-582	Mangatainoka
(waria_0)		Westella-Hansen Drain	At approx. NZMS 260 T25:370-600 to source	Mangatainoka
Mangatainoka (Mana_8)	Makakahi (Mana_8d)	Hamua Drains (part)	From confluence with the Makakahi River at approx.  NZMS 260 T25:421-673 to approx. NZMS 260 T25:400-670 and at approx. NZMS 260 T25:418-678 to approx.  NZMS 260 T25:418-673	Mangatainoka



Water Management Zone*	Sub-zone*	River^	Locality Description	Common Name of Scheme
		Hamua Drains (part)	From confluence with the Makakahi River at approx.  NZMS 260 T25:420-672 to approx. NZMS 260 T25:401-653 and at approx. NZMS 260 T25:415-667 to approx.  NZMS 260 T25:413-665 and at approx.  NZMS 260 T25:411-661 to approx. NZMS 260 T25:410-662	Mangatainoka
	Mangaatua (Mana_9c)	Owens Road Drain	At approx. NZMS 260 T24:502-923 to approx. NZMS 260 T24:500-908 and at approx. NZMS 260 T24:504-915 to approx. NZMS 260 T24:506-913	Upper Manawatu
	(wana_76)	Woodland Road Drain	At approx. NZMS 260 T24:505-913 to approx. NZMS 260 T24:518-904	Upper Manawatu
	Upper and Lower Mangahao (Mana_9d, Mana_9e)	Mangahao River	From confluence with the Manawatu River at approx. NZMS 260 T24:496-892 to approx. NZMS 260 T24:465-815	Upper Manawatu
Upper Gorge (Mana_9)		Soldiers Road Drain network	From confluence with the Mangahao River at approx. NZMS 260 T24:487-835 to source	Upper Manawatu
	Lower Mangahao (Mana_9e)	Ruawhata Drain Network (part)	From confluence with the Mangahao River at approx. NZMS 260 T24:494-876 to source	Upper Manawatu
		Ruawhata Drain Network (part)	At approx. NZMS 260 T24:500-874 to approx. NZMS 260 T24:503-864	Upper Manawatu
		Ruawhata Drain Network (part)	At approx. NZMS 260 T24:498-875 to approx. NZMS 260 T24:501-870	Upper Manawatu
Middle Manawatu	Middle Manawatu	Ashhurst Stream/Raukawa Road Drain	From confluence with the Manawatu River at approx. NZMS 260 T24:404-948 to approx. NZMS 260 T23:446-013	Ashhurst, Lower Manawatu
(Mana_10)	(Mana_10a)	Stoney Creek including Eagles and Whakarongo Drains	From confluence with the Manawatu River at approx. NZMS 260 T24:372-910 to approx. NZMS 260 T24:376-943 (Eagles) and to approx. NZMS 260 T24:380-946 (Whakarongo)	Lower Manawatu
Middle Manawatu (Mana_10)	Middle Manawatu (Mana_10a)	Goodman Badger Drain	From confluence with the Manawatu River at approx. NZMS 260 T24:381-927 to source	Lower Manawatu
	Upper, Middle and Lower Pohangina (Mana_10b, Mana_10c, Mana_10d)	Pohangina River	From confluence with the Manawatu River at approx. NZMS 260 T24:449-965 to approx. NZMS 260 T23:572-200	Pohangina Oroua
	Upper Pohangina (Mana_10b)	Makawakawa Stream	From confluence with the Pohangina River at approx. NZMS 260 T23:572-200 to approx. NZMS 260 T23:574-198	Pohangina Oroua



Water Management Zone*	Sub-zone*	River^	Locality Description	Common Name of Scheme
	_	Pratt Drain (drain H)	From confluence with the Pohangina River at approx. NZMS 260 T23:468-078 to approx. NZMS 260 T23:464-078	Pohangina Oroua
		Leamy Drain (drain J)	From confluence with the Pohangina River at approx. NZMS 260 T23:469-083 to approx. NZMS 260 T23:470-089	Pohangina Oroua
	Middle Pohangina (Mana_10c)	Tokeawa stream	From confluence with the Pohangina River at approx. NZMS 260 T23:475-085 to approx. NZMS 260 T23:481-085	Pohangina Oroua
	widdle r oriangina (wana_roc)	Fairless Drain (drain K)	From confluence with the Pohangina River at approx. NZMS 260 T23:477-090 to approx. NZMS 260 T23:479-101 and to approx. NZMS 260 T23:475-100	Pohangina Oroua
		Carroll Drain (drain L)	From confluence with the Pohangina River at approx. NZMS 260 T23:496-107	Pohangina Oroua
		Caldwell Drain (drain M)	From confluence with the Pohangina River at approx. NZMS 260 T23:504-120 to approx. NZMS 260 T23:509-121	Pohangina Oroua
	Lower Pohangina (Mana_10d)	Kirk Drain (drains A and B)	From confluence with the Manawatu River at approx. NZMS 260 T24:450-973 to source	Pohangina Oroua
		Hepburn Drain (drain C)	From confluence with the Pohangina River at approx. NZMS 260 T24:453-985 to source	Pohangina Oroua
		Kirk Drain (drain D)	From confluence with the Pohangina River at approx. NZMS 260 T24:456-990 to source	Pohangina Oroua
Middle Manawatu	Lower Pohangina (Mana_10d)	Jones-Edwards-Mai Drain (drain F)	From confluence with the Pohangina River at approx. NZMS 260 T23:458-040 to source	Pohangina Oroua
(Mana_10)	Lower Fortangina (Mana_Tou)	McDonald Drain (drain G)	From confluence with the Pohangina River at approx. NZMS 260 T23:466-062 to source	Pohangina Oroua
Middle, Lower and Coastal, Manawatu	Middle, Lower and Coastal Manawatu (Mana_10a, Mana_11a and Mana_13a)	Manawatu River	From the cross-river CMA boundary at approx. NZMS 260 S24:009-766 to the confluence with the Pohangina River at approx. NZMS 260 T24:449-965	Lower Manawatu
Lower Manawatu (Mana_11)	Lower Manawatu (Mana_11a)	Manawatu River Tributary	From confluence with the Manawatu River at approx. NZMS 260 S24:219-830 to source	Manawatu
		Manawatu River Tributary	From confluence with the Manawatu River at approx. NZMS 260 S24:254-848 to source	Manawatu



Water Management Zone*	Sub-zone*	River^	Locality Description	Common Name of Scheme
		Whitelocks Drain	At approx. NZMS 260 S24:227-834 to approx. NZMS 260 S24:233-838	Lower Manawatu
		Opiki Levee Bridge Blk No. 1	At approx. NZMS 260 S24:196-834 to approx. NZMS 260 S24:197-831	Lower Manawatu
		Opiki Levee Bridge Blk No. 2	At approx. NZMS 260 S24:203-830 to approx. NZMS 260 S24:197-832	Lower Manawatu
		Manawatu River Drain	At approx. NZMS 260 S24:195-838 to approx. NZMS 260 S24:194-841	Manawatu
		Opiki Levee Bridge Blk No. 3	At approx. NZMS 260 S24:193-827 to approx. NZMS 260 S24:190-829	Lower Manawatu
		Terry Drain	At approx. NZMS 260 S24:184-831 to source	Lower Manawatu, Manawatu
		MacAloons No. 2	At approx. NZMS 260 S24:172-824 to approx. NZMS 260 S24:174-823	Lower Manawatu
		MacAloons No. 1	At approx. NZMS 260 S24:163-826 to approx. NZMS 260 S24:168-824	Lower Manawatu
Lower Manawatu (Mana_11)	Upper and Lower Mangaone Stream (Mana_11d, Mana_11e)	Mangaone Stream	From confluence with the Manawatu River at approx. NZMS 260 S24:281-872 to approx. NZMS 260 T24:334-997	Lower Manawatu
		Mangaone Stream Tributary	From confluence with the Mangaone Stream at approx. NZMS 260 T24:319-963 to source	Manawatu
		Mangaone Stream Tributary	From confluence with the Mangaone Stream at approx. NZMS 260 T24:331-989 to approx. NZMS 260 T24:335-995	Lower Manawatu
		Mangaone Stream Tributary	At approx. NZMS 260 T24:300-939 to source	Manawatu
	Upper Mangaone Stream (Mana_11d)	Mangaone Stream Tributary/drain	From confluence with the Mangaone Stream at approx. NZMS 260 T24:322-967 to source	Manawatu
		Mangaone Stream Tributary	From confluence with the Mangaone Stream at approx. NZMS 260 T24:325-969 to source	Manawatu
		Mangaone Stream Tributary	At approx. NZMS 260 T23:317-005 to source	Manawatu
		Darby Creek and Houghton Drain	From confluence with the Mangaone Stream at approx. NZMS 260 T24:325-978 to source	Lower Manawatu



Water Management Zone*	Sub-zone*	River^	Locality Description	Common Name of Scheme
	Upper Mangaone Stream, Main Drain (Mana_11d, Mana_11f)	Main Drain, Burkes Drain and Taonui Stream and connected tributaries including drains	From confluence with the Manawatu River at approx. NZMS 260 S24:181-835 to source	Manawatu
	Upper Oroua (Mana_12a)	Paorangi Drain	From confluence with the Oroua River at approx. NZMS 260 T23:359-112 to approx. NZMS 260 T23:373-131	Pohangina Oroua
Oroua (Mana_12)	Upper, Middle and Lower Oroua, Kiwitea (Mana_12a, Mana_12b, Mana_12c and Mana_12d)	Oroua River	From confluence with the Manawatu River at approx. NZMS 260 S24:165-826 to approx. NZMS 260 T23:518-270	Lower Manawatu, Pohangina Oroua
	Lower Oroua	Oroua River Tributary	At approx. NZMS 260 S24:149-846 to source	Te Kawau
	(Mana_12c)	Blackmoor Drain	At approx. NZMS 260 S24:166-829 to source	Lower Manawatu
Oroua (Mana_12)	Middle Oroua, Kiwitea (Mana 12b, Mana_12d)	Kiwitea Stream	From confluence with the Oroua River at approx. NZMS 260 T23:308-067 to approx. NZMS 260 T23:358-162	Lower Manawatu, Kiwitea
(iviaria_12)	Makino (Mana_12e)	Makino Stream	From confluence with the Oroua River at approx. NZMS 260 S23:243-006 to approx. NZMS 260 T23:307-109	Lower Manawatu
Oroua, Coastal Rangitikei (Mana_12, Rang_4)	Lower Oroua, Coastal Rangitikei (Mana_12c and Rang_4a)	Sluggish Creek/Rongotea drainage network and tributary streams	From confluence with the Oroua River at approx. NZMS 260 S24:176-843 to source	Te Kawau
Coastal Manawatu (Mana_13)	Coastal Manawatu (Mana_13a)	Whitebait Creek and Tributaries	From confluence with the Manawatu River at approx. NZMS 260 S24:998-790 to source	Himatangi
		Seymours Oxbow Drain	From confluence with the Manawatu River at approx. NZMS 260 S24:135-759 to source	Makerua
		Manawatu River tributaries (drains)	All drains situated between the Manawatu River and Moutoa Floodway, from their confluence with the Manawatu River to source	Moutoa
		Moutoa Floodway	From confluence with the Manawatu River at approx. NZMS 260 S24:109-769 to NZMS 260 S24:020-748	Lower Manawatu, Moutoa
		Moutoa Floodway tributaries (drains)	From confluence with the Moutoa Floodway to source	Moutoa
		Manawatu River Tributary (drain)	From confluence with the Manawatu River at approx. NZMS 260 S24:051-721 to source	Koputaroa



Water Management Zone*	Sub-zone*	River^	Locality Description	Common Name of Scheme
		Amon Drain and tributaries	Amon Drain, from confluence with the Manawatu River at approx. NZMS 260 S24:064-717 to source	Koputaroa
		Manawatu River Tributary (drain)	From confluence with the Manawatu River at approx. NZMS 260 S24:069-708 to source	Koputaroa
		Manawatu River Tributary (drain)	From confluence with the Manawatu River at approx. NZMS 260 S24:093-711 to source	Koputaroa
		Manawatu River Tributary Drain	At approx. NZMS 260 S24:158-822 to approx. NZMS 260 S24:164-824	Lower Manawatu
Coastal Manawatu (Mana_13)		Sargent Drain	At approx. NZMS 260 S24:156-819 to approx. NZMS 260 S24:151-813	Lower Manawatu
		Funell Drain	At approx. NZMS 260 S24:148-810 to approx. NZMS 260 S24:151-812	Lower Manawatu
	Constal Management	Funells No.1 Drain	At approx. NZMS 260 S24:143-804 to approx. NZMS 260 S24:143-803	Lower Manawatu
	Coastal Manawatu (Mana_13a)	Funells No.2 Drain	At approx. NZMS 260 S24:133-796 to approx. NZMS 260 S24:134-787	Lower Manawatu
		Funells No.3 Drain	At approx. NZMS 260 S24:119-786 to approx. NZMS 260 S24:123-786	Lower Manawatu
		Barnes Drain	At approx. NZMS 260 S24:108-781 to approx. NZMS 260 S24:114-784 and to approx. NZMS 260 S24:107-784	Lower Manawatu
		Phillips Drain	From approx. NZMS 260 S24:114-774 to source	Lower Manawatu
	Coastal Manawatu, Lower Tokomaru (Mana_13a, Mana_13c)	Tokomaru River Tributary (drain network)	From confluence with the Tokomaru River at approx. NZMS 260 S24:143-729 to source, including all drains between Linton Drain and the Manawatu River	Makerua
	Lower Tokomaru (Mana_13c)	Linton Drain and tributaries including drains	From confluence with the Tokomaru River at approx.  NZMS 260 S24:196-775 to source, including all drains between Linton Drain and the Manawatu River to the west and all drains from Main Trunk Railway to the east as far upstream as Columbus Street (Linton) at approx. NZMS 260 S24:253-835	Makerua, Lower Manawatu
		Tokomaru River	From confluence with the Manawatu River at approx. NZMS 260 S24:134-727 to approx. NZMS 260 S24:222-771	Makerua, Lower Manawatu
		Tokomaru River drain	From confluence with the Tokomaru River at approx. NZMS 260 S24:185-755 to approx. NZMS 260 S24:172-775	Makerua



Water Management Zone*	Sub-zone*	River^	Locality Description	Common Name of Scheme
		Tokomaru River drain	From confluence with the Tokomaru River at approx. NZMS 260 S24:187-761 to approx. NZMS 260 S24:173-784	Makerua
		Mangaharakeikei Stream	From confluence with the Tokomaru River at approx. NZMS 260 S24:186-755 to approx. NZMS 260 S24:203-749	Makerua
		Tokomaru River drain	From confluence with the Tokomaru River at approx. NZMS 260 S24:176-742 to source	Makerua
		Tokomaru River drain (network)	From confluence with the Tokomaru River at approx. NZMS 260 S24:180-747 to source	Makerua
	Lower Tokomaru (Mana_13c)	Kara Stream	From confluence with the Manawatu River at approx. NZMS 260 S24:145-730 to approx. NZMS 260 S24:168-712	Lower Manawatu
		Kara Stream Tributary (drains)	From confluence with the Kara Stream at approx. NZMS 260 S24:153-725 to source	Makerua
		Mangapuketea	From confluence with the Kara Stream at approx. NZMS 260 S24:160-720 to approx. NZMS 260 S24:178-724	Lower Manawatu
Coastal Manawatu (Mana_13)	Mangaore (Mana_13d)	Mangaore Stream	From confluence with the Manawatu River at approx. NZMS 260 S24:117-717 to approx. NZMS 260 S24:147-709	Lower Manawatu
		Mangaore Stream Tributary (drains)	From confluence with the Mangaore Stream at approx. NZMS 260 S24:124-716 to source	Makerua
		Mangaore Stream Tributary (drains)	From confluence with the Mangaore Stream at approx. NZMS 260 S24:126-716 to source	Koputaroa
	Koputaroa (Mana_13e)	Koputaroa Stream	Koputaroa Stream from confluence with the Manawatu River at approx. NZMS 260 S24:106-710 to source	Koputaroa
	Foxton Loop	Manawatu River Tributary (drains)	From confluence with the Foxton Loop (Manawatu River) at approx. NZMS 260 S24:032-783 to source	Foxton East
	(Mana_13f)	Manawatu River Tributary (drains)	From confluence with Foxton Loop (Manawatu River) at approx. NZMS 260 S24:024-771 to source	Whirikino
Lower and Coastal Rangitikei (Rang_3, Rang_4)	Lower, Coastal and Tidal Rangitikei (Rang_3a, Rang_4a and Rang_4b)	Rangitikei River	From the cross-river CMA boundary at approx. NZMS 260 S23:010-001 to approx. NZMS 260 T22:341-330	Rangitikei
Coastal Rangitikei (Rang_4)	Coastal Rangitikei (Rang_4a)	Parewanui Drains (part)	From confluence with the Rangitikei River at approx. NZMS 260 S23:046-004 to sources as far west and north as Parewanui Road.	Rangitikei



Water Management Zone*	Sub-zone*	River^	Locality Description	Common Name of Scheme
	Coastal Rangitikei (Rang_4a)	Bulls Domain and Racecourse drains	From confluence with the Rangitikei River at approx. NZMS 260 S23:130-102 to source	Tutaenui
	Tidal Rangitikei	Forest Road Wetland Tributary	From approx. NZMS 260 S23:018-034 to source	Forest Road
	(Rang_4b)	Forest Road Wetland Tributary	From approx. NZMS 260 S23:022-036 to source	Forest Road
		Parewanui Drains (part)	From confluence with the Rangitikei River at approx. NZMS 260 S23:010-001 to source	Rangitikei
	Tidal Rangitikei	Parewanui Drains (part)	From confluence with the Rangitikei River at approx. NZMS 260 S24:014-996 to source	Rangitikei
	(Rang_4b)	Parewanui Drains (part)	From confluence with the Rangitikei River at approx. NZMS 260 S24:025-985 to source	Rangitikei
		Parewanui Drains (part)	From confluence with Forest Road Wetland at approx. NZMS 260 S23:024-024 to source	Rangitikei
Coastal Rangitikei (Rang_4)		Porewa Stream	From confluence with the Rangitikei River at approx. NZMS 260 S23:191-216 to approx. NZMS 260 T22:382-519	Porewa
		Ongo Stream and Tributary	From confluence with the Porewa Stream at approx.  NZMS 260 S22:259-348 to approx.  NZMS 260 S22:249-379 and from approx.  NZMS 260 S22:257-355 to approx.  NZMS 260 S22:256-356	Porewa
	Porewa (Rang_4c)	Porewa Scheme Detention Dam 29	100 metres upstream and downstream of approx. NZMS 260 T22:301-371	Porewa
		Porewa Scheme Detention Dam 39	100 metres upstream and downstream of approx. NZMS 260 S22:226-301	Porewa
		Porewa Scheme Detention Dam 42	100 metres upstream and downstream of approx. NZMS 260 S22:240-361	Porewa
		Porewa Scheme Detention Dam 43	100 metres upstream and downstream of approx. NZMS 260 S22:242-364	Porewa
Coastal Rangitikei (Rang_4)	Porewa (Rang_4c)	Porewa Scheme Detention Dam 44	100 metres upstream and downstream of approx. NZMS 260 S22:256-356	Porewa
		Porewa Scheme Detention Dam 45	100 metres upstream and downstream of approx. NZMS 260 S22:249-379	Porewa



Water Management Zone*	Sub-zone*	River^	Locality Description	Common Name of Scheme
		Porewa Scheme Detention Dam 46	100 metres upstream and downstream of approx. NZMS 260 S22:269-374	Porewa
		Porewa Scheme Detention Dam 54	100 metres upstream and downstream of approx. NZMS 260 S22:279-363	Porewa
		Porewa Scheme Detention Dam 62	100 metres upstream and downstream of approx. NZMS 260 T22:306-377	Porewa
		Porewa Scheme Detention Dam 63	100 metres upstream and downstream of approx. NZMS 260 T22:312-388	Porewa
		Porewa Scheme Detention Dam 64	100 metres upstream and downstream of approx. NZMS 260 T22:332-388	Porewa
		Porewa Scheme Detention Dam 73	100 metres upstream and downstream of approx. NZMS 260 S22:296-386	Porewa
		Porewa Scheme Detention Dam 75	100 metres upstream and downstream of approx. NZMS 260 S22:288-398	Porewa
		Porewa Scheme Detention Dam 82	100 metres upstream and downstream of approx. NZMS 260 T22:315-415	Porewa
		Porewa Scheme Detention Dam 83	100 metres upstream and downstream of approx. NZMS 260 T22:317-417	Porewa
		Porewa Scheme Detention Dam 84	100 metres upstream and downstream of approx. NZMS 260 T22:320-423	Porewa
		Porewa Scheme Detention Dam 85	100 metres upstream and downstream of approx. NZMS 260 T22:326-433	Porewa
		Porewa Scheme Detention Dam 86	100 metres upstream and downstream of approx. NZMS 260 T22:332-439	Porewa
Coastal Rangitikei (Rang_4)	Porewa (Rang_4c)	Porewa Scheme Detention Dam 92	100 metres upstream and downstream of approx. NZMS 260 T22:319-398	Porewa
		Porewa Scheme Detention Dam 93	100 metres upstream and downstream of approx. NZMS 260 T22:327-408	Porewa
		Porewa Scheme Detention Dam 94	100 metres upstream and downstream of approx. NZMS 260 T22:333-415	Porewa
		Porewa Scheme Detention Dam 94A	100 metres upstream and downstream of approx. NZMS 260 T22:333-416	Porewa



Water Management Zone*	Sub-zone*	River^	Locality Description	Common Name of Scheme
		Porewa Scheme Detention Dam 95	100 metres upstream and downstream of approx. NZMS 260 T22:336-428	Porewa
		Porewa Scheme Detention Dam 96	100 metres upstream and downstream of approx. NZMS 260 T22:339-432	Porewa
		Porewa Scheme Detention Dam 97	100 metres upstream and downstream of approx. NZMS 260 T22:342-446	Porewa
		Porewa Scheme Detention Dam 98	100 metres upstream and downstream of approx. NZMS 260 T22:354-454	Porewa
		Porewa Scheme Detention Dam 100	100 metres upstream and downstream of approx. NZMS 260 T22:341-453	Porewa
		Tutaenui Stream	From approx. NZMS 260 S23:100-093 to approx. NZMS 260 S23:146-296	Tutaenui
		Hanratty Drain	At approx. NZMS 260 S23:122-119 to approx. NZMS 260 S23:130-127	Tutaenui
	Tutaenui (Rang_4d)	Lower Tutaenui Overflow Channel	At approx. NZMS 260 S23:126-130 to approx. NZMS 260 S23:128-131	Tutaenui
		Tricker Drain	At approx. NZMS 260 S23:127-133 to approx. NZMS 260 S23:127-135	Tutaenui
		Tutaenui Stream Tributary	From confluence with the Tutaenui Stream at approx. NZMS 260 S23:135-202 to approx. NZMS 260 S23:118-216	Tutaenui
Coastal Rangitikei (Rang_4)	Tutaenui (Rang_4d)	Tutaenui Stream Tributary	From confluence with the Tutaenui Stream at approx.  NZMS 260 S23:133-212 to approx. NZMS 260 S23:136-227 and to approx. NZMS 260 S23:146-224	Tutaenui
		Marton West Stream and drain	At approx. NZMS 260 S23:130-216 to approx. NZMS 260 S23:123-229 and to approx. NZMS 260 S23:129-211	Tutaenui
		Tutaenui Scheme Detention Dam E1	100 metres upstream and downstream of approx. NZMS 260 S23:144-183	Tutaenui
		Tutaenui Scheme Detention Dam E2	100 metres upstream and downstream of approx. NZMS 260 S23:146-224	Tutaenui
		Tutaenui Scheme Detention Dam E3	100 metres upstream and downstream of approx. NZMS 260 S23:155-241	Tutaenui
		Tutaenui Scheme Detention Dam E4	100 metres upstream and downstream of approx. NZMS 260 S23:153-251	Tutaenui



Water Management Zone*	Sub-zone*	River^	Locality Description	Common Name of Scheme
		Tutaenui Scheme Detention Dam E6	100 metres upstream and downstream of approx. NZMS 260 S23:158-271	Tutaenui
		Tutaenui Scheme Detention Dam E7	100 metres upstream and downstream of approx. NZMS 260 S23:143-271	Tutaenui
		Tutaenui Scheme Detention Dam E8	100 metres upstream and downstream of approx. NZMS 260 S23:143-279	Tutaenui
		Tutaenui Scheme Detention Dam E9	100 metres upstream and downstream of approx. NZMS 260 S23:149-297	Tutaenui
		Tutaenui Scheme Detention Dam E10	100 metres upstream and downstream of approx. NZMS 260 S23:165-302	Tutaenui
		Tutaenui Scheme Detention Dam E11	100 metres upstream and downstream of approx. NZMS 260 S23:170-301	Tutaenui
		Tutaenui Scheme Detention Dam W1	100 metres upstream and downstream of approx. NZMS 260 S23:147-170	Tutaenui
		Tutaenui Scheme Detention Dam W2	100 metres upstream and downstream of approx. NZMS 260 S23:119-239	Tutaenui
		Tutaenui Scheme Detention Dam W3	100 metres upstream and downstream of approx. NZMS 260 S23:119-248	Tutaenui
	Tutaenui	Tutaenui Scheme Detention Dam W4	100 metres upstream and downstream of approx. NZMS 260 S23:126-247	Tutaenui
Coastal Rangitikei		Tutaenui Scheme Detention Dam W5	100 metres upstream and downstream of approx. NZMS 260 S23:130-259	Tutaenui
(Rang_4)	(Rang_4d)	Tutaenui Scheme Detention Dam W6	100 metres upstream and downstream of approx. NZMS 260 S23:133-263	Tutaenui
		Tutaenui Scheme Detention Dam W7	100 metres upstream and downstream of approx. NZMS 260 S23:136-286	Tutaenui
		Tutaenui Scheme Detention Dam W8	100 metres upstream and downstream of approx. NZMS 260 S23:141-288	Tutaenui
Cherry Grove, Te Maire (Whai_2, Whai_3)	Cherry Grove, Te Maire (Whai_2a and Whai_3)	Whanganui River	At approx. NZMS 260 S18:054-531 to approx. NZMS 260 S18:127-541	Upper Whanganui
Cherry Grove (Whai_2)	Lower Ongarue (Whai_2g)	Ongarue River	From confluence with the Whanganui River at approx. NZMS 260 S18:055-545 to approx. NZMS 260 S18:051-572	Upper Whanganui



Water Management Zone*	Sub-zone*	River^	Locality Description	Common Name of Scheme
		Mateongaonga Stream	From confluence with the Whanganui River at approx. NZMS 260 R22:877-433 to confluence with Mangamoku Stream at approx. NZMS 260 S22:937-430	Matarawa
	Lower Whanganui (Whai_7a)	Mangamoku Stream	From confluence with the Mateongaonga Stream at approx. NZMS 260 S22:937-430 to source	Matarawa
Lower Whanganui (Whai_7)	(vviiai_/a)	Mateongaonga Stream Tributary	From confluence with Mateongaonga Stream at approx. NZMS 260 R22:889-422 to approx. NZMS 260 R22:893-410	Matarawa
		Kaimatira Road Drain	At approx. NZMS 260 R22:890-420 to approx. NZMS 260 S22:901-420	Matarawa
	Matarawa (Whai_7d)	Matarawa Stream and Tributary, including two detention dams	From approx. NZMS 260 R22:870-409 to approx. NZMS 260 S22:011-368 and at approx. NZMS 260 S22:961-387 to approx. NZMS 260 S22:967-860	Matarawa
		Bardell Drain network	From the confluence with the Matarawa Stream at approx. NZMS 260 R22:893-410 to source	Matarawa
		Mangaone Stream and Tributary, including one detention dam	From confluence with the Matarawa Stream at approx.  NZMS 260 S22:915-399 to approx. NZMS 260 S22:940-394 and at approx. NZMS 260 S22:940-394 to approx.  NZMS 260 S22:953-403	Matarawa
Lower Whanganui (Whai 7)	Matarawa (Whai_7d)	Railway Drain	At approx. NZMS 260 S22:917-399 to approx. NZMS 260 S22:924-394	Matarawa
(Wildi_7)	(whal_ru)	Kaukatea Stream and Tributary including one detention dam	From confluence with the Mangaone Stream at approx. NZMS 260 S22:919-399 to NZMS 260 S22:002-425 and at approx. NZMS 260 S22:986-417 to approx. NZMS 260 S22:989-416	Matarawa
		Okoia Drain	At approx. NZMS 260 S22:922-398 to source	Matarawa
		Kaukatea Stream Tributary Detention Dam	100 metres upstream and downstream of approx. NZMS 260 S22:987-415	Matarawa
Lower and Coastal Whangaehu (Whau_3, Whau_4)	Lower and Coastal Whangaehu (Whau_3a, Whau_4)	Whangaehu River	From the cross-river CMA boundary at approx. NZMS 260 S23:903-287 to approx. NZMS 260 S22:089-466	Whangaehu
Lower Whangaehu (Whau_3)	Lower Whangaehu (Whau_3a)	Mangawhero River	From confluence with the Whangaehu River at approx. NZMS 260 S22:065-471 to approx. NZMS 260 S22:041-550	Whangaehu
	Upper Mangawhero (Whau_3d)	Mangahowhi Stream and detention dam	At approx. NZMS 260 S20:100-920 to approx. NZMS 260 S20:146-922	Pakahi



