

# One plan 


#### Abstract

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.


# Cover design: Blacksheepdesign <br> Photography: David Lupton 

## 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:


Bruce Gordon CHAIRMAN


[^0]
## MANAWATU-WANGANUI REGIONAL COUNCIL REGIONAL COASTAL PLAN

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

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


It is hereby certified that the regional coastal plan provisions of the Regional Coastal Plan wefe approved by the Minister of Conservation.


Hon Dr/Nick Smith
MIVISTER OF CONSERVATION
Dated this 14 h day of

2014.

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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 <br> 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 <br> 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.

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 <br> 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. Largescale 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 ${ }^{1}$ 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.

## $1.4 \quad$ 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 $30-50 \mathrm{~cm}$ rise in sea level in the next 100 years
- an increase of up to $3^{\circ} \mathrm{C}$ 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.

[^1]
## 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 <br> 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.


# Te Ao Māori ${ }^{1}$ - Resource Management Issues of Significance to Hapū* and $/ w i^{*}$ 

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

### 2.1 Scope and Background

## Te Hōkai, Te Takenga Mai

This chapter identifies the resource management issues of significance to hap $\bar{u}^{*}$ and $i$ i $^{*}$ 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 hapū* and $i w i^{*}$ 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 ite mahi whakahaere rauemi.

The chapter provides background on:

- the Region's hapū* and $i w i^{*}$
- hap $\bar{u}^{*}$ and $i w i^{*}$ involvement in resource management
- an understanding of Māori values including maurí, taonga*, wāhi tapu*, wāhi tūpuna*, tikanga Māori and kaitiakitanga
- resource management issues of concern to hapū${ }^{*}$ and $i w i^{*}$.

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 $/ w i^{*}$

## Ngā Hapū me ngā Iwi o te Rohe

More than 12 distinct $i w i^{*}$ 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 Âtihaunui-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

[^2]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: whānau*, hapū ${ }^{*}$ or $i w i^{*}$, 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 $i w i^{*}$ or hapū ${ }^{*}$ 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, āhāhi 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 $/$ wi* $^{*}$ Involvement in Resource Management

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

$H a p \bar{u}^{*}$ and $i w i^{*}$ 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 ${ }^{\star}$ and $i w i^{*}$ environmental monitoring programmes, riparian planting, $i^{w} i^{*}$ resource management planning or research, and hap $\bar{u}^{*}$ and $i w i^{*}$ training and workshops. Iwi management plans* are an important way for $h a p \bar{u}^{*}$ and $i w i^{*}$ 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 āiwi 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 whānau*, hapū ${ }^{*}$ and $i w i^{*}$. 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 ite 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 hapu${ }^{*}$ and $i w i^{*}$ 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 $h a p \bar{u}^{*}$ and $i w i^{*}$ in the Region share with the environment. The Council is committed to strengthening relationships and partnerships to involve hapu${ }^{*}$ and iwi* more actively in managing the Region's resources. This is provided for in particular by Policy 2-1 which identifies how increased hapū ${ }^{*}$ and $i w i^{*}$ 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 hapū ${ }^{*}$ and $i w i^{*}$ 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 $i w i^{*}$, as they share an intimate relationship and are considered physically and spiritually
intertwined. The general expectation of $h a p \bar{u}^{*}$ and $i w i^{*}$ 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 āRohe, 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.

[^3]
## 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 $i w i^{*}$ 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 kïa 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, ātikanga 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 hapu $\bar{u}^{*}$ and $\overline{i w i^{*}}$ 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 $i w i^{*}$ 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 $/ w{ }^{*}$ <br> Ngā Take Whakahaere Rauemi e Hirahira ana ki ngā Hapū me ngā Iwi

The Region's hapu${ }^{*}$ and $i w i^{*}$ view present resource management as inadequate for the issues described below. As a consequence, the relationships of hapü* and iwi* with ancestral lands, water, sites*, wāhi tapu* and other taonga* (including wāhi tūpuna*) 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 hapū 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: $\quad$ 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, à, 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 ite 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 ite 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: $\quad$ 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 <br> 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 $h a p \bar{u}^{\star}$ and $i w i^{*}$ 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^ must be given particular regard and the relationship of hap $\bar{u}^{*}$ and iwi $^{*}$ with their ancestral lands^, water^, sites*, wāhi tapu* and other taonga* (including wāhi tūpuna*) 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 <br> Policies