Water Management Zone*	Sub-zone*	River^	Locality Description	Common Name of Scheme
		Mangahowhi Tributary stream and detention dam	From confluence with the Mangahowhi Stream at approx. NZMS 260 S20:138-921 to approx. NZMS 260 S20:138-919	Pakahi
Coastal Whangaehu (Whau_4)	Coastal Whangaehu (Whau_4)	Whangaehu River Tributary and drains	From confluence with the Whangaehu River at approx.  NZMS 260 S22:988-319 to approx. NZMS 260 S22:014-328 and to approx. NZMS 260 S22:010-334 and to approx.  NZMS 260 S22:007-326	Haunui
Coastal Whangaehu	Coastal Whangaehu	Whangaehu River Tributary and drains	From confluence with the Whangaehu River at approx. NZMS 260 S22:006-338 to source	Haunui
(Whau_4)	(Whau_4)	Whangaehu River Tributary and drains	From confluence with the Whangaehu River at approx. NZMS 260 S22:009-341 to source	Haunui
Turakina	Lower Turakina	Makirikiri Stream	From confluence with the Turakina River at approx. NZMS 260 S23:955-245 to approx. NZMS 260 S23:985-250	Makirikiri
(Tura_1)	Cower Turakina (Tura_1)	Makirikiri Stream Tributary (drain/spillway)	From confluence with the Makirikiri Steam Tributary at approx. NZMS 260 S23:981-247 to confluence with Makirikiri Stream at approx. NZMS 260 S23:983-250	Makirikiri
	Upper and Lower Ohau (Ohau_1a, Ohau_1b)	Ohau River	From the cross-river CMA boundary at approx. NZMS 260 S25:930-595 to approx. NZMS 260 S25:097-586	Ohau Manakau
		Ohau Loop	From confluence with the Ohau River at approx.  NZMS 260 S25:936-586 to approx. NZMS 260 S25:939-583 and at approx. NZMS 260 S25:933-586 to approx.  NZMS 260 S25:929-585	Ohau Manakau
		Lake Waitaha outlet stream	From confluence with the Ohau River at approx. NZMS 260 S25:946-580 to source	Ohau Manakau
Ohau (Ohau_1)	Lower Ohau	Kuku Stream	From confluence with the Ohau River at approx. NZMS 260 S25:947-578 to approx. NZMS 260 S25:022-547	Ohau Manakau
	(Ohau_1a)	Kuku Stream Tributary and drains	From confluence with the Kuku Stream at approx. NZMS 260 S25:948-577 to source	Ohau Manakau
		Kuku Stream Tributary and drains	From confluence with the Kuku Stream at approx. NZMS 260 S25:952-571 to source	Ohau Manakau
		Kuku Stream Tributary and drains	From confluence with the Kuku Stream at approx. NZMS 260 S25:961-567 to approx. NZMS 260 S25:977-563	Ohau Manakau
		Haines Drain and tributaries (drains)	From confluence with the Ohau River at approx. NZMS 260 S25:952-578 to source	Ohau Manakau



Water Management Zone*	Sub-zone*	River^	Locality Description	Common Name of Scheme
		Parkin Drain and tributaries	From confluence with the Ohau River at approx. NZMS 260 S25:960-582 to source	Ohau Manakau
Ohau	Lower Ohau	Parkin Drain and tributaries  Burnell Drain and tributaries  Burnell Drain and tributaries  Calley Drain and tributaries  From confluence with the Ohau River at approx. NZMS 260 S25:963-585 to source  From confluence with the Ohau River at approx. NZMS 260 S25:975-581 to source  From confluence with the Ohau River at approx. NZMS 260 S25:975-581 to source  From confluence with the Ohau River at approx. NZMS 260 S25:972-586 to source  From the cross-river CMA boundary at approx. NZMS 260 U25:998-618 to approx. NZMS 260 U24:918-832  From confluence with the Akitio River at approx. NZMS 260 U25:985-688 to approx. NZMS 260 U25:985-660  From confluence with the Akitio River at approx. NZMS 260 U25:982-658 to approx. NZMS 260 U25:980-657  Mangahewa Stream  Akitio River Tributary  From confluence with the Akitio River at approx. NZMS 260 U24:967-700 to approx. NZMS 260 U24:968-702  From confluence with the Akitio River at approx. NZMS 260 U24:955-705 to approx. NZMS 260 U24:955-702  From confluence with the Akitio River at approx. NZMS 260 U24:955-705 to approx. NZMS 260 U24:951-716  Mangahuia Stream  Akitio River Tributary  From confluence with the Akitio River at approx. NZMS 260 U24:950-714 to approx. NZMS 260 U24:951-716  From confluence with the Akitio River at approx. NZMS 260 U24:932-703 to approx. NZMS 260 U24:932-704  From confluence with the Akitio River at approx. NZMS 260 U24:929-713 to approx. NZMS 260 U24:929-711  From confluence with the Akitio River at approx. NZMS 260 U24:907-722 to approx. NZMS 260 U24:906-723  From confluence with the Akitio River at approx. NZMS 260 U24:907-722 to approx. NZMS 260 U24:906-723  From confluence with the Akitio River at approx. NZMS 260 U24:907-722 to approx. NZMS 260 U24:906-723  From confluence with the Akitio River at approx. NZMS 260 U24:907-722 to approx. NZMS 260 U24:906-723  From confluence with the Akitio River at approx. NZMS 260 U24:907-722 to approx. NZMS 260 U24:906-723  From confluence with the Akitio River at approx.	Ohau Manakau	
(Ohau_1)	(Ohau_1a)	Catley Drain and tributaries		Ohau Manakau
		Honore Drain and tributaries		Ohau Manakau
	Upper and Lower Akitio (Akit_1a and Akit_1b)	Akitio River		Akitio
		Wakawaihine Stream		Akitio
		Akitio River Tributary		Akitio
		Mangahewa Stream		Akitio
Akitio		Akitio River Tributary		Akitio
(Akit_1)	Lower Akitio (Akit_1b)	Akitio River Tributary		Akitio
		Mangahuia Stream		Akitio
		Mangaone Stream		Akitio
		Waihoro Stream		Akitio
		Rakaupuhipuhi Stream		Akitio
Akitio (Akit_1)	Lower Akitio (Akit_1b)	Akitio River Tributary		Akitio
		Makupara Stream		Akitio



Water Management Zone*	Sub-zone*	River^	Locality Description	Common Name of Scheme	
		Akitio River Tributary	From confluence with the Akitio River at approx. NZMS 260 U24:882-768 to approx. NZMS 260 U24:882-770	Akitio	
		Akitio River Tributary	From confluence with the Akitio River at approx. NZMS 260 U24:898-781 to approx. NZMS 260 U24:898-783	Akitio	
		Akitio River Tributary	From confluence with the Akitio River at approx. NZMS 260 U24:888-788 to approx. NZMS 260 U24:887-790	Akitio	
		Waihi River	From confluence with the Akitio River at approx. NZMS 260 U24:895-802 to NZMS 260 U24:894-803	Akitio	
		Table Stream	From confluence with the Akitio River at approx. NZMS 260 U24:910-812 to NZMS 260 U24:909-813	Akitio	
		Tahuokaretu Stream	From confluence with the Akitio River at approx. NZMS 260 U24:913-817 to NZMS 260 U24:914-816	Akitio	
Southern Whanganui Lakes (West_5)	Southern Whanganui Lakes (West_5)	Raumai Range Stream Tributary	From confluence with the Raumai Range Stream at approx. NZMS 260 S23:990-083 to source		
Northern Manawatu Lakes (West_6)	Northern Manawatu Lakes (West_6)	Coastal Lake Station Stream	From the cross-river CMA boundary at approx. NZMS 260 S24:989-875 to source Himatan		
Lake Papaitonga (West_7)	Lake Papaitonga (West_7)	Waiwiri Stream and Lake Papaitonga	From approx. NZMS 260 S25:935-620 to source	Ohau/Manakau	
		Waikawa Stream	From approx. NZMS 260 S25:921-561 to approx. NZMS 260 S25:994-519	Ohau/Manakau	
Waikawa (West_9)	Waikawa (West_9a)	Campbell Drain	From confluence with the Waikawa Stream at approx. NZMS 260 S25:943-548 to source	Ohau/Manakau	
		Waikawa Stream Tributary	From confluence with the Waikawa Stream at approx. NZMS 260 S25:994-519 to source	Ohau/Manakau	
Waikawa (West_9)	Manakau (West_9b)	Manakau Stream	From confluence with the Waikawa Stream at approx.  NZMS 260 S25:946-549 to confluence with the Waiauti Stream at approx. NZMS 260 S25:966-508  Ohau/Manakau		
		Waiauti Stream	From confluence with the Manakau Stream at approx. NZMS 260 S25:966-508 to approx. NZMS 260 S25:966-489	Ohau/Manakau	
		Waiauti Stream Tributary	From confluence with the Waiauti Stream at approx. NZMS 260 S25:968-492 to approx. NZMS 260 S25:978-484	Ohau/Manakau	



Water Management Zone*	Sub-zone*	River^	Locality Description	Common Name of Scheme
		Manakau Stream Tributary including drains	From confluence with the Manakau Stream at approx. NZMS 260 S25:947-546 to source	Ohau/Manakau
		Manakau Stream Tributary including drains	From confluence with the Manakau Stream at approx. NZMS 260 S25:950-543 to source	Ohau/Manakau
	Lake Horowhenua, Hokio (Hoki_1a, Hoki_1b))	Hokio Tributary (drains)	From the confluence with the Hokio Stream at approx. NZMS 260 S25:980-646 to source	Hokio
Lake Horowhenua		Hokio Stream	From the cross-river CMA boundary at approx. NZMS 260 S25:950-658 to Lake Horowhenua at approx. NZMS 260 S25:993-643	Hokio
(Hoki_1)	Lake Horowhenua	Lake Horowhenua Tributary (drain)	From confluence with Lake Horowhenua at approx. NZMS 260 S25:996-628 to source	Hokio
	(Hoki_1a)	Mairua Drain network	From confluence with Lake Horowhenua at approx.  NZMS 260 S25:014-653 to sources as far west as approx.  NZMS 260 S25:008-664 as far north as approx.  NZMS 260 S25:020-664 and as far east as approx.  NZMS 260 S25:031-657	Hokio
Lake Horowhenua, Ohau (Hoki_1, Ohau_1)	Lake Horowhenua, Lower Ohau (Hoki_1a, Ohau_1b)	Arawhata Drain and tributaries including McLeavey, Kohitere and Kimberley Transit drains	From confluence with Arawhata Drain at approx. NZMS 260 S25:003-628 to sources as far south as Buller and McLeavy Roads as far north as Hokio Beach Road as far west as Sand Road and as far east as Arapaepae Road	Hokio
		Hokio Beach Rd drain and tributaries including Boulton Rd drain	From confluence with Arawhata Drain at approx. NZMS 260 S25:001-625 to source	Hokio
Lake Horowhenua,	Lake Horowhenua,	Painua drains and tributaries	From confluence with Arawhata Drain at approx. NZMS 260 S25:996-622 to source	Hokio
Ohau (Hoki_1, Ohau_1)	Lower Ohau (Hoki_1a, Ohau_1b	Whelans Drain and tributaries including Farm Road, Kimberley and Pescini drains	From confluence with Arawhata Drain at approx. NZMS 260 S25:994-619 to Kimberley Centre at approx. NZMS 260 S25:028-589	Hokio
		Arawhata Tributary (drain)	From confluence with Arawhata Drain at approx. NZMS 260 S25:989-613 to confluence with Farm Road drain at approx. NZMS 260 S25:999-605	Hokio





# Amenity (AM) Value

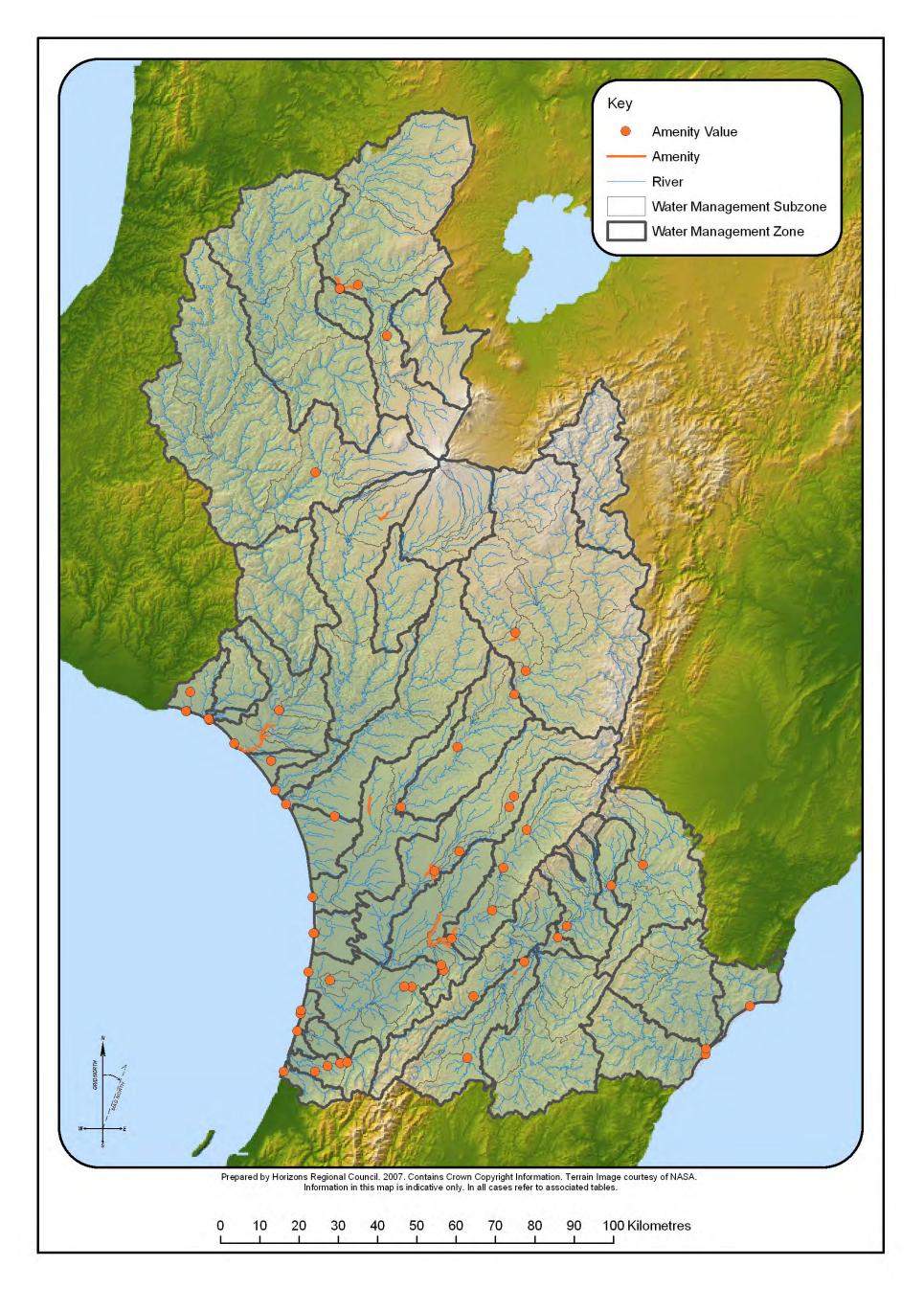


Figure B:12 Visual Guide to the Distribution of the Amenity (AM) Value





Table B.12: Amenity (AM) Value in the Region

Water Management Zone*	Sub zone*	Site	Description
Upper Manawatu	Upper Manawatu	Manawatu River at Maunga Road	At approx. NZMS 260 U23:830-079
Opper ividilawatu	Opper Manawatu	Manawatu River at Maunga Road At approx. NZMS 260 U23:830-079 Manawatu River at Weber Road At approx. NZMS 260 U23:749-026 Manawatu River at Hopelands Domain (River Road) At approx. NZMS 260 T24:636-923 Manawatu River at Hopelands Domain (River Road) At approx. NZMS 260 T24:633-895 Mangatainoka River At approx. NZMS 260 T24:503-806 to approx. T. Mangatainoka River at SH2 Reserve At approx. NZMS 260 T24:503-806 Manawatu River at Marima Domain At approx. NZMS 260 T24:398-745 Manawatu River at Ashhurst Domain At approx. NZMS 260 T24:342-891 Manawatu River at Albert Street At approx. NZMS 260 T24:342-891 Pohangina River at Totara Reserve At approx. NZMS 260 T23:373-168 Pohangina River at Raumai Reserve At approx. NZMS 260 T24:314-882 to approx. T.  Tiritea Stream From approx. NZMS 260 S24:291-872 to approx. T.  From approx. NZMS 260 T24:313-882 to approx. NZMS 260 T24:316-824  From approx. NZMS 260 T24:313-954 to the point in upstream of the bridge at approx. NZMS 260 T23:302-254 Oroua River at Londons Ford At approx. NZMS 260 T23:302-254 Oroua River at Almadale At approx. NZMS 260 T23:302-254 Oroua River at Almadale At approx. NZMS 260 T23:302-254 Oroua River at Almadale At approx. NZMS 260 S23:299-064 From approx. NZMS 260 S23:276-053 to the inters Robis Streat at approx. NZMS 260 S23:289	At approx. NZMS 260 U23:749-026
Hopelands-	Honolands-Tiraumoa	Manawatu River at Kumeroa (Little Road)	
Tiraumea	Hopelanus-Firaumea	1 ,	I I
	Lower Mangatainoka	Mangatainoka River	From approx. NZMS 260 T24:503-806 to approx. T24:500-802
Mangatainoka	Lower Mangatamoka	3	
	Makakahi	Manawatu River at Hopelands Domain (River Road)  Mangatainoka River  Mangatainoka River at SH2 Reserve  kakahi Makakahi River at Bridge Street Eketahuna  Mangahao Mangahao River at Marima Domain  Manawatu River at Ashhurst Domain  Manawatu River at Albert Street  Pohangina River at Totara Reserve  Pohangina River at Raumai Reserve  Indicate Promain  Manawatu River Albert Street  Pohangina River Albert Street  Pohangina River Albert Street  Pohangina River Albert Street  Pohangina River Albert Street  Raumai Reserve  Manawatu River  From a Raumai Reserve  Manawatu River  Kahuterawa Stream Albert Stream	
Upper Gorge	Upper Mangahao	3	
	Middlo Manawatu	Manawatu River at Ashhurst Domain	At approx. NZMS 260 T24:445-964
Middle Manawatu	Delands- iraumea  Hopelands-Tiraumea  Lower Mangatainoka  Makakahi  Der Gorge  Upper Mangahao  Middle Manawatu  Middle Pohangina  e and Lower Manawatu  Middle and Lower Manawatu  Turitea	Manawatu River at Albert Street	
Wilduic Wallawalu	Middlo Dobangina	Pohangina River at Totara Reserve	At approx. NZMS 260 T23:533-168
	Wildule Forlangina	Pohangina River at Raumai Reserve	At approx. NZMS 260 T23:474-072
Middle and Lower Manawatu	Middle and Lower Manawatu	Manawatu River	From approx. NZMS 260 S24:291-872 to approx. T24:353-919
I IVIIO	Turitea	Tiritea Stream	From approx. NZMS 260 T24:316-882 to approx. NZMS 260 T24:334-869
	Vahutorawa	Kahuterawa Stream at Reserve	At approx. NZMS 260 T24:322-810
	Kanulerawa	Kahuterawa Stream at Camp Kilsby	At approx. NZMS 260 T24:316-824
	Lower Mangaone	Mangaone Stream	From approx. NZMS 260 T24:313-954 to the point immediately upstream of the bridge at approx. NZMS 260 S24:286-877
		Oroua River at Londons Ford	
	Upper Oroua	Oroua River at Bartletts Ford	At approx. NZMS 260 T23:490-226
		Oroua River at Almadale	At approx. NZMS 260 T23:362-113
		Oroua River at Timona Park	At approx. NZMS 260 S23:299-064
Oroua	Middle Oroua	Oroua River	From approx. NZMS 260 S24:293-043 to confluence with the Kiwitea Stream at approx. NZMS 260 T23:308-066
	Kiwitea	Kiwitea Stream	From confluence with the Oroua River at approx. NZMS 260 T23:308-066 to approx. NZMS 260 T23:311-075
	Makino		From approx. NZMS 260 S23:276-053 to the intersection with Roots Street at approx. NZMS 260 S23:289-082
Coastal Manawatu	Coastal Manawatu	Foxton Beach	At approx. NZMS 260 S24:978-806
Γ	Lower Tokomaru	Tokomaru River at Horseshoe Bend	At approx. NZMS 260 S24:241-768



Water Management Zone*	Sub zone*	Site	Description
		Tokomaru River Bank Reserve (SH57)	At approx. NZMS 260 S24:222-770
	Foxton Loop	Foxton Loop Reserve	From approx. NZMS 260 S24:031-783 to approx. NZMS 260 S24:027-796
		Tokomaru River Bank Reserve (SH57) Foxton Loop Reserve From approx. NZMS 260 S24:027-796 Foxton Loop Reserve Rangitikei River upstream Hautapu Confluence (Toe Toe Rd) Hautapu River Hautapu River  Toe Rd)  Hautapu River at Papakai Park/Spooner's Hill Otaihape Stream  Rangitikei River at Mangaweka Rangitikei River at Vinegar Hill Rangitikei River at Vinegar Hill Rangitikei at Makino Rd/Rue Rue Rd Tutalenui Stream  Whanganui River at Manunui Whanganui River at Cherry Grove Whakapapa River at Owhango Ongarue River at Vongarue River  Whanganui River at Owhango Ongarue River at Vongarue River  Whanganui River at Mangawek  Whanganui River River River River  Whanganui River River River  Manganui River River  Manganui River  Rangitikei River River River Rangitikei River River River Rangitikei Ri	At approx. NZMS 260 S24:033-785
	Pukeokahu – Mangaweka		At approx. NZMS 260 T22:531-573
Middle Rangitikei	Upper and Lower Hautapu	Hautapu River	From the confluence with the Otaihape Stream at approx. NZMS 260 T21:507-656 to approx. T21:502-671
		Hautapu River at Papakai Park/Spooner's Hill	At approx. NZMS 260 T21:505-670
	Lower Hautapu  Otaihape Stream  Rangitikei River at Mangaweke Rangitikei Rangitikei Rangitikei Rangitikei Rangitikei Rangitikei at Makino Rd/Rue Rue  Stal Rangitikei  Tidal Rangitikei  Holben Reserve	Otaihape Stream	From confluence with the Hautapu River at approx. NZMS 260 T21:507-656 to approx. T21:492-652
			At approx. NZMS 260 T22:503-513
Lower Rangitikei	Lower Rangitikei	Rangitikei River at Vinegar Hill At approx. NZMS 260 T22:358-379 Rangitikei at Makino Rd/Rue Rue Rd At approx. NZMS 260 S23:213-226 Holben Reserve At approx. NZMS 260 S24:989-997 Tutaenui Stream From approx. NZMS 260 S23:133-209 to approx. S23:133-252	
		Rangitikei at Makino Rd/Rue Rue Rd	gaweka         At approx. NZMS 260 T22:503-513           gar Hill         At approx. NZMS 260 T22:358-379           ue Rue Rd         At approx. NZMS 260 S23:213-226           At approx. NZMS 260 S24:989-997           From approx. NZMS 260 S23:133-209 to approx. S23:133-252           anunui         At approx. NZMS 260 S18:104-556           ry Grove         At approx. NZMS 260 S18:057-545
Coastal Pangitikoi	Tidal Rangitikei	Holben Reserve	At approx. NZMS 260 S24:989-997
Coastal Kallyllikei	Tutaenui	Tutaenui Stream	From approx. NZMS 260 S23:133-209 to approx. S23:133-252
, and the second	Cherry Grove	Whanganui River at Manunui	At approx. NZMS 260 S18:104-556
		Whanganui River at Cherry Grove	At approx. NZMS 260 S18:057-545
	Charry Grove	Whanganui River	From Confluence with the Ongarue River at approx. NZMS 260 S18:055-544 to approx. S18:100-554
Cherry Grove	Lower Whakapapa	Whakapapa River at Owhango	At approx. NZMS 260 S19:178-426
	Lower Ongarue		At approx. NZMS 260 S18:057-546
	Lower Origanue	Ongarue River	From Confluence with the Whanganui River at approx. NZMS 260 S18:055-544 to approx. S18:043-575
Pipiriki	Lower Manganui o te Ao	Manganui o te Ao River at Ruatiti	At approx. NZMS 260 S20:996-079
	Lower Whanganui	Whanganui River at Mosquito Point	At approx. NZMS 260 S22:902-473
Lower Whanganui	Lower and Coastal Whanganui	Whanganui River	From River Mouth to approx. NZMS 260 R22:888-434
	Coastal Whanganui	Castlecliff Beach	At approx. NZMS 260 R22:788-388
	Matarawa	Matarawa Stream	From Confluence with the Whanganui River at approx. NZMS 260 R22:857-397 to approx. R22:872-408
Lower Whangaehu	Upper Mangawhero	Mangawhero River	From approx. NZMS 260 S20:156-963 to approx. S20:178-976
Coastal Whangaehu	Coastal Whangaehu	Whangaehu Beach	At approx. NZMS 260 R23:893-269
Lower Turakina	Lower Turakina	Turakina Beach – Koitiata	At approx. NZMS 260 S23:921-234



Water Management Zone*	Sub zone*	Site	Description
		Ohau River at Kimberley Reserve	At approx. NZMS 260 S25:059-574
Ohau	Lower Ohau	Ohau River at Kirkcaldies Bridge Reserve	At approx. NZMS 260 S25:027-567
Ondu	Lower Orlan	Ohau River at Gladstone Reserve	At approx. NZMS 260 S25:076-577
		Ohau River at Parikawau Reserve	At approx. NZMS 260 S25:994-553
East Coast	East Coast	Herbertville Beach	At approx. NZMS 260 V24:103-719
Akitio	Lower Akitio	Akitio River	At approx. NZMS 260 U25:991-611
ANIIIO	Lower Antio	Akitio Beach	At approx. NZMS 260 U25:989-597
		Ototoka Stream at William Birch Pool	At approx. NZMS 260 R22:676-519
Northern Coastal	Northern Coastal	Ototoka Stream	At approx. NZMS 260 R22:666-471
		Ototoka Beach	At approx. NZMS 260 R22:667-471
Kai lwi		Kai Iwi Stream	At approx. NZMS 260 R22:723-451
	Kai lwi	Kai lwi Beach	At approx. NZMS 260 R22:725-448
Mowhanau	Mowhanau	Mowhanau Stream	At approx. NZMS 260 R22:726-448
W 11 1 1 1	17. 11. 1. 1.	Lake Wiritoa	At approx. NZMS 260 R22:882-344
Kaitoke Lakes	Kaitoke Lakes	South Beach	At approx. NZMS 260 R22:882-344
Southern Wanganui Lakes	Southern Wanganui Lakes	Lake Dudding	At approx. NZMS 260 S23:045-203
Northern Manawatu	Nauthaus Manauatu Lalaa	Kaikokupu Stream at Himatangi Beach	At approx. NZMS 260 S24:993-905
Lakes	Northern Manawatu Lakes	Himatangi Beach	At approx. NZMS 260 S24:991-905
Waitarere	Mellenne	Waitarere Beach	At approx. NZMS 260 S24:958-701
	Waitarere	Wairarawa Stream at Waitarere Beach	At approx. NZMS 260 S24:959-709
Waikawa	Waikawa	Waikawa Stream @ Hank Edwards Reserve	At approx. NZMS 260 S25:915-553
Lake Horowhenua	Hokio	Hokio Stream @ Hokio Beach	At approx. NZMS 260 S25:949-657





# **Domestic Food Supply (DFS) Value**

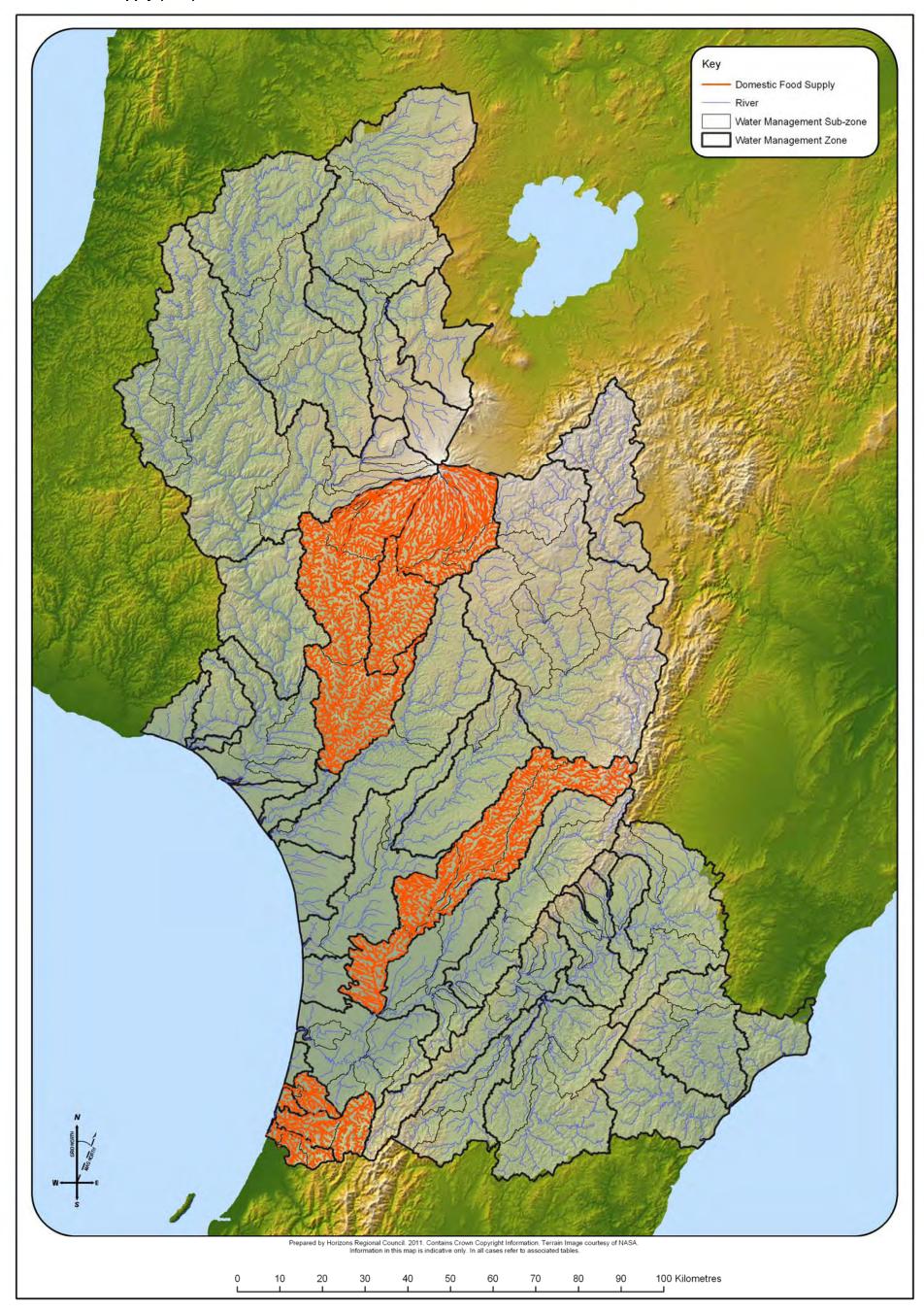


Figure B:13 Visual Guide to the Distribution of Domestic Food Supply (DFS) Value





Table B.13: Domestic Food Supply (DFS) Value in the Region

Water Management Zone*	Sub-zone*	River^	Description	Domestic Food Supply Value
Oroua (Mana_12)	Upper, Middle and Lower Oroua and Kiwitea and Makino (Mana_12a, Mana_12b, Mana_12c, Mana_12d and Mana_12e)	Oroua River and tributaries	From Manawatu River confluence at approx. NZMS 260 S24:167-826 to source	Seed potato production
Upper Whangaehu (Whau_1)	Upper Whangaehu, Waitangi and Tokiahuru (Whau_1a, Whau_1b and Whau_1c)	Whangaehu River and tributaries	From Karioi at approx. NZMS 260 S21:218-864 to source	Vegetable production
Middle Whangaehu (Whau_2)	Middle Whangaehu (Whau_2)	Whangaehu River and tributaries	From Aranui at approx. NZSM 260 S21:175-627 to Karioi at approx. NZSM 260 S21:218-864	Vegetable production
Lower Whangaehu (Whau_3)	Lower Whangaehu, Upper and Lower Makotuku, Upper and Lower Mangawhero , and Makara (Whau_3a, Whau_3b, Whau_3c, Whau_3d, Whau_3e and Whau_3f)	Whangaehu River and tributaries	From Kauangaroa at approx. NZMS 260 S22:045-397 to Aranui at approx. NZSM 260 S21:175-627	Vegetable production
Ohau (Ohau_1)	Upper and Lower Ohau (Ohau_1a and Ohau_1b)	Ohau River and triburaries	From approx. NZMS 260 S25:918-578 to source (excluding the mainstem of the Ohau River from the cross-river CMA boundary at NZMS 260 S25:2692921-6059503 seawards)	Vegetable production
Lake Papaitonga (West_8)	Lake Papaitonga (West_8)	Lake Papaitonga and tributaries and Waiwiri Stream	Lake Papaitonga catchment and Waiwiri Stream	Vegetable production
Waikawa (West_9)	Waikawa and Manakau (West_9a and West_9b)	Waikawa Stream and tributaries	From approx. NZMS 260 S25:908-548 to source (excluding the mainstem of the Waikawa Stream from the cross-river CMA boundary at NZMS 260 S25:2691531-6055429 seawards)	Vegetable production
Lake Horowhenua (Hoki_1)	Lake Horowhenua (Hoki_1a)	Lake Horowhenua and tributaries and Hokio Stream	Lake Horowhenua Catchment and Hokio Stream (ecluding the mainstem of the Hokio Stream from the cross-river CMA boundary at NZMS 260 S25:2694967-6065799 seawards).	Vegetable production





# Part B.3: Surface *Water*^ Management Values Key: showing the management objectives, where the Values apply and where to find them in Schedule B

Value Group		Individual Values	Management Objective	Where it applies	Location in Schedule B
Огоцр	NS	Natural State	The <i>river</i> ^ and its <i>bed</i> ^ are maintained in their natural state	Public Conservation Land	Figure B:2 page B-17 and Table B.2 page B-19
	LSC	Life-supporting Capacity	The water body' and its bed' support healthy aquatic life/ecosystems	All natural <i>water bodies</i> <sup>^</sup> and their <i>beds</i> <sup>^</sup> (8 LSC classes)	Figure B:1 page B-15
Ecosystem	SOS-A	Sites of Significance - Aquatic	Sites of significance for indigenous aquatic biodiversity are maintained or enhanced	Specified sites/reaches	Figure B:3 page B-21 and Table B.3 pages B-23 to B-32
Values	SOS-R	Sites of Significance - Riparian	Sites of significance for indigenous riparian biodiversity are maintained or enhanced	Specified sites/reaches	Figure B:4 page B-33 and Table B.4 pages B-35 to B-37
	IS	Inanga Spawning	The water body' and its bed' sustain healthy inanga spawning and egg development	Specified sites/reaches	Figure B:5 page B-39 and Table B.5 pages B-41 to B-42
	WM	Whitebait* Migration	The water body' and its bed' are maintained or enhanced to provide safe passage of inwardly migrating juvenile native fish known collectively as whitebait'	Specified sites/reaches	Figure B:6 page B-43 and Table B.6 pages B-45 to B-46
	CR	Contact Recreation	The water body and its bed are suitable for contact recreation	All natural water bodies <sup>^</sup> and their beds <sup>^</sup>	
	AM	Amenity	The amenity values of the <i>water body</i> ^ and its <i>bed</i> ^ (and its margins where in public ownership) are maintained or enhanced	Specified sites/reaches	Figure B:12 page B-107 and Table B.12 pages B-109 to B-111
	Mau	Mauri*	The maurit of the water body and its bed is maintained or enhanced	All natural water bodies <sup>^</sup> and their beds <sup>^</sup>	
Recreational and Cultural	SOS-C	Sites of Significance - Cultural	Sites of significance for cultural values are maintained	Specified sites for the Manawatu River in Mana_10a, 11a, 13a and 13f	Figure B:7 page B-47 and Table B.7 page B-49
Values	Values TF Trout Fishery		The water body and its bed sustain healthy rainbow or brown trout fisheries	Specified zones/reaches (3 categories)	Figure B:8 page B-51 and Table B.8 pages B-53 to B-59
	-	Trout Spawning	The water body' and its bed' meet the requirements of rainbow and brown trout spawning and larval and fry development	Specified sites/reaches	Figure B:9 page B-61 and Table B.9 pages B-63 to B-71
	AE Aesthetics		The aesthetic values of the <i>water body</i> ' and its <i>bed</i> ' are maintained or enhanced	All natural <i>water bodies</i> <sup>^</sup> and their <i>beds</i> <sup>^</sup>	. •
	WS	Water^ Supply	The water is suitable, after treatment, as a drinking water source for human consumption	Catchments above surface <i>water</i> ^ takes for community <i>water</i> ^ supply	Figure B:10 page B-73 and Table B.10 pages B-75 to B-80
<i>Water</i> ^ Use	IA	Industrial Abstraction	The water is suitable as a water source for industrial abstraction or use, including for hydroelectricity generation	All natural water bodies <sup>^</sup> except those classified as NS and those identified as zero allocation Water Management Zones <sup>*</sup> or Sub-zones <sup>*</sup> (other than the Upper Moawhango (Rang 2c) Water Management Sub-Zone) in Schedule B	
	I	Irrigation	The water is suitable as a water source for irrigation	All natural <i>water bodies</i> <sup>^</sup> except those classified as NS and those identified as zero allocation <i>Water Management Zones</i> <sup>*</sup> or <i>Sub-zones</i> <sup>*</sup> in Schedule B	
	SW	Stockwater	The water is suitable as a supply of drinking water for livestock	All water bodies <sup>^</sup> including artificial	
DFS		Domestic Food Supply	The water is suitable for domestic food production	Specified water management sub-zones* West_8, West_9, Hoki_1, Ohau_1, Whau_1, Whau_2, Whau_3 and Mana_12	Figure B:13 page B-113 and Table B.13 page B-115
	CAP	Capacity to Assimilate Pollution	The capacity of a <i>water body</i> and its <i>bed</i> to assimilate pollution is not exceeded	All natural water bodies^ and their beds^ except NS	
Social/ Economic	FC/D	Flood Control and Drainage	The integrity of existing flood and <i>river</i> ^ bank erosion protection <i>structures</i> ^ and existing drainage <i>structures</i> ^ is not compromised and the risks associated with flooding and erosion are managed sustainably	Existing flood/ erosion control and drainage schemes	Figure B:11 page B-81 and Table B.11 pages B-83 to B-105
Values	EI	Existing <i>Infrastructure</i> ^	The integrity of existing <i>infrastructure</i> ^ is not compromised	This applies in the general vicinity of any existing infrastructure <sup>*</sup> such as roads, culverts, bridges, water <sup>*</sup> intakes, discharge <sup>*</sup> pipes, flow recording stations and gas pipelines	

# Surface Water^ Management Values Classification Sub-code Key

	Value	Classification Sub-codes
LSC	Life-supporting Capacity	UHS: Upland Hard Sedimentary UVA: Upland Volcanic Acidic UVM: Upland Volcanic Mixed Uli: Upland Limestone HM: Hill Mixed HSS: Hill Soft Sedimentary LM: Lowland Mixed LS: Lowland Sand
TF	Trout Fishery	I: Outstanding II: Regionally Significant III: Other Trout Fishery





SCHEDULE C: SURFACE WATER QUANTITY

Schedule C:
Surface Water Quantity

## Schedule C: Surface Water Quantity

Schedule C is a component of Part II - the Regional Plan.

Schedule C only applies to rivers^.

### How to use the contents of this schedule:

Step 1: Identify which Water Management Sub-zone\* your proposed abstraction lies in (go to Schedule A).

Step 2: Refer to Table C.1 to identify which cumulative core allocation limits and minimum flows apply to your Water Management Sub-zone\*.

#### **Advice Note:**

In accordance with Policy 5-15(b), the taking of *water*\(^ for hydroelectricity generation that was lawfully established as at 31 May 2007 falls outside the cumulative core allocation limits and minimum flows in this Schedule.

The cumulative core allocation in any *Water Management Sub-zone*\* is only available where:

- (a) the point of take is downstream of the locations described in Table C.2 which identifies the location of infrastructure related to existing hydroelectricity generation schemes, or
- (b) the point of take is upstream of the locations described in the Table C.2 and the quantity of *water*^ to be taken is no more than was lawfully allocated to be taken upstream of those locations as at 31 May 2007.

Table C.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone*							
Water Management Zone*	Sub-zone*	Minimum flow (m³/s)	Flow monitoring site	Flow monitoring site location	Cumulative core allocation limit (m³/day)		
	Upper Manawatu (Mana_1a)	1.600	Manawatu at Weber Rd	U23:751-027	17,712		
Upper Manawatu (Mana_1)	Mangatewainui (Mana_1b)	1.600	Manawatu at Weber Rd	U23:751-027	5,616		
( * * = /	Mangatoro (Mana_1c)	0.700	Mangatoro at Mangahei Rd	U23:813-019	10,368		



Water Management Zone*	Sub-zone*	Minimum flow (m³/s)	Flow monitoring site	Flow monitoring site location	Cumulative core allocation limit (m³/day)	
nole Zone (Mana_1)					17,172	
Weber-Tamaki	Weber-Tamaki (Mana_2a)	1.600	Manawatu at Weber Rd	U23:751-027	21,600	
(Mana_2)	Mangatera (Mana_2b)	1.600	Manawatu at Weber Rd	U23:751-027	3,888	
tchment cumulative allocable vo	chment cumulative allocable volume (Mana_1 + Mana_2)					
Upper Tamaki (Mana_3)	Upper Tamaki (Mana_3)	0.240	Tamaki at Water Supply Weir	U23:709-111	6,912	
Upper Kumeti (Mana_4)	Upper Kumeti (Mana_4)	0.055	Kumeti at Te Rehunga	T24:616-899	864	
\ <u>-</u> /	Tamaki-Hopelands (Mana_5a)	2.980	Manawatu at Hopelands	T24:616-899	83,808	
	Lower Tamaki (Mana_5b)	0.360	Tamaki at Stephensons	U23:707-022	12,096	
	Cumulative allocable volume (Mana_3 + Mana_5b)					
Tamaki-Hopelands (Mana_5)	Lower Kumeti (Mana_5c)	2.980	Manawatu at Hopelands	T24:616-899	5,184	
	Cumulative allocable volume (Mana_4 + Mana_5c)					
	Oruakeretaki (Mana_5d)	0.208	Oruakeretaki at SH2 Napier	T23:679-014	13,651	
	Raparapawai (Mana_5e)	0.035	Raparapawai at Jacksons Rd	T24:645-938	1,296	
atchment cumulative allocable volume (Mana_1 + Mana_2 + Mana_3 + Mana_4 + Mana_5)						
Hopelands-Tiraumea (Mana_6)	Hopelands-Tiraumea (Mana_6)	2.980	Manawatu at Hopelands	T24:616-899	90,720	
tchment cumulative allocable vo	olume (Mana_1 + Mana_2 +	Mana_3 + Mana_4 +	Mana_5 + Mana_6)		90,720	
Tiraumea (Mana_7)	Upper Tiraumea (Mana_7a)	2.040	Tiraumea at Ngaturi	T24:578-780	3,456	



Table C.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone*						
Water Management Zone*	Sub-zone*	Minimum flow (m³/s)	Flow monitoring site	Flow monitoring site location	Cumulative core allocation limit (m³/day)	
	Lower Tiraumea (Mana_7b)	2.040	Tiraumea at Ngaturi	T24:578-780	23,328	
	Mangaone River (Mana_7c)	2.040	Tiraumea at Ngaturi	T24:578-780	1,728	
	Makuri (Mana_7d)	1.700	Makuri at Tuscan Hills	T24:583-717	8,640	
	Cumulative allocable vol	ume (Mana_7a + Mana	_7c + Mana_7d)		8,640	
	Mangaramarama (Mana_7e)	2.040	Tiraumea at Ngaturi	T24:578-780	2,160	
Vhole Zone (Mana_7)					23,328	
	Upper Mangatainoka (Mana_8a)	0.370	Mangatainoka at Larsons Road	T25:308-596	1,728	
Managadainala	Middle Mangatainoka (Mana_8b)	1.305	Mangatainoka at Pahiatua Town Bridge	T24:501-802	5,184	
Mangatainoka (Mana_8)	Lower Mangatainoka (Mana_8c)	1.305	Mangatainoka at Pahiatua Town Bridge	T24:501-802	27,913	
	Makakahi (Mana_8d)	0.320	Makakahi at Hamua	T25:424-676	2,694	
	Cumulative allocable vol	ume (Mana_8a + Mana	_8b + Mana_8d)		5,184	
Whole Zone (Mana_8)					27,913	
Catchment cumulative allocable vo	lume Mangatainoka and Ti	raumea (Mana_7 + Ma	ana_8)		51,241	
	Upper Gorge (Mana_9a)	9.175	Manawatu at Upper Gorge	T24:494-933	198,288	
	Mangapapa (Mana_9b)	0.035	Mangapapa at Troup Road	T24:520-922	1,296	
Upper Gorge (Mana_9)	Mangaatua (Mana_9c)	0.070	Mangaatua at Hutchinsons	T24:581-932	432	
	Upper Mangahao (Mana_9d)	1.415	Mangahao at Ballance	T24:468-818	7,344	
	Lower Mangahao (Mana_9e)	1.415	Mangahao at Ballance	T24:468-818	7,344	



Table C.1: Cumulative Core Allocation	on Limits and Minimum F	lows by Water Manage	ment Sub-zone*		
Water Management Zone*	Sub-zone*	Minimum flow (m³/s)	Flow monitoring site	Flow monitoring site location	Cumulative core allocation limit (m³/day)
	Cumulative allocable vo	lume (Mana_9d + Mana	ı_9e)		7,344
Whole Zone (Mana_9)					
Catchment cumulative allocable vol	ume (Mana_1 + Mana_2 +	+ Mana_3 + Mana_4 +	Mana_5 + Mana_6 + Mana_7 + Mana_8 +	· Mana_9)	198,288
Middle Manawatu	Middle Manawatu (Mana_10a)	12.240	Manawatu at Teachers College	T24:331-892	264,384
	Upper Pohangina (Mana_10b)	1.960	Pohangina at Mais Reach	T23:467-053	9,936
	Middle Pohangina (Mana_10c)	1.960	Pohangina at Mais Reach	T23:467-053	39,312
(Mana_10)	Cumulative allocable vo	39,312			
, ,	Lower Pohangina (Mana_10d)	1.960	Pohangina at Mais Reach	T23:467-053	39,312
	Cumulative allocable volume (Mana_10b + Mana_10c + Mana_10d)				
	Aokautere (Mana_10e)	12.240	Manawatu at Teachers College	T24:331-892	432
Whole Zone (Mana_10)					
Catchment cumulative allocable vol	ume (Mana_1 + Mana_2 +	+ Mana_3 + Mana_4 +	Mana_5 + Mana_6 + Mana_7 + Mana_8 +	- Mana_9 + Mana_10)	264,384
Lower Manawatu (Mana_11)	Lower Manawatu (Mana_11a)	12.240	Manawatu at Teachers College	T24:331-892	336,096
	Turitea (Mana_11b)	0.041	Turitea at Ngahere Park	T24:354-852	37,100
	Kahuterawa (Mana_11c)	0.180	Kahuterawa at Johnsons Rata	T24:323-808	864
	Upper Mangaone Stream (Mana_11d)	0.035	Mangaone at Milson Line	T24:311-953	432
	Lower Mangaone Stream (Mana_11e)	0.035	Mangaone at Milson Line	T24:311-953	864



Water Management Zone*	Sub-zone*	Minimum flow (m³/s)	Flow monitoring site	Flow monitoring site location	Cumulative core allocation limit (m³/day)		
	Cumulative allocable volume (Mana_11d + Mana_11e)						
	Main Drain (Mana_11f)	12.240	Manawatu at Teachers College		10% of <i>MALF</i> *		
hole Zone (Mana_11)					336,096		
atchment cumulative allocable vo	lume (Mana_1 + Mana_2 +	• Mana_3 + Mana_4 +	Mana_5 + Mana_6 + Mana_7 + Mana_8 +	Mana_9 + Mana_10 + Mana_11)	336,096		
Oroua (Mana_12)	Upper Oroua (Mana_12a)	1.005	Oroua at Almadale	T23:365-113	34,128		
	Middle Oroua (Mana_12b)	1.030	Oroua at Kawa Wool	S23:287-038	34,992		
	Lower Oroua (Mana_12c)	1.085	Oroua at Awahuri Bridge	S23:243-002	37,152		
	Cumulative allocable vo	Cumulative allocable volume (Mana_12a + Mana_12b + Mana_12c)					
	Kiwitea (Mana_12d)	0.150	Kiwitea at Haynes Line	T23:366-207	1,296		
	Makino (Mana_12e)	0.075	Makino at Boness Road	S23:254-023	1,296		
hole Zone (Mana_12)					37,152		
tchment cumulative allocable vo na_12)	olume (Mana_1 + Mana_2	+ Mana_3 + Mana_4	+ Mana_5 + Mana_6 + Mana_7 + Mana_8	+ Mana_9 + Mana_10 + Mana_11 +	373,248		
Coastal Manawatu (Mana_13)	Coastal Manawatu (Mana_13a)	12.240	Manawatu at Teachers College	T24:331-892	598,752		
	Upper Tokomaru (Mana_13b)	0.240	Tokomaru at Riverland Farm	S24:218-772	1,296		
	Lower Tokomaru (Mana_13c)	0.240	Tokomaru at Riverland Farm	S24:218-772	14,688		
	Cumulative allocable volume (Mana_13b + Mana_13c)						
	Mangaore (Mana_13d)	MALF*	Mangaore at d/s Mangahao Power Station	S25:173-670	10% of <i>MALF</i> *		
	Koputaroa (Mana 13e)	12.240	Manawatu at Teachers College	T24:331-892	432		



Water Management Zone*	Sub-zone*	Minimum flow (m³/s)	Flow monitoring site	Flow monitoring site location	Cumulative core allocation limit (m³/day)	
	Foxton Loop (Mana_13f)	MALF*			10% of <i>MALF</i> *	
/hole Zone (Mana_13)					598,752	
atchment cumulative allocable vo ana_12 + Mana_13)	olume (Mana_1 + Mana_2 ·	+ Mana_3 + Mana_4 + N	Mana_5 + Mana_6 + Mana_7 + Mana_	8 + Mana_9 + Mana_10 + Mana_11 +	598,752	
Upper Rangitikei (Rang_1)	Upper Rangitikei (Rang_1)	n/a			0	
Middle Rangitikei (Rang_2)	Middle Rangitikei (Rang_2a)	5.000	Rangitikei at Pukeokahu	U21:713-708	21,600	
	Pukeokahu- Mangaweka (Rang_2b)	12.250	Rangitikei at Mangaweka	T22:504-513	52,704	
	Cumulative allocable vol	Cumulative allocable volume (Rang_2a + Rang_2b)				
	Upper Moawhango (Rang_2c)	n/a		T21:557-745	0	
	Middle Moawhango (Rang_2d)	n/a		T21:557-745	0	
	Lower Moawhango (Rang_2e)	n/a		T21:557-745	0	
	Upper Hautapu (Rang_2f)	0.640	Hautapu at Alabasters	T21:486-683	9,936	
	Lower Hautapu (Rang_2g)	0.640	Hautapu at Alabasters	T21:486-683	12,960	
	Cumulative allocable vol	ume (Rang_2f + Rang_2g	1)		12,960	
hole Zone (Rang_2)					52,704	
atchment cumulative allocable vo	olume (Rang_1 + Rang_2)				52,704	
Lower Rangitikei (Rang_3)	Lower Rangitikei (Rang_3a)	12.100	Rangitikei at Onepuhi	S23:201-222	141,696	
	Makohine (Rang_3b)	0.040	Makohine at Viaduct	T22:395-450	864	



Water Management Zone*	Sub-zone*	Minimum flow (m³/s)	Flow monitoring site	Flow monitoring site location	Cumulative core allocation limit (m³/day)
Vhole Zone (Rang_3)					141,696
atchment cumulative allocable vo	lume (Rang_1 + Rang_2 +	· Rang_3)			141,696
Coastal Rangitikei (Rang_4)	Coastal Rangitikei (Rang_4a)	10.230	Rangitikei at McKelvies	S24:033-985	213,840
	Tidal Rangitikei (Rang_4b)	10.230	Rangitikei at McKelvies	S24:033-985	285,120
	Porewa (Rang_4c)	12.100	Rangitikei at Onepuhi	S23:201-222	0
	Tutaenui (Rang_4d)	10.230	Rangitikei at McKelvies	S24:033-985	6,653
hole Zone (Rang_4)	•				285,120
atchment cumulative allocable vo	lume (Rang_1 + Rang_2 +	Rang_3 + Rang_4)			285,120
Upper Whanganui (Whai_1)	Upper Whanganui (Whai_1)	26.6	Whanganui at Te Maire		518
hole Zone (Whai_1)				•	518
Cherry Grove (Whai_2)	Cherry Grove (Whai_2a)	26.6	Whanganui at Te Maire		15,121
	Upper Whakapapa (Whai_2b)	26.6	Whanganui at Te Maire		3,937
	Lower Whakapapa (Whai_2c)	26.6	Whanganui at Te Maire		5,517
	Piopiotea (Whai_2d)	26.6	Whanganui at Te Maire		80
	Pungapunga (Whai_2e)	26.6	Whanganui at Te Maire		0
	Upper Ongarue (Whai_2f)	26.6	Whanganui at Te Maire		1,270
	Lower Ongarue (Whai_2g)	26.6	Whanganui at Te Maire		1,422