## Kaupapa

Policy 2-1: $\quad$ Hapū ${ }^{*}$ 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 $i w i^{*}$ and their ancestral lands^, water^, sites*, wāhi tapu* and other taonga* (including wāhi tūpuna*) through increased involvement of hapū* and $i w i^{*}$ 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 hapū* or $i{ }^{i} i^{*}$ 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 ite 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 $h a p \bar{u}^{*}$ or $i w i^{*}$,
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, hapū${ }^{*}$, 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 $h a p \bar{u}^{*}$ and $i w i^{*}$ 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 hapū or $i w i^{*}$ 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, íwi 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 ${ }^{\wedge}$ 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^ applicants to consult directly with hapu $\bar{u}^{*}$ or $\dot{i w i^{*}}$ 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 ${ }^{\wedge}$ 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 ite Mahere Takutai ā-Rohe me ngā mahere ā-takiwā,
(ii) hei Historic Reserves i raro ite 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 ${ }^{\wedge}$ on the qualities and features which contribute to the values of these sites*.
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 hapū* and iwi* recording the locations of wāhi tapu*, wāhi tūpuna* 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 $i w i^{*}$ under (a), above, must be minimised by the Regional Council facilitating the compilation of databases by hapū ${ }^{*}$ and $i w i^{*}$ 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: $\quad$ 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 hapu${ }^{*}$ or $i w i^{*}$ 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: Ėtahi take whakahaere rauemi anō

The specific issues listed in 2.2 which were raised by hapu${ }^{*}$ and $i w i^{*}$ 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 $h a p \bar{u}^{*}$ and $i w i^{*}$, 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 hapū ${ }^{*}$ and $i w i^{*}$ concerns, but they offer possible explanations as to the depth of feeling and connection hapū${ }^{*}$ and $i w i^{*}$ 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 hapū* and iwi*
Ngā Take Whakahaere Rauemi e Hirahira ana ki ngā Hapū me ngā Iwi

Resource issue of significance to hapü* and iwi* $^{*}$
He take rauemi e hirahira ana ki ngā hapū me ngā iwi
(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 ite whakarato wāhanga ki ngā āhuatanga e hirahira ana 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 ite uru o ngā paru kino ki roto i ngā wai.

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

## Mauri* ${ }^{*}$ <br> Mauri

Wai Māori (pure water) is essential to hapū${ }^{*}$ and $i w i^{*}$ 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 ${ }^{\wedge}$ all affect the ability of the mauri* to perform its role effectively, therefore resulting in a standard of water^ not suitable for hapū* and $i w i^{*}$ 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.

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

Surface water^ 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
Whäinga 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
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 5
Ngā ture kei Wāhanga 14 Te Tuku Parakaingaki ki te Whenua me ngā Wai

Resource issue of significance to hapü* and iwi $^{*}$
He take rauemi e hirahira ana
ki ngā hapū me ngā iwi
(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) ite 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, te tohi tamariki, te mea, te mea.
(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 abstractions can adversely affect water ${ }^{\wedge}$ and existing groundwater users. Mā nui rawa o te waiopapa ka tangohia e raru ai te wai me ngā kaiwhakamahi wai o nāianei.

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
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
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
$\mathrm{Ngā}$ mahi kei Wāhanga 5
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
Kaupapa 5-21
Ngā mahi kei Wāhanga 5

In some circumstances, water ${ }^{\wedge}$ 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.

Resource issue of significance to hapü* and iwi $^{*}$
He take rauemi e hirahira ana
kingā hapū me ngā iwi
(g) Water^ diversion from one catchment to another is considered culturally abhorrent.
Ko te whakaaro he mea kiriweti te whakataha ite rere noa a te wai mai i tētahi takiwā ki tētahi atu takiwā.
(h) Sewage disposed to water ${ }^{\wedge}$ 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.

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

## Mauri*

Mauri
Hapū${ }^{*}$ and $i w i^{*}$ 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 $i w i^{*}$ 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.

## Mahi tautara (sewage waste)

There are serious physical and spiritual connotations to hapū${ }^{*}$ and $i w i^{*}$ 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 $i w i^{*}$ ). Land-based treatment of sewage is preferred. Ki ngā hapū me ngā íwi 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 $h a p \bar{u}^{*}$ and $i w i^{*}$ can be wide-ranging. The best method of avoiding these effects is the prevention of direct discharge ${ }^{\wedge}$. 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 ingā pānga.