Table C.1: Cumulative Core Allocati	ion Limits and Minimum Fl	lows by <i>Water Manage</i>	ement Sub-zone*		
Water Management Zone*	Sub-zone*	Minimum flow (m³/s)	Flow monitoring site	Flow monitoring site location	Cumulative core allocation limit (m³/day)
Whole Zone (Whai_2)				•	15,121
Catchment cumulative allocable vo	lume (Whai_1 + Whai_2)				15,121
Te Maire (Whai_3)	Te Maire (Whai_3)	MALF*			10% of <i>MALF</i> *
Catchment cumulative allocable vo	lume (Whai_1 + Whai_2 + l	Whai_3)			10% of <i>MALF</i> *
	Middle Whanganui (Whai_4a)	MALF*			10% of <i>MALF</i> *
Middle Whanganui	Upper Ohura (Whai_4b)	MALF*			10% of <i>MALF</i> *
(Whai_4)	Lower Ohura (Whai_4c)	MALF*			10% of <i>MALF</i> *
	Retaruke (Whai_4d)	MALF*			10% of <i>MALF</i> *
Whole Zone (Whai_4)					10% of <i>MALF</i> *
Catchment cumulative allocable vo	, – –	Whai_3 + Whai_4)			10% of MALF*
	Pipiriki (Whai_5a)	MALF*			10% of <i>MALF</i> *
	Tangarakau (Whai_5b)	MALF*			10% of <i>MALF</i> *
Pipiriki	Whangamomona (Whai_5c)	MALF*			10% of <i>MALF</i> *
(Whai_5)	Upper Manganui o te Ao (Whai_5d)	n/a			0
	Makatote (Whai_5e)	n/a			0
	Waimarino (Whai_5f)	7 day <i>MALF</i> *			5% of 7 day MALF*



Table C.1: Cumulative Core Allocati	on Limits and Minimum F	lows by <i>Water Manage</i>	ement Sub-zone*		
Water Management Zone*	Sub-zone*	Minimum flow (m³/s)	Flow monitoring site	Flow monitoring site location	Cumulative core allocation limit (m³/day)
	Middle Manganui o te Ao (Whai_5g)	7 day <i>MALF</i> *			5% of 7 day <i>MALF</i> *
	Mangaturuturu (Whai_5h)	n/a			0
	Lower Manganui o te Ao (Whai_5i)	7 day <i>MALF</i> *			5% of 7 day MALF*
	Orautoha (Whai_5j)	7 day <i>MALF</i> *			5% of 7 day <i>MALF</i> *
Whole Zone (Whai_5)					10% of <i>MALF</i> *
Catchment cumulative allocable vol	lume (Whai_1 + Whai_2 +	Whai_3 + Whai_4 +	Whai_5)		10% of MALF*
Paetawa (Whai_6)	Paetawa (Whai_6)	MALF*			10% of <i>MALF</i> *
Catchment cumulative allocable vo	lume (Whai_1 + Whai_2 +	Whai_3 + Whai_4 +	Whai_5 + Whai_6)		10% of MALF*
	Lower Whanganui (Whai_7a)	MALF*			10% of <i>MALF</i> *
Lower Whanganui	Coastal Whanganui (Whai_7b)	MALF*			10% of <i>MALF</i> *
(Whai_7)	Upokongaro (Whai_7c)	MALF*			10% of <i>MALF</i> *
	Matarawa (Whai_7d)	MALF*			10% of <i>MALF</i> *
Whole Zone (Whai_7)					10% of <i>MALF</i> *
Catchment cumulative allocable vol	lume (Whai_1 + Whai_2 +	Whai_3 + Whai_4 +	Whai_5 + Whai_6 + Whai_7)		10% of MALF*
Upper Whangaehu	Upper Whangaehu (Whau_1a)	8.700	Whangaehu at Karioi	S21:218-864	47,520
(Whau_1)	Waitangi (Whau_1b)	0.470	Waitangi at Tangiwai	T21:316-886	9,504



Table C.1: Cumulative Core Allocati	on Limits and Minimum Fl	ows by Water Manage	ement Sub-zone*		
Water Management Zone*	Sub-zone*	Minimum flow (m³/s)	Flow monitoring site	Flow monitoring site location	Cumulative core allocation limit (m³/day)
	Tokiahuru (Whau_1c)	3.840	Tokiahuru at Junction	S21:217-870	41,472
Whole Zone (Whau_1)					47,520
Middle Whangaehu (Whau_2)	Middle Whangaehu	9.650	Whangaehu at Aranui	S21:175-627	52,272
Catchment cumulative allocable vo	lume (Whau_1 + Whau_2)				52,272
	Lower Whangaehu (Whau_3a)	11.770	Whangaehu at Kauangaroa	S22:045-397	127,008
	Upper Makotuku (Whau_3b)	0.095	Makotuku at Below Race Intake	S20:091-002	2,506
	Lower Makotuku (Whau_3c)	0.165	Makotuku at Raetihi	S20:065-955	3,802
Lower Whangaehu (Whau_3)	Upper Mangawhero (Whau_3d)	1.020	Mangawhero at Pakihi Road	S20:100-945	20,736
(	Lower Mangawhero (Whau_3e)	2.405	Mangawhero at Ore Ore	S21:045-794	24,624
	Makara (Whau_3f)	0.045	Makara at d/s Airstrip		0
	Cumulative allocable vol		2,506		
	Cumulative allocable vol	ume (Whau_3b + Wha	u_3c + Whau_3f)		3,802
Vhole Zone (Whau_3)					127,008
Catchment cumulative allocable vo	lume (Whau_1 + Whau_2 +	· Whau_3)			127,008
Coastal Whangaehu (Whau_4)	Coastal Whangaehu (Whau_4)	11.770	Whangaehu at Kauangaroa	S22:045-397	127,008
Catchment cumulative allocable vo	lume (Whau_1 + Whau_2 -	+ Whau_3 + Whau_4)			127,008
Turakina	Upper Turakina (Tura_1a)	0.340	Turakina at Otairi	S22:236-471	3,024
(Tura_1)	Lower Turakina (Tura_1b)	0.805	Turakina at O'Neills Bridge	S23:006-287	12,528



Table C.1: Cumulative Core Allocati	on Limits and Minimum F	lows by <i>Water Manage</i>	ement Sub-zone*		
Water Management Zone*	Sub-zone*	Minimum flow (m³/s)	Flow monitoring site	Flow monitoring site location	Cumulative core allocation limit (m³/day)
	Ratana 0.805 Turakina a		Turakina at O'Neills Bridge	S23:006-287	10% of MALF
Whole Zone (Tura_1)					12,528
Catchment cumulative allocable vo	lume (Tura_1)				12,528
Ohau	Upper Ohau (Ohau_1a)	0.820	Ohau at Rongomatane	S25:072-577	24,192
(Ohau_1)	Lower Ohau (Ohau_1b)	0.820	Ohau at Rongomatane	S25:072-577	24,192
Whole Zone (Ohau_1)					24,192
Catchment cumulative allocable vo	lume (Ohau_1)				24,192
Owahanga (Owha_1)	Owahanga (Owha_1)	0.030	Owahanga at Branscombe Bridge	U25:893-587	432
East Coast (East_1)	East Coast (East_1)	MALF*			10% of <i>MALF</i> *
	Upper Akitio (Akit_1a)	0.045	Akitio at Weber	U24:919-832	864
Akitio (Akit_1)	Lower Akitio (Akit_1b)	0.145	Akitio at Mouth	U25:988-655	2,592
	Waihi (Akit_1c)	0.050	Waihi at SH52	U24:892-804	1,296
Catchment cumulative allocable vo	lume (Akit_1)				2,592
Northern Coastal (West_1)	Northern Coastal (West_1)	MALF*			10% of <i>MALF</i> *
Kai lwi (West_2)	Kai lwi (West_2)	0.445	Kai lwi at Handley Road	R22:726-455	3,888
Mowhanau (West_3)	Mowhanau (West_3)	MALF*			10% of <i>MALF</i> *
Kaitoke Lakes (West_4)	Kaitoke Lakes (West_4)	MALF*			10% of <i>MALF</i> *



Table C.1: Cumulative Core Allocation	on Limits and Minimum Fl	ows by Water Manage	ment Sub-zone*		
Water Management Zone*	Sub-zone*	Minimum flow (m³/s)	Flow monitoring site	Flow monitoring site location	Cumulative core allocation limit (m³/day)
Southern Whanganui Lakes (West_5)					10% of <i>MALF</i> *
Northern Manawatu Lakes (West_6)	Northern Manawatu Lakes (West_6)	MALF*			10% of <i>MALF</i> *
Waitarere (West_7)	Waitarere (West_7)	MALF*			10% of <i>MALF</i> *
Lake Papaitonga (West_8)	Lake Papaitonga (West_8)	MALF*			10% of <i>MALF</i> *
Waikawa	Waikawa (West_9a)	0.220	Waikawa at North Manakau Road	S25:987-530	6,048
(West_9)	Manakau (West_9b)	0.040	Manakau at SH1 Bridge	S25:968-512	432
Whole zone (West_9)					6,048
Lake Horowhenua	Lake Horowhenua (Hoki_1a)	MALF*			10% of <i>MALF</i> *
(Hoki_1)	Hokio (Hoki_1b)	MALF*			10% of MALF*

le C.2: Location of Existing Hydroelectricity Generation Scheme Infrastructure											
Water Management Zone*	Sub-zone*	Intake/Dam Name	Locality Descriptions								
Middle Rangitikei (Rang_2)	Upper Moawhango (Rang_2)	Moawhango Dam	T20:472-962								
Upper Whanganui (Whai_1)	Upper Whanganui (Whai_1)	Okupata Intake	S19:287-351								
Upper Whanganui (Whai_1)	Upper Whanganui (Whai_1)	Taurewa Intake	T19:305-356								
Upper Whanganui (Whai_1)	Upper Whanganui (Whai_1)	Tawhitikuri Intake	T19:311-359								



Water Management Zone*	Sub-zone*	Intake/Dam Name	<b>Locality Descriptions</b>
Upper Whanganui (Whai_1)	Upper Whanganui (Whai_1)	Mangatepopo Intake	T19:313-361
Upper Whanganui (Whai_1)	Upper Whanganui (Whai_1)	Whanganui Intake	T19:353-386
Upper Whanganui (Whai_1)	Upper Whanganui (Whai_1)	Te Whaiau Dam	T19:357-398
Upper Whanganui (Whai_1)	Upper Whanganui (Whai_1)	Otamangakau Dam	T19:367-410
Cherry Grove (Whai_2)	Upper Whakapapa (Whai_2b)	Whakapapa Intake minimum flow site (footbridge)	S19:226-295
Te Maire (Whai_3)	Te Maire (Whai_3)	Whanganui River at Te Maire	S19:998-490
Upper Whangaehu (Whau_1)	Upper Whangaehu (Whau 1a)	Makahikatoa	T20:401-984
Upper Whangaehu (Whau_1)	Upper Whangaehu (Whau_1a)	Unnamed tributary of the Whangaehu River	T20:404-984
Upper Whangaehu (Whau_1)	Upper Whangaehu (Whau 1a)	Unnamed tributary of the Whangaehu River	T20:407-985
Upper Whangaehu (Whau_1)	Upper Whangaehu (Whau_1a)	Unnamed tributary of the Whangaehu River	T20:409-985
Upper Whangaehu (Whau_1)	Upper Whangaehu (Whau 1a)	Unnamed tributary of the Whangaehu River	T20:419-985
Upper Whangaehu (Whau_1)	Upper Whangaehu (Whau_1a)	Unnamed tributary of the Whangaehu River	T20:424-985
Upper Whangaehu (Whau_1)	Upper Whangaehu (Whau_1a)	Unnamed tributary of the Wahianoa River	T20:393-986
Upper Whangaehu (Whau 1)	Upper Whangaehu (Whau 1a)	Unnamed tributary of the Wahianoa River	T20:393-986
Upper Whangaehu (Whau_1)	Upper Whangaehu (Whau_1a)	Unnamed tributary of the Wahianoa River	T20:394-986
Upper Whangaehu (Whau 1)	Upper Whangaehu (Whau 1a)	Unnamed tributary of the Wahianoa River	T20:394-986
Upper Whangaehu (Whau_1)	Upper Whangaehu (Whau_1a)	Unnamed tributary of the Wahianoa River	T20:397-986



Table C.2: Location of Existing Hydroelectricity	able C.2: Location of Existing Hydroelectricity Generation Scheme Infrastructure										
Water Management Zone*	Sub-zone*	Intake/Dam Name	Locality Descriptions								
Upper Whangaehu (Whau_1)	Upper Whangaehu (Whau_1a)	Unnamed tributary of the Wahianoa River	T20:397-986								
Upper Whangaehu (Whau_1)	Upper Whangaehu (Whau_1a)	Unnamed tributary of the Whangaehu River	T20:413-986								
Upper Whangaehu (Whau_1)	Upper Whangaehu (Whau_1a)	Unnamed tributary of the Whangaehu River	T20:416-986								
Upper Whangaehu (Whau_1)	Upper Whangaehu (Whau_1a)	Unnamed tributary of the Whangaehu River	T20:417-986								
Upper Whangaehu (Whau_1)	Upper Whangaehu (Whau_1a)	Unnamed tributary of the Wahianoa River	T20:387-987								
Upper Whangaehu (Whau_1)	Upper Whangaehu (Whau_1a)	Unnamed tributary of the Wahianoa River	T20:387-987								
Upper Whangaehu (Whau_1)	Upper Whangaehu (Whau_1a)	Tomowai	T20:414-987								
Upper Whangaehu (Whau_1)	Upper Whangaehu (Whau_1a)	Unnamed tributary of the Wahianoa River	T20:378-988								
Upper Whangaehu (Whau_1)	Upper Whangaehu (Whau_1a)	Unnamed tributary of the Wahianoa River	T20:378-988								
Upper Whangaehu (Whau_1)	Upper Whangaehu (Whau_1a)	Unnamed tributary of the Wahianoa River	T20:383-988								
Upper Whangaehu (Whau_1)	Upper Whangaehu (Whau_1a)	Unnamed tributary of the Wahianoa River	T20:383-988								



Schedule D:
Groundwater Quantity

## **Schedule D: Groundwater Quantity**

Schedule D is a component of Part II - the Regional Plan.

Groundwater Management Zone*	Surface Water Management Zones* within GWMZ*	Annual Allocable Volume for GWMZ* (m³/y)
Whanganui	Lower Whanganui (Whai_7) Northern Coastal (West_1) Kai Iwi (West_2) Mowhanau (West_3) Kaitoke Lakes (West_4)	46,000,000
Whangaehu	Upper Whangaehu (Whau_1) Middle Whangaehu (Whau_2) Lower Whangaehu (Whau_3) Coastal Whangaehu (Whau_4)	122,000,000
Turakina	Turakina (Tura_1)	50,000,000
Rangitikei	Lower Rangitikei (Rang_3) Coastal Rangitikei (Rang_4) Southern Whanganui Lakes (West_5) Northern Manawatu Lakes (West_6)	75,000,000
Manawatu	Middle Manawatu (Mana_10) Lower Manawatu (Mana_11) Oroua (Mana_12) Coastal Manawatu (Mana_13)	166,000,000
Horowhenua	Lake Horowhenua (Hoki_1) Ohau (Ohau_1) Waitarere (West_7) Lake Papaitonga (West_8) Waikawa (West_9)	27,000,000
Tararua	Upper Manawatu (Mana_1) Weber - Tamaki (Mana_2) Upper Tamaki (Mana_3) Upper Kumeti (Mana_4) Tamaki - Hopelands (Mana_5) Hopelands - Tiraumea (Mana_6) Tiraumea (Mana_7) Mangatainoka (Mana_8) Upper Gorge (Mana_9)	239,000,000
East Coast	Akitio (Akit_1) Owahanga (Owha_1) East Coast (East_1)	Unspecified
Northern Rangitikei	Upper Rangitikei (Rang_1) Middle Rangitikei (Rang_2)	Unspecified
Northern Whanganui	Upper Whanganui (Whai_1) Cherry Grove (Whai_2) Te Maire (Whai_3) Middle Whanganui (Whai_4) Pipiriki (Whai_5) Paetawa (Whai_6)	Unspecified

The annual allocable volumes in Table D.1 are based on 5% of the average annual rainfall for each  $Groundwater\ Management\ Zone^*$ .



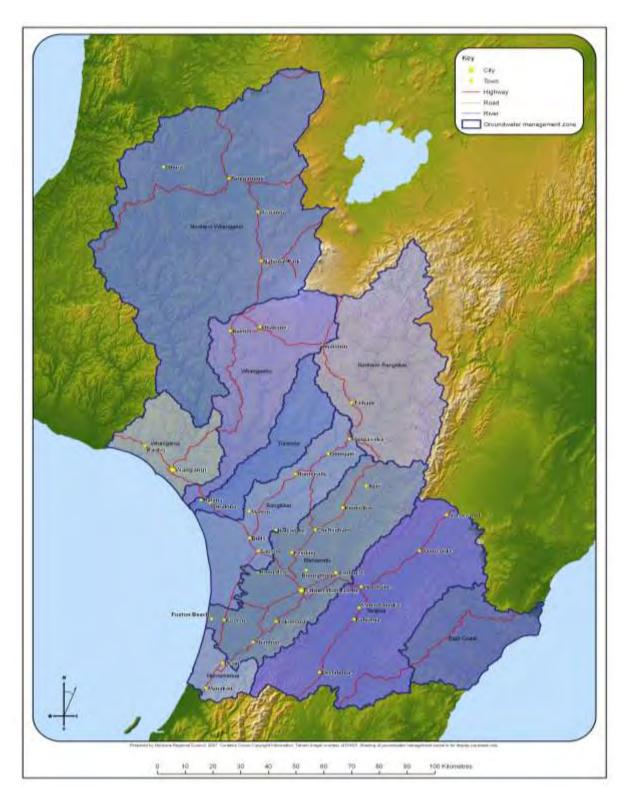


Figure D.1: Groundwater Management Zones\* (GWMZ\*)

Refer to Table D.1 for the surface *Water Management Sub-zones*\* within each *GWMZ*\* and the annual allocable volume for each *GWMZ*\*.



Schedule E:
Surface Water Quality Targets

# Schedule E: Surface *Water Quality Targets\** (or Standards Where Specified Under Conditions / Standards / Terms in a rule)

Schedule E is a component of Part II - the Regional Plan.

#### **SCHEDULE E INDEX:**

Tables		Page Numbers
Table E.1:	Region-wide Water Quality Targets* (or standards where specified under conditions/standards/terms in a rule) that apply to all Rivers^	E-2
Table E.2:	Water Quality Targets* (or standards where specified under conditions/standards/terms in a rule) for Rivers^ in each Water Management Sub-zone* (WMSZ*)	E-3 to E-14
Table E.3:	Additional Water Quality Targets* (or standards where specified under conditions/standards/terms in a rule) that apply 1 May to 30 September (inclusive) to all Specified Sites/Reaches of Rivers^ with a Trout Spawning (TS) Value	E-15
Table E.4:	Lake^ Water Quality Targets* (or standards where specified under conditions/standards/terms in a rule)	E-16
Table E.5:	Water Quality Targets* (or standards where specified under conditions/standards/terms in a rule) Key (fold-out)	E-17

**USER GUIDE:** How to use the contents of Schedule E.

**Step 1:** Identify the *WMSZ\** for your proposed activity (go to Schedule A).

Step 2: Check if Trout Spawning is a Value for your WMSZ\* (go to Schedule B).

Step 3: Identify which Water Quality Targets\* (or standards where specified under conditions/standards/terms in a rule) apply to your activity using steps a. to c.:

#### a. A river^:

i. Turn first to Table E.1 to see the *Water Quality Targets\** (or standards where specified under conditions/standards/terms in a rule) that apply to all *rivers*^ in the Region,



- ii. Then turn to Table E.2 to see the *Water Quality Targets\** (or standards where specified under conditions/standards/terms in a rule) that apply to *rivers*^ in your *WMSZ\**,
- iii. If the *river*^ at the *site*\* of your proposed activity has the Schedule B Value of Trout Spawning, turn to Table E.3 to see additional *Water Quality Targets*\* (or standards where specified under conditions/standards/terms in a rule) that apply 1 May to 30 September (inclusive).

#### b. A lake^:

- i. Turn to Schedule F Table F.2(b) to determine if your type of *lake*<sup>^</sup> is referred to in v to vii,
- ii. If your type of lake is not referred to in Schedule F Table F.2(b) v to vii then turn to Table E.4,
- iii. Determine if the *lake*^ meets the description of a "deep" or "shallow" *lake*^ from Table E.4 and see the *Water Quality Targets*\* (or standards where specified under conditions/standards/terms in a rule) that apply to the *lake*^ water^ in Table E.4.
- c. Water<sup>\(\)</sup> in the coastal marine area<sup>\(\)</sup>:
  - i. Turn to Tables I.4 to I.7 in Schedule I to see the *Water Quality Targets\** (or standards where specified under conditions/standards/terms in a rule) that apply in the *coastal marine area*^.

**USER NOTE:** For table abbreviations – please refer to the fold-out *Water Quality Targets\** (or standards where specified under conditions/standards/terms in a rule) **KEY** at the back of this schedule.

Table E.1: Region	Table E.1: Region-wide Water Quality Targets* (or standards where specified under conditions/standards/terms in a rule) that apply to all Rivers^													
Water Management	Sub zono*	E.coli /	100 ml	Periphyton Filamentous Cover	Distant or Cyanabastarial Cayor	QMCI								
Zone*	Sub-zone*	< 50 <sup>th</sup> %ile	< 20 <sup>th</sup> %ile	renphyton rhamentous cover	Diatom or Cyanobacterial Cover	%∆¹								
All Water Management Zones*	All Water Management Sub- zones*	260	550	30%	60%	20								

This Water Quality Target\* (or standard where specified under conditions/standards/terms in a rule) is only relevant for measuring the percentage of change in Quantitative Macroinvertebrate Community Index (QMCI) between appropriately matched habitats upstream and downstream of activities, such as discharges^ to water^, for the purposes of measuring the effect of discharges^ on aquatic macroinvertebrate communities. It is not an appropriate Water Quality Target\* (or standard where specified under conditions/standards/terms in a rule) for the measurement of the general state of macroinvertebrate communities in each Water Management Sub-zone\*.



Table E.2: Water Quality Targets\* (or standards where specified under conditions/standards/terms in a rule) for Rivers^ in each Water Management Sub-zone\* (Note: refer to Table E.4 for the water quality targets\* (or standards where specified under conditions/standards/terms in a rule) that apply to lakes^)

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Water Management	Sub-zone*	рН		рН		рН		Ter (°0		DO (%SAT)	scBOD₅ (g/m³)	POM (g/m³)	Periphyton	DRP (g/m³)	SIN (g/m³)	Deposited Sediment Cover (%)	MCI	Ammo Nitro (g/n	gen	Tox.	Visual (m	
Zone*		Range	Δ	<	Δ	>	<	<	Chl <i>a</i> (mg/m²)	<	<	<u>&lt;</u>	>	<	Max	%	< 50 <sup>th</sup> %ile	%∆				
	Upper Manawatu (Mana_1a)	7 to 8.5	0.5	19	3	80	1.5	5	120	0.010	0.167	20	120	0.400	2.1	99	3	20				
Upper Manawatu (Mana_1)	Mangatewainui (Mana_1b)	7 to 8.5	0.5	19	3	80	1.5	5	120	0.010	0.167	20	120	0.400	2.1	99	3	20				
(,	Mangatoro (Mana_1c)	7 to 8.5	0.5	19	3	80	1.5	5	120	0.010	0.110	20	120	0.400	2.1	99	3	20				
Weber-Tamaki	Weber-Tamaki (Mana_2a)	7 to 8.5	0.5	19	2	80	1.5	5	120	0.010	0.444	20	120	0.400	2.1	99	3	20				
(Mana_2)	Mangatera (Mana_2b)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.444	20	100	0.400	2.1	99	2.5	30				
Upper Tamaki (Mana_3)	Upper Tamaki (Mana_3)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3	20				
Upper Kumeti (Mana_4)	Upper Kumeti (Mana_4)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3	20				
Tamaki- Hopelands	Tamaki- Hopelands (Mana_5a)	7 to 8.5	0.5	19	3	80	1.5	5	120	0.010	0.444	20	120	0.400	2.1	99	3	20				
(Mana_5)	Lower Tamaki (Mana_5b)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.444	20	100	0.400	2.1	99	2.5	30				

<sup>&</sup>lt;sup>2</sup> The Deposited Sediment Cover (%) Water Quality Target\* (or standard where specified under conditions/standards/terms in a rule) only applies for State of the Environment monitoring purposes to determine if the percentage cover of deposited sediment on the bed of the river will provide for and maintain the values in each WMSZ.



Water Management	Sub-zone*	рН		Ter (°0	-	DO (%SAT)	scBOD <sub>5</sub> (g/m³)	POM (g/m³)	Periphyton	DRP (g/m³)	SIN (g/m³)	Deposited Sediment Cover (%)	MCI	Ammo Nitro (g/n	gen	Tox.	Visual (	
Zone*		Range	Δ	<	Δ	>	<	<	Chl <i>a</i> (mg/m²)	<	<	<u>&lt;</u>	>	<	Max	%	< 50 <sup>th</sup> %ile	%Δ
	Lower Kumeti (Mana_5c)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.444	20	100	0.400	2.1	99	2.5	30
	Oruakeretaki (Mana_5d)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.444	20	100	0.400	2.1	99	2.5	30
	Raparapawai (Mana_5e)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.444	20	100	0.400	2.1	99	2.5	30
Hopelands- Tiraumea (Mana_6)	Hopelands- Tiraumea (Mana_6)	7 to 8.5	0.5	19	3	80	1.5	5	120	0.010	0.444	20	120	0.400	2.1	99	3	20
	Upper Tiraumea (Mana_7a)	7 to 8.5	0.5	23	3	70	2	5	120	0.010	0.444	25	100	0.400	2.1	95	2	30
	Lower Tiraumea (Mana_7b)	7 to 8.5	0.5	23	3	70	2	5	120	0.010	0.444	25	100	0.400	2.1	95	2	30
Tiraumea (Mana_7)	Mangaone River (Mana_7c)	7 to 8.5	0.5	23	3	70	2	5	200	0.010	0.444	25	100	0.400	2.1	95	1.6	30
	Makuri (Mana_7d)	7 to 8.5	0.5	19	2	80	1.5	5	120	0.010	0.110	20	120	0.400	2.1	99	3	20
	Mangaramarama (Mana_7e)	7 to 8.5	0.5	22	3	70	2	5	200	0.010	0.444	25	100	0.400	2.1	95	1.6	30
Mangatainoka	Upper Mangatainoka (Mana_8a)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3	20
(Mana_8)	Middle Mangatainoka (Mana_8b)	7 to 8.5	0.5	19	3	80	1.5	5	120	0.010	0.444	20	120	0.400	2.1	99	3	20



Water Management	Sub-zone*	рН		Ter (°0	•	DO (%SAT)	scBOD <sub>5</sub> (g/m³)	POM (g/m³)	Periphyton	DRP (g/m³)	SIN (g/m³)	Deposited Sediment Cover (%)	MCI	Ammo Nitro (g/r	gen	Tox.	Visual (	•
Zone*		Range	Δ	<	Δ	>	<	<	Chl <i>a</i> (mg/m²)	<	<	<u>&lt;</u>	>	<	Max	%	< 50 <sup>th</sup> %ile	%∆
	Lower Mangatainoka (Mana_8c)	7 to 8.5	0.5	19	3	80	1.5	5	120	0.010	0.444	20	120	0.400	2.1	99	3	20
	Makakahi (Mana_8d)	7 to 8.5	0.5	19	3	80	1.5	5	120	0.010	0.444	20	120	0.400	2.1	99	3	20
	Upper Gorge (Mana_9a)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.444	20	100	0.400	2.1	95	2.5	30
	Mangapapa (Mana_9b)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.444	20	100	0.400	2.1	95	2.5	30
Upper Gorge (Mana_9)	Mangaatua (Mana_9c)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.444	20	100	0.400	2.1	95	2.5	30
	Upper Mangahao (Mana_9d)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.167	15	120	0.320	1.7	99	3	20
	Lower Mangahao (Mana_9e)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.444	20	100	0.400	2.1	95	2.5	30
	Middle Manawatu (Mana_10a)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.444	20	100	0.400	2.1	95	2.5	30
Middle	Upper Pohangina (Mana_10b)	7 to 8.2	0.5	19	2	80	1.5	5	120	0.006	0.070	15	120	0.320	1.7	99	3	20
Manawatu (Mana_10)	Middle Pohangina (Mana_10c)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.110	20	100	0.400	2.1	95	2.5	30
	Lower Pohangina (Mana_10d)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.110	20	100	0.400	2.1	95	2.5	30



Water Management	Sub-zone*	рН		Ter (°0	•	DO (%SAT)	scBOD <sub>5</sub> (g/m³)	POM (g/m³)	Periphyton	DRP (g/m³)	SIN (g/m³)	Deposited Sediment Cover (%)	MCI	Ammo Nitro (g/r	gen	Tox.	Visual (	
Zone*		Range	Δ	<	Δ	>	<	<	Chl <i>a</i> (mg/m²)	<	<	<u>&lt;</u>	>	<	Max	%	< 50 <sup>th</sup> %ile	%∆
	Aokautere (Mana_10e)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.110	20	100	0.400	2.1	95	2.5	30
	Lower Manawatu (Mana_11a)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.444	20	100	0.400	2.1	95	2.5	30
	Turitea (Mana_11b)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3	20
Lower	Kahuterawa (Mana_11c)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3	20
Manawatu (Mana_11)	Upper Mangaone Stream (Mana_11d)	7 to 8.5	0.5	24	3	60	2	5	200	0.010	0.444	25	100	0.400	2.1	95	2.5	30
	Lower Mangaone Stream (Mana_11e)	7 to 8.5	0.5	24	3	60	2	5	200	0.010	0.444	25	100	0.400	2.1	95	2.5	30
	Main Drain (Mana_11f)	7 to 8.5	0.5	24	3	60	2	5	200	0.015	0.444	25	100	0.400	2.1	95	2.5	30
	Upper Oroua (Mana_12a)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.167	20	100	0.400	2.1	95	2.5	30
Oroua	Middle Oroua (Mana_12b)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.444	20	100	0.400	2.1	95	2.5	30
(Mana_12)	Lower Oroua (Mana_12c)	7 to 8.5	0.5	24	3	70	2	5	200	0.015	0.444	25	100	0.400	2.1	95	2.5	30
	Kiwitea (Mana_12d)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.167	20	100	0.400	2.1	95	2.5	30



Water Management	Sub-zone*	рН		Ter (°0		DO (%SAT)	scBOD₅ (g/m³)	POM (g/m³)	Periphyton	DRP (g/m³)	SIN (g/m³)	Deposited Sediment Cover (%)	MCI	Ammo Nitro (g/r	gen	Tox.	Visual (	•
Zone*		Range	Δ	<	Δ	>	<	<	Chl <i>a</i> (mg/m²)	<	<	<u>&lt;</u>	>	<	Max	%	< 50 <sup>th</sup> %ile	%∆
	Makino (Mana_12e)	7 to 8.5	0.5	24	3	70	2	5	120	0.015	0.444	25	100	0.400	2.1	95	2.5	30
	Coastal Manawatu (Mana_13a)	7 to 8.5	0.5	24	3	70	2	5	200	0.015	0.444	25	100	0.400	2.1	95	2.5	30
	Upper Tokomaru (Mana_13b)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3	20
Coastal Manawatu	Lower Tokomaru (Mana_13c)	7 to 8.5	0.5	24	3	70	2	5	120	0.010	0.444	25	100	0.400	2.1	95	2.5	30
(Mana_13)	Mangaore (Mana_13d)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.167	20	100	0.400	2.1	95	2.5	30
	Koputaroa (Mana_13e)	7 to 8.5	0.5	24	3	60	2	5	200	0.015	0.444	25	100	0.400	2.1	95	2.5	30
	Foxton Loop (Mana_13f)	7 to 8.5	0.5	24	3	60	2	5	200	0.015	0.444	25	100	0.400	2.1	95	2.5	30
Upper Rangitikei (Rang_1)	Upper Rangitikei (Rang_1 <b>)</b>	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3.4	20
Middle	Middle Rangitikei (Rang_2a)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3.4	20
Rangitikei (Rang_2)	Pukeokahu – Mangaweka (Rang_2b)	7 to 8.5	0.5	19	3	80	1.5	5	120	0.010	0.110	15	120	0.320	1.7	99	3.4	20



Water Management	Sub-zone*	рН		Ter (°0	•	DO (%SAT)	scBOD <sub>5</sub> (g/m³)	POM (g/m³)	Periphyton	DRP (g/m³)	SIN (g/m³)	Deposited Sediment Cover (%)	MCI	Ammo Nitro (g/n	gen	Tox.	Visual (	
Zone*		Range	Δ	<	Δ	>	<	<	Chl <i>a</i> (mg/m²)	<	<	<u>&lt;</u>	>	<	Max	%	< 50 <sup>th</sup> %ile	%∆
	Upper Moawhango (Rang_2c)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3	20
	Middle Moawhango (Rang_2d)	7 to 8.5	0.5	19	2	80	1.5	5	120	0.010	0.110	20	100	0.400	2.1	95	2.5	30
	Lower Moawhango (Rang_2e)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.110	25	100	0.400	2.1	95	2	30
	Upper Hautapu (Rang_2f)	7 to 8.5	0.5	19	2	80	1.5	5	120	0.010	0.110	20	120	0.400	2.1	99	3	20
	Lower Hautapu (Rang_2g)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.110	25	100	0.400	2.1	95	2	30
Lower Rangitikei	Lower Rangitikei (Rang_3a)	7 to 8.5	0.5	19	3	80	1.5	5	120	0.010	0.110	15	120	0.400	2.1	99	3	20
(Rang_3)	Makohine (Rang_3b)	7 to 8.5	0.5	22	3	70	2	5	200	0.010	0.110	25	100	0.400	2.1	95	1.6	30
Coastal	Coastal Rangitikei (Rang_4a)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.110	20	100	0.400	2.1	95	2.5	30
Rangitikei (Rang_4)	Tidal Rangitikei (Rang_4b)	7 to 8.5	0.5	24	3	70	2	5	200	0.015	0.167	25	100	0.400	2.1	95	2.5	30
	Porewa (Rang_4c)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.110	25	100	0.400	2.1	95	1.6	30



Water Management	Sub-zone*	рН		Ter (°0		DO (%SAT)	scBOD <sub>5</sub> (g/m³)	POM (g/m³)	Periphyton	DRP (g/m³)	SIN (g/m³)	Deposited Sediment Cover (%)	MCI	Ammo Nitro (g/n	gen	Tox.	Visual (	
Zone*		Range	Δ	<	Δ	>	<	<	Chl <i>a</i> (mg/m²)	<	<	<u>&lt;</u>	>	<	Max	%	< 50 <sup>th</sup> %ile	%∆
	Tutaenui (Rang_4d)	7 to 8.5	0.5	24	3	60	2	5	200	0.010	0.110	25	100	0.400	2.1	95	2.5	30
Upper Whanganui (Whai_1)	Upper Whanganui (Whai_1)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3	20
	Cherry Grove (Whai_2a)	7 to 8.5	0.5	19	2	80	1.5	5	120	0.010	0.110	20	100	0.400	2.1	95	2.5	30
	Upper Whakapapa (Whai_2b)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3	20
Cherry Grove	Lower Whakapapa (Whai_2c)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3	20
(Whai_2)	Piopiotea (Whai_2d)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3	20
	Pungapunga (Whai_2e)	7 to 8.5	0.5	19	2	80	1.5	5	120	0.010	0.110	20	100	0.400	2.1	95	2.5	30
	Upper Ongarue (Whai_2f)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3	20
	Lower Ongarue (Whai_2g)	7 to 8.5	0.5	19	2	80	1.5	5	120	0.010	0.110	20	100	0.400	2.1	95	2.5	30
Te Maire (Whai_3)	Te Maire (Whai_3)	7 to 8.5	0.5	19	2	80	1.5	5	120	0.010	0.110	20	100	0.400	2.1	95	2.5	30



Water Management	Sub-zone*	рН		Ter (°0	-	DO (%SAT)	scBOD <sub>5</sub> (g/m³)	POM (g/m³)	Periphyton	DRP (g/m³)	SIN (g/m³)	Deposited Sediment Cover (%)	MCI	Ammo Nitro (g/n	gen	Tox.	Visual (	•
Zone*		Range	Δ	<	Δ	>	<	<	Chl <i>a</i> (mg/m²)	<	<	<u>&lt;</u>	>	<	Max	%	< 50 <sup>th</sup> %ile	%∆
	Middle Whanganui (Whai_4a)	7 to 8.5	0.5	19	2	80	1.5	5	120	0.010	0.110	20	100	0.400	2.1	95	2.5	30
Middle Whanganui	Upper Ohura (Whai_4b)	7 to 8.5	0.5	22	3	70	2	5	200	0.015	0.167	25	100	0.400	2.1	95	1.6	30
(Whai_4)	Lower Ohura (Whai_4c)	7 to 8.5	0.5	22	3	70	2	5	200	0.015	0.167	25	100	0.400	2.1	95	1.6	30
	Retaruke (Whai_4d)	7 to 8.5	0.5	19	2	80	1.5	5	120	0.010	0.110	20	100	0.400	2.1	95	2.5	30
	Pipiriki (Whai_5a)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.110	25	100	0.400	2.1	95	2	30
	Tangarakau (Whai_5b)	7 to 8.5	0.5	22	3	70	2	5	200	0.015	0.167	25	100	0.400	2.1	95	1.6	30
	Whangamomona (Whai_5c)	7 to 8.5	0.5	22	3	70	2	5	200	0.015	0.167	25	100	0.400	2.1	95	1.6	30
Pipiriki (Whai_5)	Upper Manganui o te Ao (Whai_5d)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3.4	20
	Makatote (Whai_5e)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3.4	20
	Waimarino (Whai_5f)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3.4	20
	Middle Manganui o teAo (Whai_5g)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3.4	20



Water Management	Sub-zone*	рН		Ter (°0		DO (%SAT)	scBOD <sub>5</sub> (g/m³)	POM (g/m³)	Periphyton	DRP (g/m³)	SIN (g/m³)	Deposited Sediment Cover (%)	MCI	Ammo Nitro (g/n	gen	Tox.	Visual (	
Zone*		Range	Δ	<	Δ	>	<	<	Chla (mg/m²)	<	<	<u>&lt;</u>	>	<	Max	%	< 50 <sup>th</sup> %ile	%∆
	Mangaturuturu (Whai_5h)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3.4	20
	Lower Manganui o teAo (Whai_5i)	7 to 8.5	0.5	19	2	80	1.5	5	120	0.010	0.110	15	120	0.320	1.7	99	3.4	20
	Orautoha (Whai_5j)	7 to 8.5	0.5	19	2	80	1.5	5	120	0.010	0.110	15	120	0.320	1.7	99	3.4	20
Paetawa (Whai_6)	Paetawa (Whai_6)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.110	25	100	0.400	2.1	95	2	30
	Lower Whanganui (Whai_7a)	7 to 8.5	0.5	22	3	70	2	5	200	0.015	0.167	25	100	0.400	2.1	95	1.6	30
Lower Whanganui	Coastal Whanganui (Whai_7b)	7 to 8.5	0.5	24	3	60	2	5	200	0.015	0.167	25	100	0.400	2.1	95	1.6	30
(Whai_7)	Upokongaro (Whai_7c)	7 to 8.5	0.5	22	3	70	2	5	200	0.015	0.167	25	100	0.400	2.1	95	1.6	30
	Matarawa (Whai_7d)	7 to 8.5	0.5	22	3	70	2	5	200	0.015	0.167	25	100	0.400	2.1	95	1.6	30
Upper Whangaehu	Upper Whangaehu (Whau_1a)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3	20
(Whau_1)	Waitangi (Whau_1b)	7 to 8.5	0.5	19	2	80	1.5	5	120	0.010	0.110	20	100	0.400	2.1	95	2.5	30



Water Management	Sub-zone*	рН		Ter (°0		DO (%SAT)	scBOD₅ (g/m³)	POM (g/m³)	Periphyton	DRP (g/m³)	SIN (g/m³)	Deposited Sediment Cover (%)	MCI	Ammo Nitro (g/n	gen	Tox.	Visual (	•
Zone*		Range	Δ	<	Δ	>	<	<	Chl <i>a</i> (mg/m²)	<	<	<u> </u>	>	<	Max	%	< 50 <sup>th</sup> %ile	%∆
	Tokiahuru (Whau_1c)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3	20
Middle Whangaehu (Whau_2)	Middle Whangaehu (Whau_2)	7 to 8.5	0.5	22	3	70	2	5	200	0.015	0.167	25	100	0.400	2.1	95	1.6	30
	Lower Whangaehu (Whau_3a)	7 to 8.5	0.5	22	3	70	2	5	200	0.015	0.167	25	100	0.400	2.1	95	2	30
	Upper Makotuku (Whau_3b)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3	20
Lower	Lower Makotuku (Whau_3c)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3	20
Whangaehu (Whau_3)	Upper Mangawhero (Whau_3d)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3	20
	Lower Mangawhero (Whau_3e)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.110	25	100	0.400	2.1	95	2	30
	Makara (Whau_3f)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	25	120	0.320	1.7	99	3	20
Coastal Whangaehu (Whau_4)	Coastal Whangaehu (Whau_4)	7 to 8.5	0.5	22	3	70	2	5	200	0.015	0.167	25	100	0.400	2.1	95	1.6	30
Turakina (Tura_1)	Upper Turakina (Tura_1a)	7 to 8.5	0.5	22	3	70	2	5	200	0.015	0.167	25	100	0.400	2.1	95	1.6	30



Water Management	Sub-zone*	рН		Tei (°	mp C)	DO (%SAT)	scBOD <sub>5</sub> (g/m³)	POM (g/m³)	Periphyton	DRP (g/m³)	SIN (g/m³)	Deposited Sediment Cover (%)	MCI	Ammo Nitro (g/n	gen	Tox.	Visual (	
Zone*		Range	Δ	<	Δ	>	<	<	Chl <i>a</i> (mg/m²)	<	<	<u>&lt;</u>	>	<	Max	%	< 50 <sup>th</sup> %ile	%Δ
	Lower Turakina (Tura_1b)	7 to 8.5	0.5	22	3	70	2	5	200	0.015	0.167	25	100	0.400	2.1	95	1.6	30
	Ratana (Tura_1c)	7 to 8.5	0.5	24	3	60	2	5	200	0.015	0.167	25	100	0.400	2.1	95	2.5	30
Ohau	Upper Ohau (Ohau_1a)	7 to 8.2	0.5	19	2	80	1.5	5	50	0.006	0.070	15	120	0.320	1.7	99	3	20
(Ohau_1)	Lower Ohau (Ohau_1b)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.110	20	100	0.400	2.1	95	2.5	30
Owahanga (Owha_1)	Owahanga (Owha_1)	7 to 8.5	0.5	22	3	70	2	5	200	0.015	0.167	25	100	0.400	2.1	95	1.6	30
East Coast (East_1)	East Coast (East_1)	7 to 8.5	0.5	22	3	70	2	5	200	0.015	0.167	25	100	0.400	2.1	95	1.6	30
	Upper Akitio (Akit_1a)	7 to 8.5	0.5	22	3	70	2	5	200	0.015	0.167	25	100	0.400	2.1	95	1.6	30
Akitio (Akit_1)	Lower Akitio (Akit_1b)	7 to 8.5	0.5	22	3	70	2	5	200	0.015	0.167	25	100	0.400	2.1	95	1.6	30
	Waihi (Akit_1c)	7 to 8.5	0.5	22	3	70	2	5	200	0.015	0.167	25	100	0.400	2.1	95	1.6	30
Northern Coastal (West_1)	Northern Coastal (West_1)	7 to 8.5	0.5	24	3	60	2	5	200	0.015	0.167	25	100	0.400	2.1	95	2.5	30
Kai lwi (West_2)	Kai lwi (West_2)	7 to 8.5	0.5	22	3	70	2	5	200	0.015	0.167	25	100	0.400	2.1	95	1.6	30
Mowhanau (West_3)	Mowhanau (West_3)	7 to 8.5	0.5	24	3	60	2	5	200	0.015	0.167	25	100	0.400	2.1	95	2.5	30



Water Management	Sub-zone*	рН		Ter (°0		DO (%SAT)	scBOD <sub>5</sub> (g/m³)	POM (g/m³)	Periphyton	DRP (g/m³)	SIN (g/m³)	Deposited Sediment Cover (%)	MCI	Ammo Nitro (g/n	gen	Tox.	Visual (	
Zone*		Range	Δ	<	Δ	>	<	<	Chl <i>a</i> (mg/m²)	<	<	<u>&lt;</u>	>	<	Max	%	< 50 <sup>th</sup> %ile	%Δ
Kaitoke Lakes (West_4)	Kaitoke Lakes (West_4)	7 to 8.5	0.5	24	3	60	2	5	200	0.015	0.167	25	100	0.400	2.1	95	2.5	30
Southern Whanganui Lakes (West_5)	Southern Whanganui Lakes (West_5)	7 to 8.5	0.5	24	3	60	2	5	200	0.015	0.167	25	100	0.400	2.1	95	2.5	30
Northern Manawatu Lakes (West_6)	Northern Manawatu Lakes (West_6)	7 to 8.5	0.5	24	3	60	2	5	200	0.015	0.167	25	100	0.400	2.1	95	2.5	30
Waitarere (West_7)	Waitarere (West_7)	7 to 8.5	0.5	24	3	60	2	5	200	0.015	0.167	25	100	0.400	2.1	95	2.5	30
Lake Papaitonga (West_8)	Lake Papaitonga (West_8)	7 to 8.5	0.5	24	3	60	2	5	200	0.015	0.167	25	100	0.400	2.1	95	2.5	30
Waikawa	Waikawa (West_9a)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.167	20	100	0.400	2.1	95	2.5	30
(West_9)	Manakau (West_9b)	7 to 8.5	0.5	22	3	70	2	5	120	0.010	0.167	20	100	0.400	2.1	95	2.5	30
Lake Horowhenua	Lake Horowhenua (Hoki_1a)	7 to 8.5	0.5	24	3	60	2	5	200	0.015	0.167	25	100	0.400	2.1	95	2.5	30
(Hoki_1)	Hokio (Hoki_1b)	7 to 8.5	0.5	24	3	60	2	5	200	0.015	0.167	25	100	0.400	2.1	95	2.5	30



Table E.3: Additional Water Quality Targets\* (or standards where specified under conditions/standards/terms in a rule) that apply 1 May to 30 September (inclusive) to all Specified Sites/Reaches of Rivers^ with a Trout Spawning (TS) Value

	mp C)	DO (%SAT)	Deposited Sediment or POM	Deposited Sediment Cover (%)	Toxicants (%)
<	Δ	>	Δ3	<b>&lt;</b> <sup>4</sup>	
11	2	80	No measurable increase of deposited sediment or particulate organic matter (POM) on the bed^ of the river^	10	99

The Deposited Sediment Cover (%) Water Quality Target\* (or standard where specified under conditions/standards/terms in a rule) only applies for State of the Environment monitoring purposes to determine if the percentage cover of deposited sediment on the bed of the river will provide for and maintain the values in each WMSZ.



The Deposited Sediment or POM Water Quality Target\* (or standard where specified under conditions/standards/terms in a rule) is only relevant for measuring the change in deposited sediment in relation to a resource consent application for rivers valued for Trout Spawning. Measurements should be undertaken using the deposited sediment protocols of Clapcott et al., (2010).

Table E.4: Lake<sup>^</sup> Water Quality Targets<sup>\*</sup> (or standards where specified under conditions/standards/terms in a rule) (Note: Lake<sup>^</sup> Water Quality Targets<sup>\*</sup> (or standards where specified under conditions/standards/terms in a rule) apply year-round to the waters<sup>^</sup> of types of lakes<sup>^</sup> not excluded by Schedule F Table F.2(b) v to vii)

Lake Type	Algal Biomass Chla (mg/m³)		TP (g/m³)	TN (g/m³)	Ammoniacal Nitrogen (g/m³)	Tox.	Visual Clarity (m)		Euphotic Depth	E. coli	/ 100 ml
	<b>«</b>	Max.	<	<	<5	%	>	%∆	%∆	Summer (1 Nov – 30 Apr)	Winter (1 May – 31 Oct)
Deep lakes (≥ 5 m deep)	5	15	0.020	0.337	0.400	95	2.8	20	10	260	550
Shallow lakes (< 5 m deep)	8	30	0.030	0.490	0.400	95	0.8	20	10	260	550

<sup>5</sup> Water Quality Target\* (or standard where specified under conditions/standards/terms in a rule) only applies when lake pH exceeds 8.5 within the epilimnion (shallow lakes) or within 2 m of the water surface (deep lakes).



Table E.5: Water Quality Targets\* (or standards where specified under conditions/standards/terms in a rule) Key: Definition of abbreviations and full wording of the water quality targets\*

(or standard where specified under conditions/standards/terms in a rule (placement of the numerical values for a specified water quality target\* (or standard where specified under conditions/standards/terms in a rule) are indicated by [...]).

Abbreviations used in Tables E.1 to E.4  Header Sub-header		Full Wording of the Water Quality Target-(or standard where specified under conditions/standards/terms in a rule).					
рп	Δ	The pH of the water^ must not be changed by more than [].					
Temp(°C)	<	The temperature of the water^n must not exceed [] degrees Celsius.					
	Δ	The temperature of the water^n must not be changed by more than [] degrees Celsius.					
DO (%SAT)	>	The concentration of dissolved oxygen (DO) must exceed [] % of saturation.					
sCBOD₅ (g/m³)	<	The monthly average five-days filtered / soluble carbonaceous biochemical oxygen demand (sCBOD <sub>5</sub> ) when the <i>river</i> ^ flow is at or below the 20 <sup>th</sup> <i>flow exceedance</i> percentile* must not exceed [] grams per cubic metre.					
POM (g/m³)	<	The average concentration of particulate organic matter when the <i>river</i> ^ flow is at or below the 50 <sup>th</sup> flow exceedance percentile*must not exceed [] grams per cubic metre.					
	Chla(mg/m²)	The algal biomass on the <i>river</i> ^ <i>bed</i> ^ must not exceed [] milligrams of chlorophyll <i>a</i> per square metre.					
Periphyton	% cover	The maximum cover of visible <i>river</i> ^ <i>bed</i> ^ by periphyton as filamentous algae more than 2 centimetres long must not exceed []%.					
(rivers^)		The maximum cover of visible river bed by periphyton as diatoms or cyanobacteria more than 0.3 centimetres thick must not exceed []%.					
Algal biomass	<	The annual average algal biomass must not exceed [] milligrams chlorophyll a per cubic metre.					
Chla (mg/m³) (lakes^)	Maximum	Samples must not exceed [] milligrams chlorophyll <i>a</i> per cubic metre.					
DRP(g/m³)	<	The annual average concentration of dissolved reactive phosphorus (DRP) when the <i>river</i> ^ flow is at or below the 20 <sup>th</sup> flow exceedance percentile*must not exceed [] grams per cubic metre, unless natural levels already exceed this Water^ Quality Target* (or standard where specified under conditions/standards/terms in a rule).					
TP (g/m³) (lakes^)	<	The annual average concentration of total phosphorus (TP) must not exceed [] grams per cubic metre.					
SIN (g/m³)	<	The annual average concentration of soluble inorganic nitrogen (SIN) <sup>6</sup> when the <i>river</i> <sup>^</sup> flow is at or below the 20 <sup>th</sup> flow exceedance percentile*must not exceed [] grams per cubic metre, unless natural levels already exceed this Water Quality Target* (or standard where specified under conditions/standards/terms in a rule)					
TN (g/m³) (lakes^)	<	The annual average concentration of total nitrogen must not exceed []grams per cubic metre.					
Deposited Sediment Cover <sup>7</sup>	% cover	The maximum cover of visible river bed by deposited sediment less than 2 millimetres in diameter must be less than [] %, unless natural physical conditions are beyond the scope of the application of the deposited sediment protocol of Clapcott et al. (2010).					

The Deposited Sediment Cover (%) Water Quality Target\* (or standard where specified under conditions/standards/terms in a rule) only applies for State of the Environment monitoring purposes to determine if the percentage cover of deposited sediment on the bed of the river will provide for and maintain the values in each WMSZ. The effects of deposited sediment on the bed of rivers in relation to resource consent applications should be determined using the deposited sediment protocols of Clapcott et al. (2010).



Soluble inorganic nitrogen (SIN) concentration is measured as the sum of nitrate nitrogen, nitrite nitrogen, and ammoniacal nitrogen or the sum of total oxidised nitrogen and ammoniacal nitrogen.



Schedule F: Indigenous Biological Diversity

## SCHEDULE F: INDIGENOUS\* BIOLOGICAL DIVERSITY^

Schedule F is a component of Part II - the Regional Plan.

A rare habitat\*, threatened habitat\* or at-risk habitat\* is an area of vegetation or physical substrate which:

- (a) is a habitat type identified in Table F.1 as being "Rare", "Threatened" or "At-risk" respectively,
- (b) meets at least one of the criteria described in Table F.2(a) for the relevant habitat type, and
- (c) is not excluded by any of the criteria in Table F.2(b).

Unless otherwise stated, the habitat types in Table F.1 comprise vegetation that is *indigenous*\*. *Indigenous*\* is defined in the Glossary of the Plan for the purposes of Schedule F and means vegetation comprised predominantly of indigenous species, but which may include *scattered*\* exotic species.

It is recommended that a suitably qualified expert is engaged for assistance with interpreting and applying Schedule F. This could be:

- (a) a consultant ecologist, or
- (b) the Regional Council staff, who currently provide this service free of charge, including advice and a site visit where required in the first instance. It may be that following this initial provision of information, the proposal will require an Assessment of Ecological Effects to be provided as a component of the consent application. In such instances it is recommended that a consultant ecologist be engaged to conduct the assessment.

The Regional Council can, in all cases, provide any spatial data and existing information where available as relevant to the habitat and the proposed activity.

## **Interpreting Schedule F:**

Do I need a resource consent^?

#### YES IF:

the area of vegetation or physical substrate is determined to be habitat type classified as "Rare", "Threatened" or "At-risk" in Table F.1 **AND** it meets any of the criteria in Table F.2(a) **AND** it is not excluded by any of the criteria in Table F.2(b).

#### NO IF:

the area of vegetation or physical substrate is determined to be habitat type that is not classified in Table F.1,



## OR

the area of vegetation or physical substrate is determined to be habitat type classified as "Rare", "Threatened" or "At-risk" in Table F.1 but **does not** meet any of the criteria in Table F.2(a),

### OR

the area of vegetation or physical substrate meets any of the criteria in Table F.2(b).



#### Table F.1:

Table F.1 describes characteristics of habitat types as they are expressed at the regional scale. The "Habitat Type Label" column is intended as a label only and is not intended as a habitat description. The "Defined As" column defines the meaning of the habitat type set out in the "Habitat Type Label" column. The "Further Description" column is to assist Plan users and is not definitive. Patches of any given habitat type may not exhibit all elements considered characteristic of that habitat type. Some species listed may not be present, or be present in different abundances than indicated. Other species not listed can also be present. Sites\* of the same habitat type can exhibit differences from each other. Further, there may be differences in predicted composition and actual composition on the ground, particularly as a result of site\* modification and pest impacts. Unless otherwise stated, the habitat types listed in Table F.1 comprise vegetation that is indigenous\*.

Water Management Zones\* and Sub-zones\* are described in Schedule A.