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

## Sewage discharge ${ }^{\wedge}$

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 hapü* and iwi $^{*}$
He take rauemi e hirahira ana
ki ngā hapū me ngā iwi
(i) More riparian retirement and planting is needed to protect river ${ }^{\wedge}$ 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 ingā 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ of land ${ }^{\wedge}$ use continue to have a detrimental effect^ ${ }^{\wedge}$ on traditional food gathering areas, native habitats and ecosystems.
Mā te whakamahi ite 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 in the context of tikanga Mäori^ He take rauemi me te tikanga Māori

## Manaaki whenua (nurturing the land ${ }^{\wedge}$ )

 Manaaki whenuaHapū ${ }^{*}$ and $i w i^{*}$ would like to see more measures put in place to plant river ${ }^{\wedge}$ banks throughout the Region to avoid bank erosion and silt build-up in rivers^. 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 ite 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.

Land^ management plans give hapū${ }^{*}$ and $i w i^{*}$ more certainty that landowners have an holistic land ${ }^{\wedge}$ use management approach.
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.

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

Relevant part of One Plan where issue is addressed Te wāhanga o te One Plan ka kōrerotia te take
Surface water^ quality Te kounga o te wai mata

Chapter 5 - Water Objective 5-2
Policy 5-8
Rules, Chapter 14 Discharges to Land and Water and Water^ Quality Standards in Schedule D

Wāhanga 5-Wai
Whāinga 5-2
Kaupapa 5-8
Ture, Wāhanga 14
Te rukenga parakaingaki ki
te Whenua me te Wai
Taumata Kounga kei roto ite Pukapuka Āpiti D

Land^ use management
Te whakahaere ite
whakamahi whenua
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

Resource issue of significance to hapï* and iwi*
He take rauemi e hirahira ana
ki ngā hapū me ngā iwi
(I) The removal, destruction or alteration of wāhi tapu* and wāhi tūpuna* by inappropriate activities continues to have a detrimental effect^ ${ }^{\wedge}$ on those sites* and upon hapū̄ and iwi*.
Ka pāngia kinotia tonu ngā wāhi, me ngā hapū me ngā iwi hoki - ite tango, te wāwāhi, te whakarerekē rānei i ngā wāhi tapu me ngā wāhi tūpuna.

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

## 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 tititro - 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 ite 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.

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

Land^ use management
Te whakahaere ite
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 ${ }^{\wedge}$ 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 hapü* and $i w i^{*}$
He take rauemi e hirahira ana ki ngā hapū me ngā iwi
( $m$ ) The transfer of indigenous plants from rohe* to rohe* is considered culturally unnatural.
Kāore i te tika ki te whakaaro ahurea Māori te whakawhiti tupu taketake mai i tētahi rohe ki tētahi atu rohe.
( $n$ ) 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.

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

## 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 hap $\bar{u}^{*}$ and $i{ }^{i} i^{*}$. 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 ingā 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 $i w^{*}{ }^{*}$ 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.

Relevant part of One Plan where issue is addressed Te wāhanga o te One Plan ka kōrerotia te take
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, hïtori tuku ino
Whāinga 6-1
Kaupapa 6-1 ki 6-5
$N g a ̄$ mahi kei Wāhanga 6
Ture, Wāhanga 13 - Ngohe Whakamahi Whenua me te Kanorau Koiora Taketake

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 ino
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

Resource issue of significance to hapï* and iwi*
He take rauemi e hirahira ana
ki ngā hapū me ngā iwi
(0) 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.

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

## Manaaki manuhiri (caring for your visitors)

 Manaaki manuhiriSaltwater intrusion is a significant issue for hapū ${ }^{*}$ and $i i^{*}$ as many marae situated close to the coastal environment rely on groundwater bores as their primary water supply. $\operatorname{Hapu}^{*}$ and $i w^{*}$ 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 ingā 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.

Tiro whakamua (a glance at the future) 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.

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

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

Threatened indigenous biological diversity^ ${ }^{\wedge}$ 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, hitori tuku iho Whāinga 6-1
Kaupapa 6-1 ki 6-4
Wāhanga 6 ngā ture
Ture, Wāhanga 13 - Ngohe Whakamahi Whenua me te Kanorau Koiora Taketake

Resource issue of significance
to hapü* and iwi $^{*}$
He take rauemi e hirahira ana
kingā hapū me ngā iwi
(q) Monitoring and enforcement of environmental standards, including those contained in regional plans ${ }^{\wedge}$, district plans ${ }^{\wedge}$ and resource consents ${ }^{\wedge}$, 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.

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

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 $^{\wedge}$ or permitted activity ${ }^{\wedge}$ conditions ${ }^{\wedge}$ 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.