Habitat Type Label	Defined As	Classification	Further Description		
Forest* and Treeland* Habitat Types Classified as Threatened					
Hardwood/broadleaved forest or treeland	Tawa forest* in association* with other indigenous* broadleaved* species, or tawa dominated* treeland*.	Threatened	Kamahi, hinau and black maire are likely to be <i>common*</i> . <i>Podocarp*</i> species such as kahikatea, rimu or totara may be emergent above the <i>canopy*</i> . Titoki, rewarewa or northern rata may also be a feature. The subcanopy is likely to comprise <i>common* indigenous* broadleaved*</i> species.  This habitat type is found in hill country north of Wanganui and the east coast at elevations of 0 - 150 m asl.		
Kahikatea-pukatea-tawa forest or treeland	Kahikatea dominated* forest* or treeland* on lowland alluvium and floodplains commonly found in association* with pukatea and tawa.	Threatened	This habitat type is likely to be characterised by the presence of the swamp <i>forest*</i> species kahikatea and pukatea. Tawa will be <i>common*</i> on the drier, better drained or raised areas. Matai, rimu and totara can be present but are restricted to areas of better-drained soils. Titoki is also likely to be <i>common*</i> .  Kahikatea-pukatea-tawa forest is found on alluvial soils throughout the Region predominantly at elevations between 0 - 350 m but also up to 650 m asl.		
Podocarp forest or treeland	Podocarp* forest* or treeland* dominated* by matai, kahikatea or totara.	Threatened	The dominance of any of these species is dependent on the drainage capability of the soil and history of past disturbance. Totara and matai are likely to be more <i>abundant</i> * on free-draining soils, with kahikatea likely to be <i>dominant</i> * on poorly-drained soils. <i>Indigenous</i> * <i>broadleaved</i> * species (for example titoki, tawa, maire and fuchsia) are likely to be found in <i>association</i> * with the <i>podocarp</i> * species, but will be less <i>abundant</i> * than the <i>podocarp</i> * species.  Podocarp forest is mostly confined to the Wanganui, Rangitikei and Ruapehu Districts, from sea level to 900 m asl.		
Podocarp/broadleaf- fuchsia forest or treeland	Podocarp* dominated* forest* over a subcanopy of broadleaf and fuchsia, or podocarp* dominated* treeland*.  The podocarp* species matai, totara, kahikatea or rimu, will be present at varying levels of abundance*.	Threatened	This habitat type tends to favour adequately drained and reasonably fertile soils. Although typically a feature of this habitat type, fuchsia is favoured by possums and may be uncommon in many areas. Broadleaf ( <i>Griselinia</i> ), and <i>indigenous*</i> climbers and epiphytes are also likely to be <i>common*</i> . Kamahi may also be present but typical <i>indigenous*</i> broadleaved* species may be lacking.  This habitat is largely confined to small isolated areas in high rainfall areas of the hill country in Ruapehu, Wanganui, Tararua and Manawatu Districts, from 400 - 900 m asl.		



Habitat Type Label	Defined As	Classification	Further Description
Podocarp/tawa-mahoe forest or treeland	Tawa and mahoe dominated* forest* or treeland* with scattered* emergent podocarp* species.	Threatened	Kahikatea or matai trees are likely to be present in the <i>canopy*</i> or as emergent trees. Rimu and totara may also be present in low numbers. Titoki, hinau, maire or pukatea may also be present. The subcanopy is likely to comprise <i>common* indigenous* broadleaved*</i> species.
Rimu/tawa-kamahi forest or treeland	Tawa and kamahi dominated* forest* or treeland* with scattered* emergent rimu.	Threatened	This habitat type is found on dry dune land^ and low hill country (from sea level to 750 m asl).  Hinau, rewarewa or mahoe are likely to be common*. Rimu may be a feature of this habitat type, although its frequency will be dependent on the history of disturbance of the site*. Miro and totara may also be present with kahikatea and matai likely to be less common*. Pukatea is commonly likely to be present, particularly in valleys. Black beech may be locally common* on dry ridges in hill country (eg., inland from Wanganui). Common* indigenous* broadleaved* species are also likely to be present in the understorey.
Podocarp/red beech- kamahi-tawa forest or	Red beech, kamahi and tawa dominated* forest* or treeland*	Threatened	Rimu/tawa-kamahi forest can be found in all Districts of the Region from sea level to 800 m asl.  Podocarp* species such as rimu, Hall's totara and miro may be present scattered* through the canopy* or as emergent trees. Indigenous* broadleaved* species may also be present in the subcanopy and understorey.
treeland	occurring between 400 - 700 m asl.		At the higher altitudes of the range of this habitat type, silver beech becomes increasingly <i>dominant*</i> .
Podocarp/black beech/mountain beech forest or treeland	Black beech and mountain beech dominated* forest* or treeland* occurring between 400 - 1250 m asl.	Threatened	Podocarp/red beech-kamahi-tawa forest is largely confined to the Rang_2b Water Management Sub-zone*.  Emergent podocarp* species (eg., matai, totara, kahikatea, rimu or miro) can be present as emergent trees, but are not dominant*. Small indigenous* broadleaf trees are also likely to be present.
Hall's totara/silver beech-kamahi forest or treeland	Silver beech dominant* forest* or treeland* in association* with abundant* kamahi occurring between 750 - 1400 m asl.	Threatened	This habitat type is found in dry climates, on free-draining, relatively fertile soils.  Indigenous* conifer species such as Hall's totara, pahautea, totara, rimu and miro are likely to be emergent at lower elevations where silver beech is less dominant*. Northern rata may be scattered* throughout, although its relative abundance* is strongly influenced by the effects (current or historic) of possum.
Kowhai-broadleaved forest or treeland	Forest* or treeland* dominated* by kowhai on river^ terraces, river^ risers or cliffs and bluffs associated with rivers^.	Threatened	This habitat type is found in the montane areas of the Rangitikei and Manawatu Districts.  Kowhai-broadleaved* forest* is typically low-growing forest* or treeland*, often with a mixture of small tree* species and shrubs* including lacebark, ribbonwood, kanuka and indigenous* divaricating shrubs*.  The absence of a dense canopy* of tawa or kamahi from this habitat type is notable.
	This habitat type is found in the central area of the Region, within the following <i>Water Management Subzones*</i> : Akit_1a, Akit_1b, Akit_1c, Mana_1a, Mana_1b, Mana_1c, Mana_7a, Mana_7b, Mana_7c,		



Habitat Type Label	Defined As	Classification	Further Description
	Mana_7d, Mana_12d, Rang_2b, Rang_2e, Rang_2f, Rang_2g, Rang_3a, Rang_3b, Rang_4c, Whai_6, Whai_7a, Whai_7c, Whai_7d, Whau_2, Whau_3a, Whau_3e, Tura_1a, Tura_1b.		
Kanuka forest or treeland	Kanuka forest* or treeland* is dominated* by almost pure stands of well-developed kanuka. This habitat type is differentiated from kanuka scrub* by size (greater than 4.5 m tall or 20 cm diameter measured at 1.4 metres above the ground.	Threatened	Manuka and typical <i>indigenous* broadleaved*</i> species can also be present <i>scattered*</i> through the <i>canopy*</i> or understorey but will not be <i>dominant*</i> .
	b* or Shrubland* Habitat Types Class		
Podocarp/kamahi forest or treeland	Podocarp* forest* or treeland* dominated* by rimu, miro, kahikatea, matai or totara in varying dominance over abundant* kamahi.	At-risk	The degree of dominance of each of the <i>podocarp*</i> species will be dependent on soil drainage and past disturbance history. Totara, miro and matai are likely to be more <i>abundant*</i> on free-draining soils, with kahikatea likely to be <i>dominant*</i> on poorly-drained soils. Rimu will likely be <i>dominant*</i> in areas of high rainfall. Tawa, northern rata, hinau, black and white maire, fuchsia and/or mahoe may also be present.  Podocarp/kamahi forest can be found throughout the Region, excluding the western lowland area, predominantly at elevations between 150 - 900 m asl. However, Podocarp/kamahi forest can also be found between 50 - 1100 m asl.
Hall's totara/broadleaf forest or treeland	Hall's totara and broadleaf dominant* forest* or treeland* in montane sites* lacking beech.	At-risk	Pahautea can be co-dominant* in this habitat type, but is absent from the northern Tararua Ranges, where mountain toatoa is likely to be locally common*. Matai and miro can be present at the lower altitudes in this habitat type. Kamahi can also be a component of this habitat type, and will be more common* in wetter climates. Rimu is not a feature of this habitat type as Hall's totara/broadleaf forest is mostly found above the altitudinal limit of rimu.  Hall's totara/broadleaf forest is the dominant* habitat type above 800 m asl where beech is absent, but can also be found to elevations as low as 450 m asl.
Mountain beech forest or treeland	Mountain beech dominated* forest* or treeland*.	At-risk	This habitat type often occurs without many other <i>tree*</i> species, although upland conifers (eg., Hall's totara, pahautea, and mountain toatoa) and other species (eg., silver beech, broadleaf) may be present (but not <i>common*</i> ) in places, especially at lower elevations or where rainfall is higher. The understorey of mountain beech <i>forest*</i> is typically sparse. Mountain beech can tolerate cold temperatures, dry winds, and low fertility soils.  Mountain beech forest can be the predominant habitat type at higher altitudes (650 - 1450 m asl), especially on eastern <i>sites*</i> and in areas with harsh environmental conditions.



Habitat Type Label	Defined As	Classification	Further Description
Indigenous forest, treeland or scrub on alluvial terrace, floodplains, shingle fans or sand dunes supporting divaricating plant species	Indigenous* forest*, treeland*, or scrub* on alluvial terraces or floodplains in areas prone to summer drought and water-logging and frost during winter, that provides habitat for any of the following: Gardners tree daisy (Olearia gardnerii), heart-leaved kohuhu (Pittosporum obcordatum), Coprosma obconica, Coprosma wallii, Melicytus flexuosus, fierce lancewood (Pseudopanax ferox), OR	At-risk	This habitat type supports threatened or regionally uncommon divaricating plant species.  This habitat type may be the result of disturbance (naturally or human induced), contain exotic species, or other indigenous* divaricating species than those listed here, or be found in association* with another habitat type (eg., Podocarp-broadleaf forest).  Although these species may occur together or in isolation throughout the Region, this habitat type is mostly found in the Middle Rangitikei Water Management Zone* (Rang_2), with matagouri mostly found on sand country of the west coast of the Region, the East Coast Management Zone (East_1) and the Upper Whangaehu (Whau_1).
Indigenous forest or scrub containing Powelliphanta land snails	Indigenous* forest*, treeland*, or scrub* on freely draining shingle fans, river^ terraces and sand dunes that provides habitat for matagouri (Discaria toumatou).  Indigenous* forest* or scrub* habitat containing Powelliphanta traversi traversi or Powelliphanta traversi tararuaensis land snails.  This habitat type is found in Lake Papaitonga (West_8), Lake Horowhenua (Hoki_1a), Kahuterawa (Mana_11c) and Mangaore (Mana_13d) Water Management Sub-zones*.	At-risk	Powelliphanta traversi traversi may be found under leaf litter of forest* comprising pukatea, kahikatea and maire tawake in wet sites*, and tawa, kohekohe, karaka, and totara in drier sites* located in the Water Management Subzones* referred to which are found on the Horowhenua Plains.  Powelliphanta traversi tararuaensis may be found under leaf litter and bush rice grass in forest* comprising rimu and miro with rewarewa and pigeonwood in sites* with seepages, and where fertile alluvial soils or litter have accumulated, or in scrub* dominated* by wheki.  Either species of land snail may be present in even small and modified fragments of this habitat type.



Habitat Type Label	Defined As	Classification	Further Description
Riparian margin	Any indigenous* or exotic woody vegetation* that is forest*, treeland*, scrub*, or shrubland*, that is not classified elsewhere in Schedule F as rare* or threatened*, within 20 m landwards from the top of the river^ bank adjacent to a site* identified in Schedule B as being a Site of Significance - Aquatic.	At-risk	Riparian margin vegetation comprises <i>indigenous*</i> woody vegetation*, exotic woody vegetation*, or a combination of both <i>indigenous*</i> and exotic woody vegetation*. This habitat type varies greatly between <i>sites*</i> in both structure and composition, and might be highly modified, contain artificial assemblages of species or include deliberately planted woody species ( <i>indigenous*</i> or exotic).
Tussockland* Habitat T	ype Classified as At-risk		
Indigenous tussockland below the treeline	Red tussock ( <i>Chionochloa rubra</i> subsp. <i>rubra</i> var. <i>rubra</i> ) <i>dominated* tussockland*</i> below the treeline in areas with natural or human induced disturbance regimes, high <i>water</i> <sup>^</sup> tables or temperature inversions.  This habitat type is found in Rang_1, Rang_2a, Rang_2b, Rang_2c, Rang_2d, Rang_2e, and Rang_2f, <i>Water Management Sub-zones*</i> .  This habitat type located within the beds* or rivers* is excluded.	At-risk	Red tussock is particularly <i>dominant*</i> in humid climates on moist soils. Other tussock species that can be present include silver tussock and blue tussock. Silver tussock will be more important on higher fertility disturbed areas. Blue tussock may be uncommonly present as an inter-tussock species amongst red tussock.  Indigenous* and exotic woody species (eg., heather, monoao, Hebe, manuka and kanuka) are likely to be increasingly present as natural successional processes advance.
Wetland <sup>A</sup> Hahitat Tynes	s Classified as Rare or Threatened		
Dune slack wetland	Dune slack wetlands^ support low- growing indigenous* herbfield* and occur in topographically low sites* where wind has eroded hollows or depressions in raw sand, or where water^ is permanently or seasonally ponded.	Rare	Dune slack wetlands^ are found close to the sea on sand country, and can comprise a mosaic of indigenous* vegetation and bare sand. Exotic species are frequently present.
Ephemeral wetland	Ephemeral wetlands^ support indigenous* turf (<3 cm tall) species, indigenous* rushland* and indigenous* scrub*, are most frequently found in depressions	Rare	Ephemeral wetlands^ are of moderate fertility, neutral pH and fed by groundwater or an adjacent water body^.  Seasonal variations in rainfall and evaporation result in seasonal variation in water^ level. Ephemeral wetlands^ may experience complete drying in summer months or dry years.  Ephemeral wetlands^ are found on sand country (although they also occur elsewhere), and may comprise a



Habitat Type Label	Defined As	Classification	Further Description
	lacking a surface outlet, and are characterised by a marked seasonal ponding and drying.		mosaic of <i>indigenous</i> * vegetation and bare sand. Fluctuations between aquatic and terrestrial plant species often occur and exotic species are frequently present.
Bog and fen wetland	Bog wetlands^ support indigenous* mosses, lichens, cushion plants, sedges, grasses, restiads, ferns, shrubs* and trees* and are formed on peat with rainwater the only source of water^.  Fen wetlands^ support indigenous* restiads, sedges, ferns, tall herbs, tussock grasses and scrub* and are on predominantly peat. Fen wetlands^ receive inputs from groundwater and nutrients from adjacent mineral soils.	Threatened	Bog wetlands^ can be found on relatively level or gently sloping ground including hill crests, basins, terraces and within other wetland^ classes. Bog wetlands^ are nutrient poor, poorly drained and aerated, and usually acid. The water^ table is often close to or just above the ground surface.  Fen wetlands^ can be found on slight slopes (eg., fans), toes of hillsides, or on level ground without much accumulation of peat. Fen wetlands^ can grade into swamp wetland^. Fen wetlands^ are of low to moderate acidity and fertility and the water^ table is usually close to or just below the surface.  Bog wetlands^ and fen wetlands^ are often found in association* with each other and are dominated* by indigenous* species, but exotic species can also be present.
Pakihi wetland	Pakihi wetlands^ support indigenous* restiads, sedges, fernland*, shrubland* and heathland*. Pakihi wetlands^ are rain-fed systems on mineral or peat, or mature, skeletal soils.	Rare	Pakihi wetlands^ can be found on level to rolling or sloping land^ in areas of high rainfall. Pakihi wetlands^ are of very low fertility and low pH and are frequently saturated, but can be seasonally dry.  Pakihi wetlands^ are often found in association* with bog and fen wetlands^. Exotic species can also be present.
Seepage and spring wetland	Seepage wetlands^ support indigenous* sedgeland*, cushionfield*, mossfield* or scrub*, occur on slopes, and are fed by groundwater.  A spring wetland^ occurs at the point	Rare	Seepage and spring wetlands^ can be found at the point of change of slopes and places where the water^ table is raised. Seepage wetlands^ are often also fed by surface water^ including where groundwater has percolated to the surface. Substrates (ranging from raw or well-developed mineral soil to peat), nutrient levels and pH vary from site* to site*.  Seepage and spring wetlands^ are often small and can occur as isolated systems or in association* with other wetland^ types. The volume of water^ within a seepage system is less than that within a spring system.
	that an underground stream emerges at a point source.		Seepage and spring wetlands^ are dominated* by indigenous* species but exotic species can also be present.



Habitat Type Label	Defined As	Classification	Further Description
Swamp and marsh wetland	Swamp and marsh wetlands^ support indigenous* sedges, rushes, reeds, flaxland*, tall herbs, herbfield*, shrubs*, scrub* and forest*.  Swamp wetlands^ are generally of high fertility, receiving nutrients and sediment from surface run-off and groundwater.  Marsh wetlands^ are mineral wetlands^ with good to moderate drainage that are mainly groundwater or surface water^ fed and characterised by fluctuation of the water^ table.	Threatened	Substrates within swamp and marsh wetlands^ are generally a combination of peat and mineral substrates. Standing water^ and surface channels are often present, with the water^ table either permanently, or periodically, above much of the ground surface.  Swamp and marsh wetlands^ can usually be found on plains, valley floors and basins. Marsh wetlands^ can be differentiated from swamp wetlands^ by having better drainage, generally a lower water^ table and usually a more mineral substrate and higher pH. Exotic species are frequently present in both wetland^ types.
Saltmarsh wetland	Saltmarsh wetlands^ support herbfield*, rushland* and scrub*, form within areas of tidal intertidal zones, and are fed from groundwater and estuary waters^. Saltmarsh wetlands^ occur in association* with mudflats.	Threatened	Water <sup>^</sup> within a saltmarsh wetland <sup>^</sup> can be saline or brackish. Substrates are typically mineral.  Saltmarsh wetland <sup>^</sup> can comprise a mosaic of indigenous* species and bare substrate (mudflats). Exotic species can be present. In some places the mudflats can be extensive and are characteristic of estuarine wetland <sup>^</sup> systems.
Lakes and lagoons and their margins	Lakes and lagoons support indigenous* aquatic plants (emergent, floating, submerged or rafted), and indigenous* rushes, reeds, sedges, sedgeland*, flaxland*, reedland* turf (< 3 cm tall), herbfield*, scrub* and shrubs* on the margins. Indigenous* terrestrial vegetation (such as scrub*, shrub* species, shrubland*, treeland* and forest*) can also be found in association* with lake and lagoon margins.	Threatened	Lakes and lagoons in the Region are associated with dune, <i>river</i> ^, and volcanic landforms and include dune lakes, ox-bow lakes and tarns.  Lakes and lagoons can exist in isolation, be entirely within, or have elements of, other <i>wetland</i> ^ habitat types.  Exotic species (aquatic, <i>wetland</i> ^ or terrestrial) may also be present.



Habitat Type Label	Defined As	Classification	Further Description
Naturally Uncommon Ha	Lakes are areas of standing (non-flowing) water^. Lagoons are shallow lakes, connected to, or independent of, a river^, lake or the sea.  abitat Types Classified as Rare		
Coastal rock stacks, cliffs, scarps and tors	Where bare substrate, or indigenous* lichenfield*, tussockland*, herbfield*, shrubland* or scrub*, occurs on rock stacks, cliffs, scarps or tors in the coastal climatic zone.  OR  Where bare substrate or herbfield* dominated* by indigenous* species occurs on flat land^ at the top of coastal cliffs.	Rare	Vegetation types typically found in this habitat include <i>indigenous*</i> lichen species, non-woody or low-growing semi-woody herbs, tussocks, <i>shrubs*</i> and <i>scrub*</i> . Species characteristic of these vegetation types include, for example, <i>Pimelea</i> , sea primrose, <i>Selliera</i> , <i>Myosotis</i> , shore puha, flax, toetoe, <i>Astelia</i> , <i>Hebe</i> , daisy species, kawakawa, mahoe and broadleaf. Exotic species may also be present.  This habitat type may be of any rock type including basic, calcareous, quartzose, acidic and ultrabasic rocks. It is found only in the coastal climatic zone, usually within 1km of the coast and less than 300m asl.
Cliffs, scarps, and tors of acidic rock	Where bare substrate or indigenous* lichenfield*, tussockland*, herbfield*, shrubland* or scrub*, occur on cliffs, scarps or tors of acidic rock.  Acidic rock types include mudstone (papa), sandstone, greywacke, rhyolite, granite and schist.	Rare	Vegetation types typically found in this habitat include <i>indigenous*</i> lichen species, non-woody or low-growing semi-woody herbs, tussocks, <i>shrubs*</i> and <i>scrub*</i> . Species characteristic of these vegetation types include, for example, Pimelea, Myosotis, flax, toetoe, Astelia, Hebe, daisy and tree-daisy species, <i>Gaultheria, Dracophyllum,</i> mahoe and broadleaf. Exotic species may also be present.  In-situ bedrock and other bare substrate is an important part of these habitats and occurs in a mosaic of vegetation communities representing different times since disturbance.
Cliffs, scarps and tors of quartzose rock	Where bare substrate or indigenous* lichenfield*, tussockland*, herbfield*, shrubland* or scrub*, occur on cliffs, scarps or tors of quartzose rock.  Quartzose rock types include quartzite and soft quartzitic sediments.	Rare	Vegetation types typically found in this habitat include <i>indigenous</i> * lichen species, non-woody or low-growing semi-woody herbs, tussocks, <i>shrubs</i> * and <i>scrub</i> *. Species characteristic of these vegetation types include, for example, <i>Pimelea, Myosotis</i> , flax, toetoe, <i>Astelia, Hebe</i> , daisy and tree-daisy species, <i>Gaultheria, Dracophyllum</i> , mahoe and broadleaf. Exotic species may also be present.  In-situ bedrock and other bare substrate is an important part of these habitats and occurs in a mosaic of vegetation communities representing different times since disturbance.



Habitat Type Label	Defined As	Classification	Further Description
Cliffs, scarps and tors of basic and calcareous rock	Where bare substrate or indigenous* lichenfield*, tussockland*, herbfield*, shrubland* or scrub*, occur on cliffs, scarps or tors of basic and calcareous rock.  Calcareous rocks include limestone, marble, dolomite and calcareous mudstone. Basic rocks include tuffaceous mud- and sandstone, andesite, diorite, basalt and gabbro.	Rare	Vegetation types typically found in this habitat include <i>indigenous*</i> lichen species, non-woody or low-growing semiwoody herbs, tussocks, <i>shrubs*</i> and <i>scrub*</i> . Species characteristic of these vegetation types include, for example, <i>Pimelea, Myosotis</i> , flax, toetoe, <i>Astelia, Hebe</i> , daisy and tree-daisy species, ferns, <i>Gaultheria, Dracophyllum</i> , mahoe and broadleaf. Exotic species may also be present.  In-situ bedrock and other bare substrate is an important part of these habitats and occurs in a mosaic of vegetation communities representing different times since disturbance.
Karst systems	Bare substrate or indigenous* shrubland*, tussockland*, flaxland*, or herbfield*, occurring in sinkholes, cave entrances, caves and cracks in karst systems.	Rare	Karst systems are found on limestone, marble, dolomite or calcareous rock, and can be subterranean or semi-subterranean.  Karst systems provide habitat for highly specialised <i>indigenous*</i> species (often <i>endemic*</i> ) that are adapted to subterranean environments.  Karst systems are known in the Region from the Whanganui and Pohangina Valleys.
Screes* of acidic rock	Bare substrate or indigenous* lichenfield*, tussockland*, herbfield*, shrubland* or scrub* occurring on screes* of acidic rock.  Acidic rock types include silicic (rhyolite, granite and gneiss) and silicic intermediate (mudstone, sandstone, greywacke, schist, other sedimentary, ignimbrite and andesite) types.	Rare	Includes slopes covered in shingle, cobbles of acidic rock which may or may not support vegetation. Bare substrate is a characteristic feature of this habitat type.  Screes may be found associated with a boulderfield, cliff or scarp. They provide habitat for a range of plants, invertebrates and lizards including the threatened small scaled skink ( <i>Oligosomia microlepis</i> ).  Exotic species may also be present.
Screes* of calcareous rock	Bare substrate or indigenous* lichenfield*, tussockland*, herbfield*, shrubland* or scrub* occurring on screes* of calcareous rock.  Calcareous rocks include limestone, marble, dolomite ad calcareous mudstone.	Rare	Includes slopes covered in shingle, gravel or cobbles of calcareous rock which may or may not support vegetation.  Bare substrate is a characteristic feature of this habitat type.  Screes may be found associated with a larger cliff or scarp. They provide habitat for a range of plants, invertebrates and lizards, including the threatened small-scaled skink (Oligosomia microlepis).  Exotic species may also be present.



Habitat Type Label	Defined As	Classification	Further Description
Boulderfields* of acidic rock	Bare substrate or indigenous* lichenfield*, tussockland*, herbfield*, shrubland* or scrub* occurring on boulderfields* of acidic rock.  Acidic rock types include silicic (rhyolite, granite and gneiss) and silicic intermediate (mudstone, sandstone, greywacke, schist, and other sedimentary) types.	Rare	Includes slopes covered in boulders of acidic rock which may or may not support vegetation. Bare substrate is a characteristic feature of this habitat type.  **Boulderfields** may be found associated with a larger cliff or scarp. They provide habitat for a range of plants, invertebrates and lizards, including the threatened small-scaled skink (*Oligosomia microlepis**).  Exotic species may also be present.
Boulderfields* of volcanic rock	Bare substrate or indigenous* lichenfield*, tussockland*, herbfield*, shrubland* or scrub* occurring on boulderfields* of volcanic rock.  Volcanic rock types include ignimbrite, andesite, and basalt.	Rare	Includes slopes covered in boulders of volcanic rock which may or may not support vegetation. Bare substrate is a characteristic feature of this habitat type.  **Boulderfields** may be found associated with a larger cliff or scarp. They provide habitat for a range of plants, invertebrates and lizards, including the threatened small-scaled skink (*Oligosomia microlepis*).  Exotic species may also be present.
Boulderfields* of basic and calcareous rock	Bare substrate or indigenous* lichenfield*, tussockland*, herbfield*, shrubland* or scrub* occurring on boulderfields* of basic or calcareous rock.  Calcareous rocks include limestone, marble, dolomite and calcareous mudstone. Basic rocks include tuffaceous mud- and sandstone, andesite, diorite, basalt and gabbro.	Rare	Includes slopes covered in boulders of basic or calcareous which may or may not support vegetation. Bare substrate is a characteristic feature of this habitat type.  **Boulderfields** may be found associated with a larger cliff or scarp. They provide habitat for a range of plants, invertebrates and lizards, including the threatened small-scaled skink (*Oligosomia microlepis**).  Exotic species may also be present.
Active duneland	Indigenous* grassland* or sedgeland* occurring on active duneland* formed on raw coastal sand.	Rare	Active duneland* is characterised by unstable sands. This continual instability of sand prevents the formation of soil and therefore the vegetation type that an active duneland* can support is limited. Examples are Spinifex grassland* and pingao sedgeland*. Other indigenous* species can also be present eg., Sand convolvulus and sand Carex. Exotic species will also be present.  The instability of the sand provides constant disturbance and therefore creates environments within which species can establish. Continual change of the mosaic of bare sand and vegetation is an important component of active duneland*.



Habitat Type Label	Defined As	Classification	Further Description
Stable duneland	Indigenous* grassland*, tussockland*, herbfield* (including Pimelea actea and P. arenaria), or shrubland* occurring on stable duneland* formed on recent coastal sand.	Rare	Vegetation types typically occurring on stable <i>duneland*</i> include tussocks, low-growing or semi-woody herbs and <i>shrubs*</i> . These vegetation types characteristically support, for example, toetoe, <i>Selliera rotundifolia</i> , sand Gunnera, native spinach, sand Coprosma, sand daphne, coastal tree daisy, pohuehue, tauhinu, Coprosma species and hangehange. Exotic invasive species are also a feature of stable <i>duneland*</i> .  The threatened species <i>Pimelea actea</i> is known from the Tura_1b, West_5, and Whau_4 <i>Water Management</i>
Inland duneland	and Indigenous* scrub*, tussockland*, Rare herbfield* or forest* occurring on		Zones*.  Vegetation types typically found on inland <i>duneland</i> * include tussock, low-growing or semi-woody herbs, <i>shrubs</i> *, and <i>trees</i> *. These vegetation types characteristically support, for example, toetoe, flax, native spinach, manuka,
	inland <i>duneland</i> * formed on raw or recent sands inland.		kanuka, mahoe, lancewood, five-finger, hangehange, cabbage trees, titoki, akeake, ngaio, tawa, pigeonwood and mahoe. Exotic species may also be present.





#### Table F.2(a):

An area of any habitat type described in Table F.1 must meet at least one of the following criteria that apply to the relevant habitat type before it qualifies as a *rare habitat\**, *threatened habitat\** or *at-risk habitat\** for the purposes of this Plan.

#### Forest\*, Treeland\*, Scrub\* or Shrubland\* Habitat Types Classified as Threatened or At-risk

- Areas of continuous\* indigenous\* vegetation where:
  - (a) if it is habitat type classified as Threatened then the habitat must cover at least 0.25 ha, or
  - (b) if it is habitat type classified as At-risk then the habitat must cover at least 0.5 ha where:
    - 1. it supports indigenous\* understorey vegetation, or
    - 2. it is present within a gully system, or
  - (c) if it is habitat type classified as At-risk the habitat must cover at least 1 ha unless (b) above applies.

Or

- ii. Areas of discontinuous\* indigenous\* vegetation where:
  - (a) if it is habitat type classified as Threatened where it occurs as treeland\* it covers at least 1 ha, or
  - (b) if it is habitat type classified as At-risk where it occurs as treeland\* it covers at least 2 ha, or
  - (c) if it is habitat type classified as either Threatened or At-risk other than *treeland\** it covers at least 1 ha except if it is present within 50 m of an area of *continuous\** indigenous\* vegetation it covers at least 0.5 ha.

Or

iii. Areas containing Olearia gardnerii, Pittosporum obcordatum, Coprosma obconica, Coprosma wallii, Melicytus flexuosus, Pseudopanax ferox or Discaria toumatou covering at least 0.1 ha.

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iv. An area of indigenous\* vegetation of any size containing Powelliphanta land snails.

Or

v. An area of woody vegetation\* of any size or species composition (including exotic vegetation) within 20 m landwards from the top of the *river*^ bank adjacent to an area identified in Schedule B as being a Site of Significance - Aquatic.

Or

vi. Areas of *indigenous*\* vegetation that have been established for the purpose of habitat manipulation including habitat creation, restoration and buffering, where such an area covers at least 1 ha as a discrete *site*\* or at least 0.5 ha where it is adjacent to an existing area of *indigenous*\* habitat.

Or

#### Tussockland\* Habitat Type Classified as At-risk

vii. An area of indigenous\* tussockland\* covering at least 0.5 ha.

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#### Wetland<sup>^</sup> Habitat Types Classified as Threatened

viii. Areas of naturally occurring *indigenous\* wetland*^ habitat covering at least 0.1 ha.

Or

ix. Areas of indigenous\* vegetation that have been established in the course of wetland^ habitat restoration.

Or

x. Areas of artificially created *indigenous\** wetland^ habitat covering at least 0.5 ha.

Or

#### Naturally Uncommon Habitat Types and Wetland<sup>^</sup> Habitat Types Classified as Rare

xi. Habitat type that is classified as Rare that covers at least 0.05 ha.

Or

xii. Areas of *indigenous*\* habitat created at some time in the course of dune habitat restoration (including dune stabilisation).



#### Table F.2(b):

If an area of any habitat type described in Table F.1 meets any of the following criteria it must not be *rare habitat\**, *threatened habitat\** or *at-risk habitat\** for the purposes of this Plan.

#### Forest\*, Treeland\*, Scrub\*, or Shrubland\* Habitat Types Classified as Threatened or At-risk

i. Areas of indigenous\* tree\* species planted for the purposes of timber harvest.

Or

ii. Indigenous\* vegetation planted for landscaping, horticultural, shelter belts, gardening or amenity purposes.

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#### Wetland<sup>^</sup> Habitat Types Classified as Rare or Threatened

iii. Damp gully heads, or paddocks subject to regular ponding, *dominated\** by pasture or exotic species in association\* with wetland^ sedge and rush species.

Or

iv. Ditches or drains supporting raupo, flax or other wetland species (eg., *Carex* sp., *Isolepis* sp.), or populations of these species in drains or slumps associated with road reserves or rail corridors.

Or

- v. Areas of wetland^ habitat specifically designed, installed and maintained for any of the following purposes:
  - (a) stock watering (including stock ponds), or
  - (b) water storage for the purposes of fire fighting or irrigation (including old gravel pits), or
  - (c) treatment of animal effluent (including pond or barrier ditch systems), or
  - (d) wastewater treatment, or
  - (e) sediment control, or
  - (f) any hydroelectric power generation scheme, or
  - (g) water^ storage for the purposes of public water supplies\*.

Or

vi. Areas of wetland^ habitat maintained in relation to the implementation of any resource consent^ conditions^ or agreements relating to the operation\* of any hydroelectric power scheme currently lawfully established.

Or

vii. Open *water*<sup>^</sup> and associated vegetation created for landscaping purposes or amenity values where the planted vegetation is predominately exotic, or includes assemblages of species not naturally found in *association*\* with each other, on the particular landform, or at the geographical location of the created *site*\*.

#### Tussockland\* Habitat Type Classified as At-risk

viii. Red tussock regenerating through pasture dominated by exotic grass species.



Schedule G:
Regionally Outstanding Natural
Features and Landscapes

# Schedule G: Regionally Outstanding Natural Features and Landscapes

Schedule G is a component of Part I - the Regional Policy Statement.

Table G.1 lists some regionally outstanding natural features and landscapes in the Manawatu-Wanganui Region and their associated characteristics and values in narrative form.

The extent of these regionally outstanding natural features and landscapes, in particular the coastline of the Region, has not been well defined. Therefore, assessments will be required using the approach set out in Policy 6-7 and the criteria listed in Table 6.1 at the time that any use or development is proposed for those areas, so that the actual location of the feature or landscape can be defined in relation to the use or development proposal.

Regionally outstanding natural features and landscapes in the Region include the following:

Table G.1

Out	standing Natural Features or Landscapes	Cha	racteristics / Values
(a)	Tongariro National Park		Visual and scenic characteristics, particularly the park's visual prominence in the Region and the contrast of the Rangipo desert with adjacent landscapes
		(ii)	Geological features including the Rangataua Lava Flow
		(iii)	Recreational values, particularly tramping and snow sports
		(iv)	Scientific value, particularly the volcanic landscape
		(v)	Ecological value, particularly the mountainous ecology and the extensive tussock grasslands and wetlands supporting rare indigenous flora
		(vi)	Importance to tangata whenua
(b)	Whakapapa River and river valley, including all of the	(i)	Visual and scenic characteristics
	river catchment	(ii)	Recreational values
		(iii)	Ecological significance, particularly in providing a habitat for the Blue Duck (whio)
(c)	Whanganui River and river valley, upstream of Aramoana	(i)	Scenic qualities provided by the gorge landscapes and papa rock formations
		(ii)	Recreational values, particularly tramping and hunting, and those provided by the water and riparian margins
		(iii)	Ecological value provided by the presence of original forest remnants
		(iv)	Importance to tangata whenua
		(v)	Historic heritage, in particular historical importance and numerous archaeological sites
(d)	Whanganui National Park	(i)	Visual and scenic characteristics, particularly the gorge landscapes and papa rock formations
		(ii)	Ecological significance, particularly for providing habitat for rare bird species, the presence of mature indigenous forest, contribution to the national conservation estate, wilderness
		(iii)	Intrinsic value
		(iv)	Importance to tangata whenua



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Out	standing Natural Features or Landscapes	Cha	racteristics / Values
		(v)	Recreational values, particularly tramping and hunting, and those provided by the water and riparian margins
		(vi)	Recognised protection – national park
		(vii)	Historic heritage, in particular historical importance and numerous archaeological sites
(e)	Kaimanawa Ranges, in particular the skyline and the south-eastern side of the ranges	(i)	Visual and scenic characteristics, particularly the visual prominence of the skyline in much of the Region
		(ii)	Ecological significance, including the Ranges' contribution to the national conservation estate
(f)	The skyline of the Puketoi Ranges defined as the boundary between the land and sky as viewed at a sufficient distance from the foothills so as to see the	(i)	Visual and scenic characteristics, particularly the visual prominence of the skyline in the eastern part of the Region
	contrast between the sky and the solid nature of the land at the crest of the highest points along the ridges	(ii)	Geological features, particularly the asymmetrical landform termed a cuesta
(g)	Mount Aorangi - Awarua	(i)	Visual and scenic characteristics, particularly Mount Aorangi's visual prominence and contrast to the Mangaohane Plateau
		(ii)	Intrinsic value
		(iii)	Ecological significance, provided by areas of unmodified podocarp forest, high diversity of wetland types and as a habitat for rare indigenous flora and fauna
		(iv)	Scientific value, particularly Reporoa Bog and Makirikiri Tarns
		(v)	Importance to tangata whenua
(h)	(h) Manganui o te Ao River and river valley, including the Makatote and Mangaturuturu Rivers and their valleys, the Waimarino and Orautoha Streams (but not the	(i)	Visual and scenic characteristics, particularly river gorges and riparian margins and outstanding wild and scenic characteristics
	Waimarino and Orautoha valleys or the Ruatiti Stream or valley)	(ii)	Ecological significance, providing a habitat for the Blue Duck (whio), and wildlife and fisheries
		(iii)	Recognised protection – National Water Conservation Order
		(iv)	Historic heritage, in particular historical importance, archaeological sites and high potential for archaeological site discovery
(i)	(i) Rangitikei River and river valley from Mangarere Bridge (approximate map reference NZMS 260 T22:488-496) to Putorino (approximate map reference NZMS 260 T22:315-315), and from Mangarere Bridge		Visual and scenic characteristics – particularly its gorges, the Rangitikei alluvial terraces and high bluffs, and the Rangitikei River Plio-Pleistocene fossiliferous sediments (map reference NZMS 260 S23:214-224)
	(approximate map reference NZMS 260 T22:488-496)	(ii)	Scientific and educational value
	to the confluence of Whakaurekou River and Ohutu Stream (approximate map reference NZMS 260 U21:714-691)	(iii)	Historic heritage, in particular historical importance, archaeological sites and high potential for archaeological site discovery
(j)	The Ruahine Forest Park (land administered by the Department of Conservation)	(i)	Visual and scenic characteristics, particularly its prominence throughout much of the Region and its backdrop vista in contrast to the Region's plains
		(ii)	Ecological values, including values associated with mature indigenous forest, remnant and regenerating indigenous vegetation and important habitat
		(iii)	Contribution to the national conservation estate
		<u> </u>	



Out	standing Natural Features or Landscapes	Cha	racteristics / Values
		(iv)	Recreational values, especially tramping and hunting
		(v)	Historical values associated with early recreation, hunting and botanical exploration
		(vi)	Cultural values
(k)	The Tararua Forest Park (land administered by the Department of Conservation)	(i)	Visual and scenic characteristics, particularly its prominence throughout much of the Region and its backdrop vista in contrast to the Region's plains
		(ii)	Ecological values, including values associated with mature indigenous forest, remnant and regenerating indigenous vegetation and important habitat
		(iii)	Contribution to the national conservation estate
		(iv)	Recreational values, especially tramping
		(v)	Historical values associated with early recreation
		(vi)	Cultural values
(1)	The series of highest ridges and highest hilltops along the full extent of the Ruahine and Tararua Ranges, including within the Forest Parks described in items (j) and (k)	(i)	Visual, natural and scenic characteristics of the skyline of the Ruahine and Tararua Ranges, as defined by the series of highest ridges and highest hilltops along the full extent of the Ruahine and Tararua Ranges, including the skyline's aesthetic cohesion and continuity, its prominence throughout much of the Region and its backdrop vista in contrast to the Region's plains
		(ii)	Importance to tangata whenua and cultural values
		(iii)	Ecological values including values associated with remnant and regenerating indigenous vegetation
		(iv)	Historical values
		(v)	Recreational values
(m)	Manawatu Gorge, from Ballance Bridge to the confluence of the Pohangina and Manawatu Rivers,	(i)	Visual and scenic characteristics, particularly provided by its distinctive landscape
	including the adjacent scenic reserve	(ii)	Geological feature, provided by being the only river in New Zealand to drain both east and west of the main divide
		(iii)	Ecological significance, provided by its regenerating indigenous vegetation and remnant native shrubland
		(iv)	Scientific value, particularly for its geology
(n)	Parts of the Coastline of the Region, particularly the Akitio Shore Platform, Castlecliff to Nukumaru coastal cliffs, Foxtangi Dunes, Hokio Beach South Dune Fields	(i)	Visual and scenic characteristics, particularly its special coastal landscape features
		(ii)	Coastal geological processes
	and Santoft parabolic dunes	(iii)	Ecological value, particularly the Whanganui, Whangaehu, Turakina, Rangitikei, Akitio, Ohau, Waikawa and Manawatu River estuaries as habitats for indigenous fauna
		(iv)	Recreational value
		(v)	Significance to tangata whenua
		(vi)	Scientific and educational values
		(vii)	Historic heritage, in particular historical importance, archaeological sites and high potential for archaeological site discovery.
(o)	Cape Turnagain	(i)	Visual and scenic characteristics, particularly its visual prominence along the Region's east coast



Outstanding Natural Features or Landscapes	Characteristics / Values
	(ii) Ecological significance, particularly as a habitat for blue penguins and fur seals
	(iii) Scientific value
	(iv) Significance to tangata whenua
	(v) Historic heritage, in particular historical importance, archaeological sites and high potential for archaeological site discovery



SCHEDULE H: AIRSHEDS

Schedule H: Airsheds

### Schedule H: Airsheds

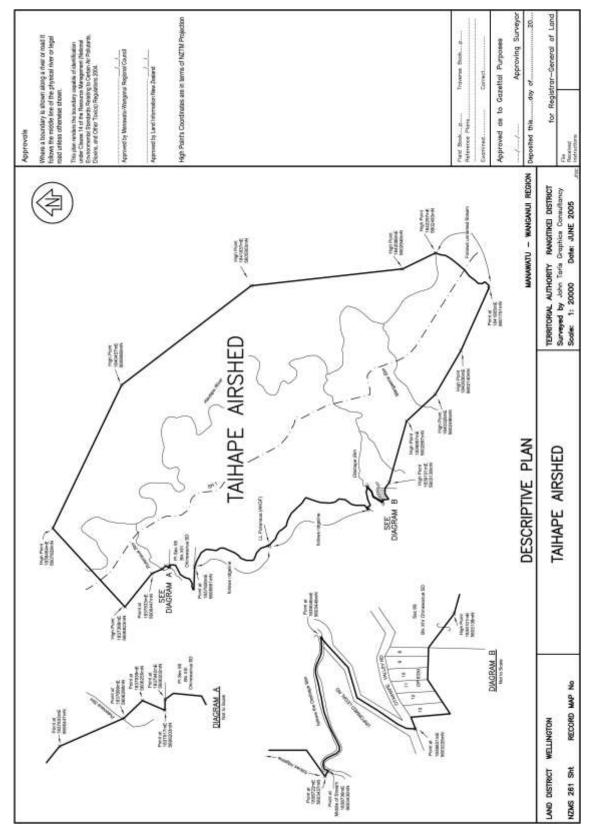


Figure H:1 Taihape Airshed



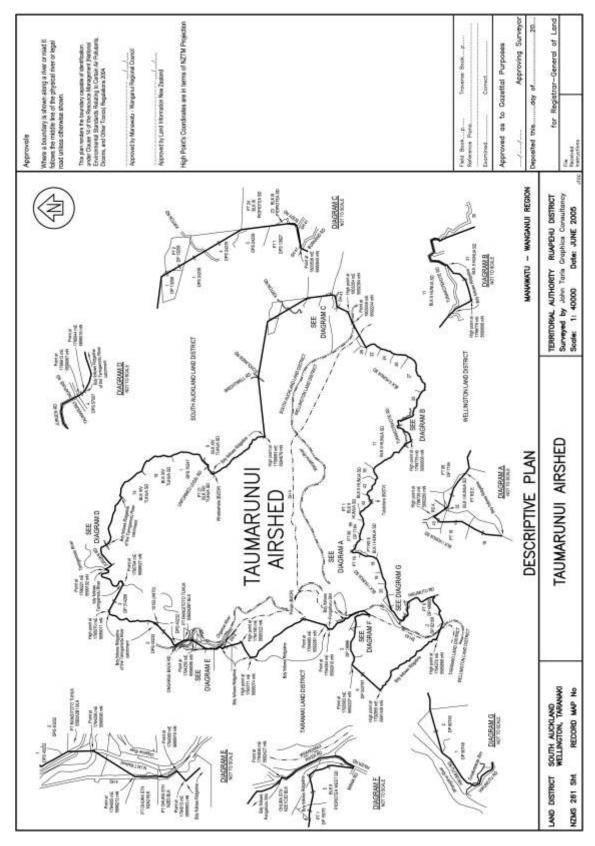


Figure H:2 Taumarunui Airshed

Schedule I:
Coastal Marine Area Activities
and Water Management

## Schedule I: Coastal Marine Area^ Activities and Water Management

Schedule I is a component of the Regional Coastal Plan.

The coastal marine area^ (CMA) is as defined in the RMA. This Schedule comprises:

Part A: CMA Boundaries: Figures I:1-I:2 show a regional overview of the CMA and Figures

I:3-I:9 depict the location of the *mouth* and the cross-river CMA boundary of identified *rivers*. These figures also show the Estuary *Water Management Sub-zones*\*

relevant to Part C.

Part B: Activity Management Areas: Figures I:10-I:13 show the Port and Protection Activity

Management Areas and the part of the General Activity Management Area in the vicinity of the Port. Table I.1 lists the ecological and other important characteristics in

the Protection Activity Management Areas.

Part C: Water Quality Management: Water Management Zone\* and Sub-zones\*, Values,

management objectives, and water quality targets: Tables I.2-I.7. Note that the

Estuary Water Management Sub-zones\* are shown in Figures I:3 to I:9.

A description of the figures contained in this Schedule is provided below:

Area	Figure	Description of Area
Coastal Marine Area^	I:1	The west coast CMA, beaches and some rivers^ of the
		Manawatu-Wanganui Region.
	1:2	The east coast CMA and some rivers <sup>^</sup> of the Manawatu-
		Wanganui Region.
Coastal Marine Area^ - river^ mouths^ and	1:3	Kai Iwi Stream and Mowhanau Stream.
cross-river CMA boundaries.	I:4	Whanganui River and Whangaehu River.
	l:5	Turakina River and Rangitikei River.
	I:6	Manawatu River and Hokio Stream.
These figures also show the Estuary Water	1:7	Ohau River and Waikawa Stream.
Management Sub-zones* relevant to Part C.	1:8	Akitio River and Owahanga River.
	1:9	Wainui River.
Activity Management Areas	I:10	Port Activity Management Area.
		Protection Activity Management Areas:
	I:11	Whanganui River and Whangaehu River.
	I:12	Turakina River and Rangitikei River.
	I:13	Manawatu River and Cape Turnagain.

#### Part A: CMA Boundaries

Figures I:1-I:2 depict the extent of the CMA within the Manawatu-Wanganui Region. On the open coast, the CMA extends from the line of mean high water springs (MHWS) seaward to the 12 nautical mile outer limit of the *territorial sea*^.

Figures I:3-I:9 depict the *mouth*^ of identified *rivers*^ as was agreed between the Minister of Conservation, the *Territorial Authorities*^ and the Regional Council in 1994 in accordance with s2 RMA. The figures additionally show where the CMA boundary lies up the identified *rivers*^ (which include streams). That is called the cross-river CMA boundary in this schedule.

For any *river*^ which is not shown in the figures, the location of the *mouth*^ was agreed between the Minister of Conservation, the *Territorial Authorities*^ and the Regional Council in 1994 to be a straight line representing a continuation of the



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line of MHWS on each side of the *river*^. The upstream location of the cross-river CMA boundary on these *rivers*^ is not mapped, but it is consistent with s2 RMA. It is the lesser of:

- (a) one kilometre upstream from the *mouth*^ of the *river*^, or
- (b) the point upstream that is calculated by multiplying the width of the *river*^ *mouth*^ by five.

The rules^ in Chapter 18 apply to the CMA.





Figure I:1 West Coast CMA and some *Rivers*^ of the Region





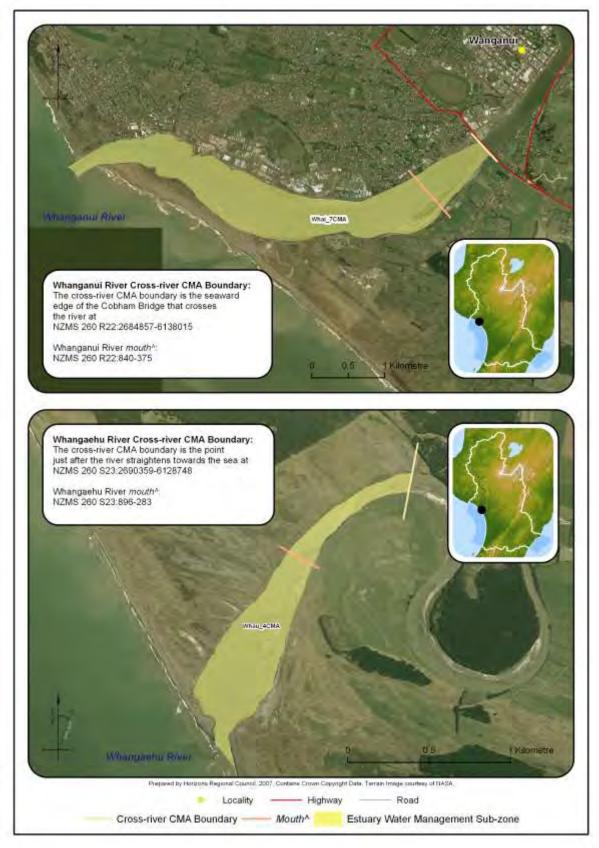
Figure I:2 East Coast CMA and some *Rivers*^ of the Region





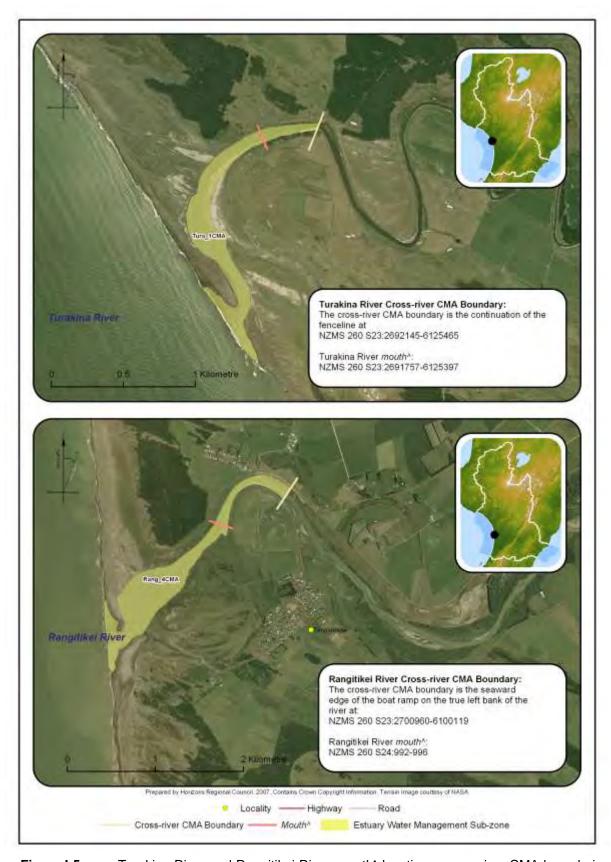
Figure I:3 Kai lwi Stream and Mowhanau Stream *mouth*^ locations, cross-river CMA boundaries and extent of the Estuary *Water Management Sub-zones*\*





**Figure I:4** Whanganui River and Whangaehu River *mouth*^ locations, cross-river CMA boundaries and extent of the Estuary *Water Management Sub-zones*\*





**Figure I:5** Turakina River and Rangitikei River *mouth*^ locations, cross-river CMA boundaries and extent of the Estuary *Water Management Sub-zones*\*





**Figure I:6** Manawatu River and Hokio Stream *mouth*^ locations, cross-river CMA boundaries and extent of the Estuary *Water Management Sub-zones*\*





Figure I:7 Ohau River and Waikawa Stream *mouth*^ locations, cross-river CMA boundaries and extent of the Estuary *Water Management Sub-zones*\*





**Figure I:8** Akitio River and Owahanga River *mouth* locations, cross-river CMA boundaries and extent of the Estuary *Water Management Sub-zones*\*



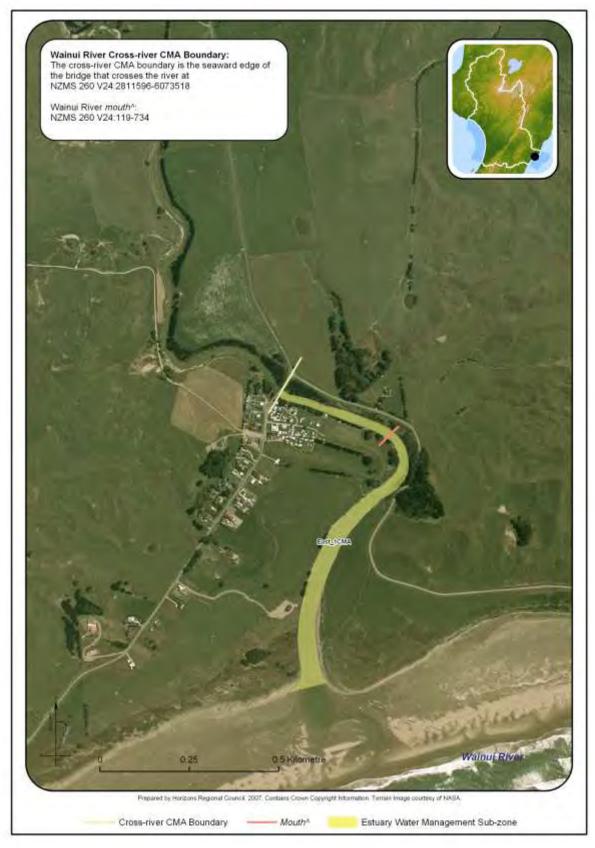


Figure I:9 Wainui River *mouth*^ location, cross-river CMA boundary and extent of the Estuary Water Management Sub-zone\*



#### Part B: Activity Management Areas

This Plan includes three different Activity Management Areas being the Port, Protection and General Activity Management Areas. These Activity Management Areas delineate discrete areas of the CMA within which different presumptions apply regarding the protection, use and development of the *foreshore*^ and seabed.

**The Port Activity Management Area** is depicted in Figure **I:10**. There are some *rules*^ in Chapter 18 which apply specifically to this Area.

#### For clarification:

- the Port Activity Management Area extends 50 m to the outside of the river^
  training wall as shown in Figure I:10.
- the identified dredging and discharge areas relate to Rule 18-28 and indicate that these activities are considered under this *rule*^ (and not under Rule 18-29).

The Protection Activity Management Areas are shown in Figures I:11-13.

There are some *rules*^ in Chapter 18 which apply specifically to these Areas.

#### For clarification:

- the landward edge of each Protection Activity Management Area is the line of MHWS.
- the seaward boundary of the Cape Turnagain Protection Activity Management Area extends seaward for a maximum distance of 100 m.
- the characteristics relating to each Protection Activity Management Area and as referred to in Policy 8-2 of the Regional Policy Statement are shown in Table I.1 below. It is these characteristics that have led to each Area being identified as a Protection Activity Management Area and regard must be had to the characteristics by decision-makers considering use and development proposals in those Areas.

The General Activity Management Area is not mapped. It comprises the entire CMA except those parts of the CMA covered by the Port Activity Management Area and the various Protection Activity Management Areas. In the Whanganui River, the General Activity Management Area includes part of the CMA comprising a band of 100 m from the line of MHWS of the northern bank of the River, as well as a band of 50 m from the edge of the Port Activity Management Area and includes the *river*^ entrance between the South Mole and the North Mole and northern *river*^ bank as shown in Figure 1:10.

Table I.1: Protection Activity Management Areas: ecological and other important characteristics

Protection Activity Management Area	Ecological and other important characteristics
Whanganui River	<ul> <li>Nationally important as a nursery for freshwater and estuarine species.</li> <li>Nationally important ecosystem for bird species.</li> <li>Nationally important strategic site* for migratory bird species.</li> <li>Provides habitat for threatened species.</li> <li>Important roosting and feeding area for wading birds</li> </ul>



Protection Activity Management	Ecological and other important characteristics
Area	
	(especially shellfish beds).
	Important feeding and breeding ground for many fish species  (against the season are a few thinks to the sittle and leaves and the season).
	(especially access ways for <i>whitebait</i> * and lamprey).
	Corliss Island has a saltmarsh fringe and is important for hawks.
	Landguard Bluff comprises a nationally important sequence of
	Pleistocene sedimentary strata and pectin shells.
	Coastal landforms and adjacent dunes are important nesting
	habitat.
William Discourse	Historic heritage^.
Whangaehu River	Nationally important strategic <i>site*</i> for migratory bird species.  Provides be bit to a three tanget hird species.
	Provides habitat for threatened bird species.      Important receiting and feeding green for wedling birds.
	<ul> <li>Important roosting and feeding area for wading birds.</li> <li>Regionally important for its high degree of naturalness.</li> </ul>
	Note:
	The Whitiau Scientific Reserve is located adjacent to the true
	right bank of the estuary.
	There is a dense concentration of archaeological sites
Turakina River	adjacent to the estuary.
Turakina River	<ul> <li>Nationally important strategic site* for migratory bird species.</li> <li>Provides habitat for threatened bird species.</li> </ul>
	<ul> <li>Provides habitat for threatened bird species.</li> <li>Important roosting and feeding habitat for wading birds.</li> </ul>
	Regionally distinct vegetation communities.
	Regionally important for its high degree of naturalness.
	Locally rich in archaeological sites.
Rangitikei River	Contains regionally important plant species.
	Regionally important for bird species.
	Regionally important for saltmarsh communities and estuarine
	<ul><li>native turf species.</li><li>Provides habitat for rare and threatened bird species.</li></ul>
	<ul> <li>Important roosting and feeding area for wading birds.</li> </ul>
	Important for <i>whitebait</i> * spawning.
	Historic heritage^.
Manawatu River	Nationally important as a nursery for freshwater and estuarine
	species.
	Internationally important strategic site* for migratory bird
	<ul><li>species.</li><li>Provides habitat for rare and threatened bird species.</li></ul>
	<ul> <li>Important roosting and feeding area for wading birds.</li> </ul>
	Contains regionally important plant species.
	<ul> <li>Internationally recognised as a wetland^ of international</li> </ul>
	importance under the RAMSAR Convention.
	Regionally important for its high degree of naturalness and
Cono Turnogoin	diversity.
Cape Turnagain	Important haul out area for marine mammals.      Important feeding, receiting and breeding area for birds.
	<ul> <li>Important feeding, roosting and breeding area for birds (especially blue penguins).</li> </ul>
	<ul> <li>Site* of high value to iwi*.</li> </ul>
	Site* of geological importance.
	Historic heritage^.



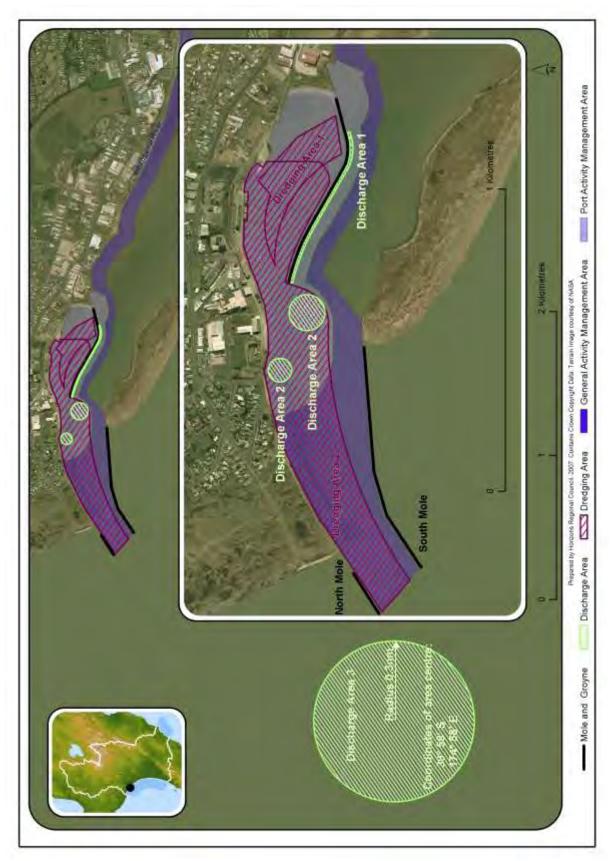


Figure I:10 Port Activity Management Area





Figure I:11 Protection Activity Management Areas



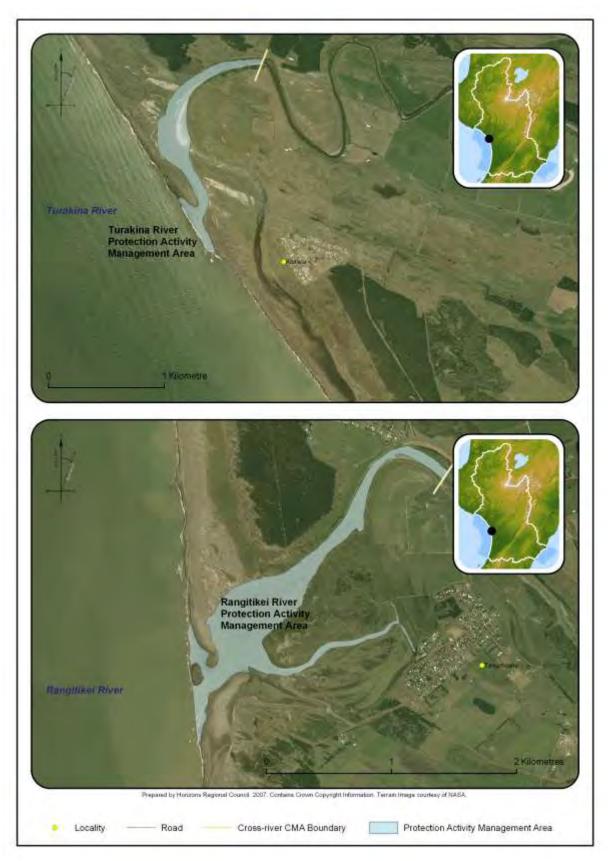


Figure I:12 Protection Activity Management Areas

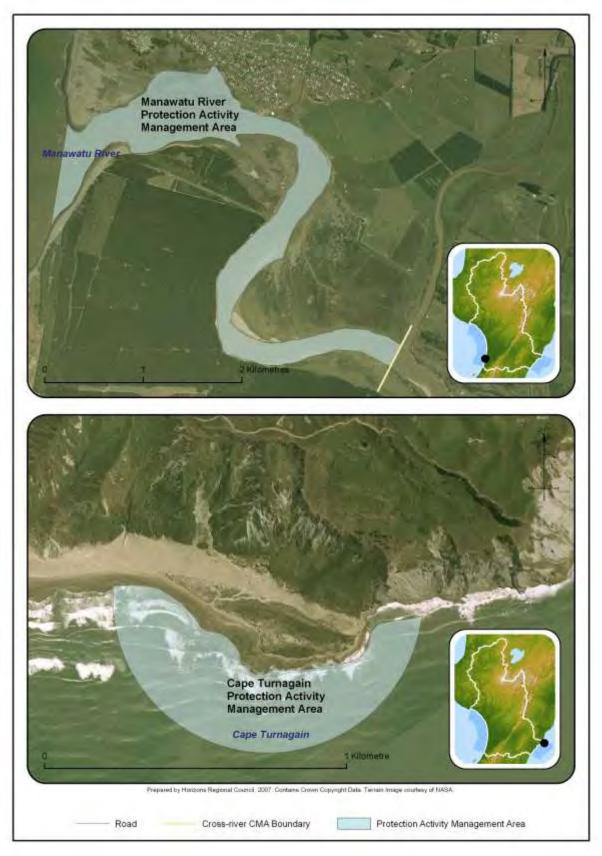


Figure I:13 Protection Activity Management Areas

## Part C: Water Quality Management

## Water Management Zones\* and Sub-zones\*, Values, Management Objectives and Water^ Quality Targets

For *water*^ quality management purposes, the CMA is divided into:

- (a) one Seawater Management Zone\* which comprises the entire CMA other than the Estuary Water Management Sub-zones\*,
- (b) 13 Estuary *Water Management Sub-zones*\* associated with specified estuary *waters*^ as shown on Figures I:3 to I:9. The term *Sub-zone*\* is used because the estuary *waters*^ are part of a larger *Water Management Zone*\* for each *river*^ (see Schedule A).

## List of Tables relating to the Seawater Management Zone\* and Estuary Sub-zones\*:

<b>Table Number</b>	Description
Table I.2	Seawater Management Zone* and Estuary Water Management Sub-zones*: Values and Management Objectives
Table I.3	Seawater Management Zone* and Estuary Water Management Sub-zones*: Where the Values apply
Table I.4	Estuary Water Management Sub-zones*: Water^ Quality Definitions
Table I.5	Estuary Water Management Sub-zones*: Water^ Quality Targets
Table I.6	Seawater Management Zone*: Water^ Quality Definitions
Table I.7	Seawater Management Zone*: Water^ Quality Targets



## Table I.2: Seawater Management Zone\* and Estuary Water Management Sub-zones\*: Values and Management Objectives

The following Values and Management Objectives apply in the Seawater Management Zone\* and Estuary Water Management Sub-zones\* listed in Table I.3.

Value group	Values		Management Objective									
	LSC	Life-supporting Capacity	The CMA supports healthy aquatic life / ecosystems.									
	SOS-A	Sites of Significance - Aquatic	Sites of significance for indigenous aquatic biodiversity within the CMA are maintained or enhanced.									
Ecosystem Values	SOS-R	Sites of Significance - Riparian	Sites of significance for indigenous riparian biodiversity within the CMA are maintained or enhanced.									
2000yotom valued	IS	Inanga Spawning	The CMA sustains healthy inanga spawning and egg development.									
	WM	Whitebait* Migration	The CMA is maintained or enhanced to provide safe passage of inwardly migrating juvenile native fish known collectively whitebait*.									
	CR	Contact Recreation	The CMA is suitable for contact recreation.									
Recreational and	Am	Amenity	The amenity values of the CMA are maintained or enhanced.									
Cultural Values			The mauri* of the CMA is maintained or enhanced.									
	SG	Shellfish Gathering	The CMA is suitable for shellfish harvesting.									
	SOS-C	Sites of Significance - Cultural	Sites of significance for cultural values are maintained.									
Water^ Use	IA	Industrial Abstraction	The CMA is suitable as a water^ source for industrial abstraction or use.									
Social and Economic	CAP	Capacity to Assimilate Pollution	The capacity of the CMA to assimilate pollution is not exceeded.									
Values	EI	Existing Infrastructure^	The integrity of existing <i>infrastructure</i> ^ is not compromised.									



## Table I.3: Seawater Management Zone\* and Estuary Water Management Sub-zones\*: Where the Values apply

#### Legend:

Table Headings: LSC: Life-supporting Capacity; SOS-A: Sites of Significance - Aquatic; SOS-R: Sites of Significance - Riparian; IS: Inanga Spawning; WM: Whitebait\* Migration; CR: Contact Recreation; Am: Amenity; Mau: Mauri\*; SG: Shellfish Gathering; SOS-C: Sites of Significance - Cultural; IA: Industrial Abstraction; CAP: Capacity to Assimilate Pollution; EI: Existing Infrastructure\*.

Key for LSC Classes: **M**: Marine; **LM**: Lowland Mixed; **HSS**: Hill Soft Sedimentary; **HM**: Hill Mixed; **LS**: Lowland Sand. The LSC Classes are listed as the geology of the catchment influences *water*<sup>^</sup> quality and life-supporting capacity.

Water Management	Estuary Water	Zone-wide Values												
Zone*	Management Sub-zone*	LSC	SOS-A	SOS-R	IS	WM	CR	Am	Mau	SG	SOS-C	IA	CAP	El
Seawater Management Zone* (entire CMA excluding Estuary Water Management Sub-zones*)	N/A	M			<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>		<b>√</b>	<b>*</b>	<b>√</b>
Coastal Manawatu (Mana_13)	Manawatu Estuary (Mana_13CMA) See Figure I:6	LM		<b>√</b> 1, 2	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>		<b>√</b> 4	<b>✓</b>	<b>~</b>	<b>√</b>
Coastal Rangitikei (Rang_4)	Rangitikei Estuary (Rang_4CMA) See Figure I:5	LM		<b>√</b> 1	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>			<b>√</b>	<b>✓</b>	<b>√</b>
Lower Whanganui (Whai_7)	Whanganui Estuary (Whai_7CMA) See Figure I:4	LM		<b>√</b> 1, 2	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>			<b>√</b>	<b>✓</b>	<b>√</b>
Coastal Whangaehu (Whau_4)	Whangaehu Estuary (Whau_4CMA) See Figure I:4	HSS		<b>√</b> 1,2	<b>~</b>	<b>√</b>	✓	<b>√</b>	<b>✓</b>			<b>~</b>	<b>✓</b>	<b>√</b>
Turakina (Tura_1)	Turakina Estuary (Tura_1CMA) See Figure I:5	HSS		<b>√</b> 1,2	✓	✓	✓	✓	<b>✓</b>			<b>√</b>	<b>✓</b>	<b>√</b>

- 1 Gravel and sand (dotterel).
- 2 Mud / silt habitat and estuarine roosts (waders).
- 3 Shortjaw kokopu and redfin bully.
- 4 Density of cultural and historical sites\* of significance including wāhi tapu\* and taonga\*. Details of the particular location of these sites\* are available from Rangitaane o Manawatu.



Water Management	Estuary Water	Zone-wide Values												
Zone*	Management Sub-zone*	LSC	SOS-A	SOS-R	IS	WM	CR	Am	Mau	SG	SOS-C	IA	CAP	El
Ohau (Ohau_1)	Ohau Estuary (Ohau_1CMA) See Figure I:7	НМ		<b>√</b> 1,2	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>			✓	<b>✓</b>	<b>√</b>
Lake Horowhenua (Hoki_1)	Hokio Estuary (Hoki_1CMA) See Figure I:6	LS			<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>			<b>√</b>	<b>✓</b>	<b>✓</b>
Owahanga (Owha_1)	Owahanga Estuary (Owha_1CMA) See Figure I:8	HSS					<b>✓</b>	<b>✓</b>	<b>✓</b>			<b>√</b>	<b>✓</b>	<b>✓</b>
East Coast (East_1)	Wainui Estuary (East_1CMA) See Figure I:9	HSS		<b>√</b> 2			<b>✓</b>	<b>✓</b>	<b>✓</b>			✓	<b>√</b>	<b>✓</b>
Akitio (Akit_1)	Akitio Estuary (Akit_1CMA) See Figure I:8	HSS			✓	✓	✓	✓	✓			✓	✓	<b>✓</b>
Kai lwi (West_2)	Kai lwi Estuary (West_2CMA) See Figure I:3	HSS			✓	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>			✓	<b>√</b>	<b>✓</b>
Mowhanau (West_3)	Mowhanau Estuary (West_3CMA) See Figure I:3	LM			✓	<b>√</b>	<b>✓</b>	✓	<b>✓</b>			✓	<b>√</b>	<b>√</b>
Waikawa (West_9)	Waikawa Estuary (West_9CMA) See Figure I:7	НМ	<b>√</b> 3	<b>√</b> 1,2		<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>			<b>√</b>	<b>√</b>	<b>✓</b>



Gravel and sand (dotterel).
 Mud / silt habitat and estuarine roosts (waders).
 Shortjaw kokopu and redfin bully.

## Table I.4: Estuary Water Management Sub-zones\*: Water^ Quality Definitions

The water quality targets for the Estuary Water Management Sub-Zones\*, as defined in **Table I.5** must read as follows (the numerical values in Table I.5 are indicated by [...]):

Abbreviations used in T Header	able I.5 Sub-header	Full wording of the target
Temp (°C)	<	The temperature of the water^ must not exceed [] degrees Celsius.
DO (%SAT)	>	The concentration of dissolved oxygen must exceed [] % of saturation.
Algal biomass Chl a (mg/m³)	<	The annual average algal biomass must not exceed [] milligrams of chlorophyll a per cubic metre.
Macro-algae (% cover)	<	The maximum cover of visible shore surface by macro-algae must not exceed []%.
DRP (g/m³)	<	The annual average concentration of dissolved reactive phosphorus (DRP) when the <i>river</i> ^ flow is at or below the 20 <sup>th</sup> flow exceedance percentile* must not exceed [] grams per cubic metre.
SIN (g/m³)	<	The annual average concentration of soluble inorganic nitrogen (SIN) <sup>1</sup> when the <i>river</i> ^ flow is at or below the 20 <sup>th</sup> flow exceedance percentile* must not exceed [] grams per cubic metre.
Ammoniacal nitrogen <sup>2</sup> (g/m <sup>3</sup> )	<	The average concentration of ammoniacal nitrogen must not exceed [] grams per cubic metre.
Тох.	%	For toxicants not otherwise defined in these targets, the concentration of toxicants in the <i>water</i> ^ must not exceed the trigger values for coastal waters defined in the 2000 ANZECC guidelines Table 3.4.1 as the level of protection for [] % of species. For metals the trigger value must be adjusted for hardness and apply to the dissolved fraction as directed in the table.
E.coli / 100 ml	< 50 <sup>th</sup> %ile	The concentration of Escherichia coli must not exceed [] per 100 millilitres 1 November - 30 April (inclusive) when the river^ flow is at or below the 50th flow exceedance percentile*.
2.55% 7 100 1111	< 20 <sup>th</sup> %ile	The concentration of Escherichia coli must not exceed [] per 100 millilitres year round when the river^ flow is at or below the 20th flow exceedance percentile*.
Euphotic depth	%∆	The euphotic depth must not be reduced by more than []%.
	%Δ	The visual clarity of the water^ measured as the horizontal sighting range of a black disc must not be reduced by more than [] %.
Visual clarity (m)	>	The visual clarity of the water^ measured as the horizontal sighting range of a black disc must equal or exceed [] metres when the river^ is at or below the 50 <sup>th</sup> flow exceedance percentile*.

<sup>2</sup> Ammoniacal nitrogen is a component of SIN. SIN standards should also be considered when assessing ammoniacal nitrogen concentrations against the standards.



Soluble Inorganic Nitrogen (SIN) concentration is measured as the sum of nitrate nitrogen, nitrite nitrogen and ammoniacal nitrogen or the sum of total oxidised nitrogen and ammoniacal nitrogen.

Table I.5: Estuary Water Management Sub-zones\*: Water^ Quality Targets

The following water<sup>A</sup> quality targets apply to the Estuary Water Management Sub-zones\*:

Water Management Zone*	Estuary <i>Sub-zone</i> *	Temp (°C)	DO (%SAT)	Algal Macro- DRP SIN Ammoniacal Nitrogen (g/m³)		Tox.	Tox. <i>E.coli</i> / 100 ml		Euphotic Depth	Visual Clarity (m)	Visual Clarity (m)			
Zone		<	>	Chl <i>a</i> (mg/m³)	% cover	<	<	<	%	<50 <sup>th</sup> %ile	<20 <sup>th</sup> %ile	%Δ	>	%∆
Coastal Manawatu (Mana_13)	Manawatu Estuary (Mana_13CMA)	24	70	4	5	0.015	0.444	0.400	95	260	550	10	1.2	20
Coastal Rangitikei (Rang_4)	Rangitikei Estuary (Rang_4CMA)	24	70	4	5	0.015	0.167	0.400	95	260	550	10	1.2	20
Lower Whanganui (Whai_7)	Whanganui Estuary (Whai_7CMA)	24	70	4	5	0.015	0.167	0.400	95	260	550	10	1.2	20
Coastal Whangaehu (Whau_4)	Whangaehu Estuary (Whau_4CMA)	22	70	4	5	0.015	0.167	0.400	95	260	550	10	1.2	20
Turakina (Tura_1)	Turakina Estuary (Tura_1CMA)	22	70	4	5	0.015	0.167	0.400	95	260	550	10	1.2	20
Ohau (Ohau_1)	Ohau Estuary (Ohau_1CMA)	22	70	4	5	0.010	0.110	0.400	95	260	550	10	1.2	20
Lake Horowhenua (Hoki_1)	Hokio Estuary (Hoki_1CMA)	24	70	4	5	0.015	0.167	0.400	95	260	550	10	1.2	20
Owahanga (Owha_1)	Owahanga Estuary (Owha_1CMA)	22	70	4	5	0.015	0.167	0.400	95	260	550	10	1.2	20
East Coast (East_1)	Wainui Estuary (East_1CMA)	22	70	4	5	0.015	0.167	0.400	95	260	550	10	1.2	20
Akitio (Akit_1)	Akitio Estuary (Akit_1CMA)	22	70	4	5	0.015	0.167	0.400	95	260	550	10	1.2	20
Kai lwi (West_2)	Kai lwi Estuary (West_2CMA)	22	70	4	5	0.015	0.167	0.400	95	260	550	10	1.2	20
Mowhanau (West_3)	Mowhanau Estuary (West_3CMA)	24	70	4	5	0.015	0.167	0.400	95	260	550	10	1.2	20
Waikawa (West_9)	Waikawa Estuary (West_9CMA)	22	70	4	5	0.010	0.167	0.400	95	260	550	10	1.2	20



# Table I.6: Seawater Management Zone\*: Water^ Quality Definitions

The water<sup>^</sup> quality targets for the Seawater Management Zone<sup>\*</sup>, as defined in **Table I.7**, must read as follows (the numerical values in Table I.7 are indicated by [...]):

Abbreviations u	sed in Table I.7 Sub-header	Full wording of the target								
DO (%SAT)	>	The concentration of dissolved oxygen must exceed [] % of saturation.								
Algal biomass Chl a (mg/m³)	<	The annual average algal biomass must not exceed [] milligrams of chlorophyll a per cubic metre.								
TP (g/m³)	<	The annual average concentration of total phosphorus must not exceed [] grams per cubic metre.								
TN (g/m <sup>3</sup> )	<	The annual average concentration of total nitrogen must not exceed [] grams per cubic metre.								
Ammoniacal nitrogen (g/m³)	<	The average concentration of ammoniacal nitrogen must not exceed [] grams per cubic metre.								
Тох.	%	For toxicants not otherwise defined in these targets, the concentration of toxicants in the <i>water</i> ^ must not exceed the trigger values for coastal waters defined in the 2000 ANZECC guidelines Table 3.4.1 for the level of protection of [] % of species. For metals the trigger value must be adjusted for hardness and apply to the dissolved fraction as directed in the table.								
\r \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	%∆	The visual clarity of the water^ measured as the horizontal sighting range of a black disc must not be reduced by more than [] %.								
Visual clarity (m)	>	The visual clarity of the water^ measured as the horizontal sighting range of a black disc must equal or exceed [] metres.								
Enterococci	1 November - 30 April (inclusive)	The concentration of enterococci must not exceed [] per 100 millilitres 1 November - 30 April (inclusive).								
Enterococci	1 May - 31 October (inclusive)	The concentration of enterococci must not exceed [] per 100 millilitres 1 May - 31 October (inclusive).								
	<	The median concentration of faecal coliforms must not exceed [] per 100 millilitres.								
Faecal coliforms		The median concentration of faecal comornis must not exceed [] per 100 minimizes.								
	90 <sup>th</sup> %ile	The 90th percentile concentration of faecal coliforms must not exceed [] per 100 millilitres.								



# Table I.7: Seawater Management Zone\*: Water^ Quality Targets

The following water^ quality targets apply to the Seawater Management Zone\*:

	Management Zone		Algal Biomass	TP TN (g/m³)		Ammoniacal Nitrogen (g/m³)	Tox.	Visual Clarity (m)		Enterococci		Faecal C	oliforms
		>	Chl a (mg/m <sup>3</sup> )	<	<	<	(%)	>	%Δ	1 Nov - 30 April	1 May - 31 Oct	<	90 <sup>th</sup> %ile
Se	awater Management Zone*	90	3	0.010	0.060	0.060	99	1.6	20	140	280	14	43





Schedule J: Floodways and Areas Prone to Flooding

# Schedule J: Floodways and Areas Prone to Flooding

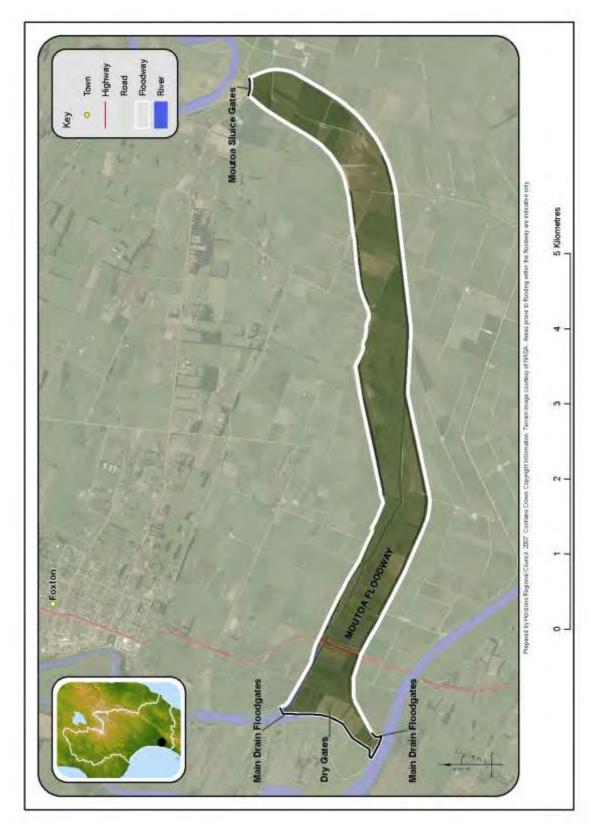


Figure J:1 Moutoa floodway



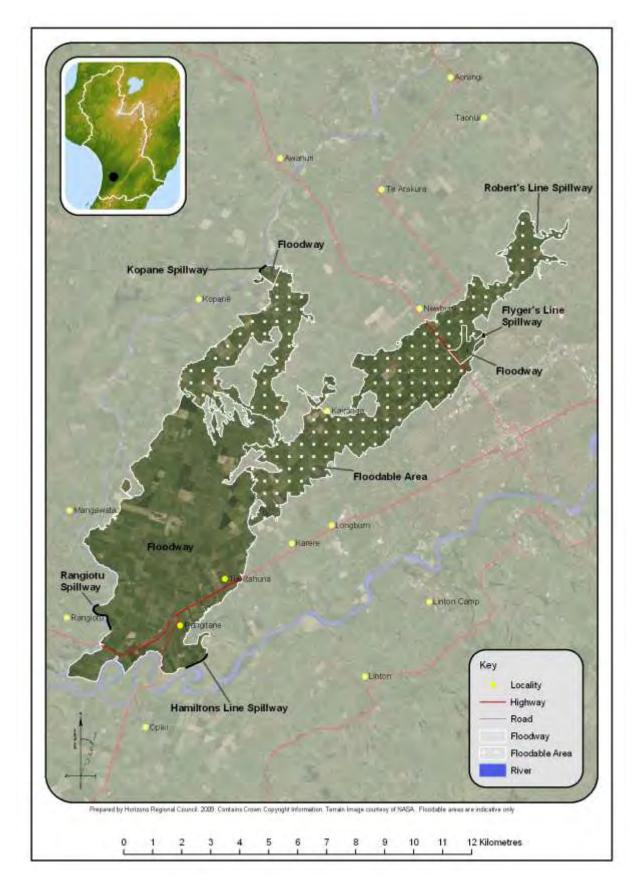


Figure J:2 Taonui Basin spillways, floodways and floodable areas





Figure J:3 Reid Line floodway





Figure J:4 Makirikiri floodway