Relevant part of One Plan where issue is addressed Te wāhanga o te One Plan ka kōrerotia te take
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 hapū ${ }^{*}$ and $i w i^{*}$.

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


| Method 2-2 <br> 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 $i w i^{*}$ 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. <br> 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 $i w i^{*}$. Te Kaunihera ā-Rohe me ngā hapū me ngā iwi o te Rohe. |
| Links to Policy Ngā Hononga Kaupapa | This method links to Policies 2-2(b) and (c) Ka hono atu tēnei mahi ki ngā Kaupapa 2-2(b) me (c). |
| Target Ngā Keonga | To approach iwi* in the Region regarding participation in the method by June 2012. <br> 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 <br> 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 $\bar{u}^{*}$ 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 $i w i^{*}$. 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, 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 $i w i^{*}$ 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 <br> Mahi 2-4 | Code of Practice for Wāhi Tapu* and Wāhi Tūpuna* Protection and Discovery <br> He Tikanga Mahi mō te Whakamarumaru me te Hura i ngā Wāhi Tapu me ngā Wāhi Tüpuna |
| :---: | :---: |
| Description He Whakamārama | The aim of this method is to develop a code of practice to ensure all efforts are made to protect wāhi tapu* and wāhi tūpuna* from unnecessary damage, and procedures are in place in the event wāhi tapu* or wāhi tūpuna* 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 ingā wā ka huraina he wāhi tapu, he wāhi tūpuna rānei. <br> This code of practice may provide for variation in procedures and practices for different hap $\bar{u}^{*}$ and $i{ }^{w} i^{*}$ if they identify that this is appropriate. <br> 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. <br> 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*. <br> 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 hap $\bar{u}^{*}$ and $i w i^{*}$, in consultation as appropriate with resource users. <br> 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). <br> 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. |

Te Ao Māori

| Method 2-5 <br> Mahi 2-5 | Regional Hapü* and $/$ wi* Projects <br> He Kaupapa Mahi ā-Hapū, Mahi ā-lwi hoki o te Rohe |
| :---: | :---: |
| Description He Whakamārama | This method will allow opportunities for hapu${ }^{*}$ and $i$ iw $^{*}$ to work alongside the Regional Council to develop and implement a range of projects initiated by hap $\bar{u}^{*}$ or $\mathrm{iwl}^{*}$. These projects could include wetland restoration or enhancement, river bank erosion planting, wāhi tapu* or wāhi tūpuna* GIS mapping, research projects on Mäori land blocks, and hapü* and iwi* resource monitoring initiatives. Mā te mahi nei e whakaputa mea angitū mā ngā hapū me ngā iwi ki te mahi tahi me te Kaunihera ā-Rohe ki te whakahiato me te whakatinana i ngā tümomo kaupapa mahi ka timataia e ngā hapū me ngā iwi. Ka whai wāhi pea ngā kaupapa pērā ite whakahou me te whakarākei ake ingā papa waiwai, te whakatō tupu ki ngā parenga hei ārai te horo whenua, te whakamahere ingā wāhi tapu - wāhi tüpuna ki te GIS, ngā kaupapa rangahau i ngā poraka whenua Māori, me ngā kaupapa aroturuki rauemi a ngā hapū me ngā iwi. |
| Who Ko wai mā | Regional Council and the Region's hapū${ }^{*}$ and $i w i^{*}$. <br> 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 <br> Mahi 2-6 | Iwi Management Plans* (IMP) He Mahere Whakahaere ā-Iwi |
| :---: | :---: |
| Description He Whakamārama | The objective of this method is to encourage hap $\bar{u}^{*}$ and $i w i^{*}$ to develop iwi management plans*. This will ensure hapū${ }^{*}$ and $i w i^{*}$ resource management perspectives are articulated in order that they can be incorporated in the Regional Council's planning practices and policy documents. <br> 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 ingā mahi whakamahere me ngā kaupapa a te Kaunihera ā-Rohe. |
| Who Ko wai mā | The Regional Council will assist hapū" and $i w i^{*}$. Mā te Kaunihera ā-Rohe ngā hapū me ngā iwi eāwhina. |
| 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 <br> Mahi 2-7 | Web-Based $/ w i^{*}$ Contacts Database He Pātengi Raraunga ā-Ipurangi o Ngā Iwi |
| :---: | :---: |
| Description He Whakamārama | This method is intended to provide the Regional Council and resource consent applicants with accurate contact information for hapū ${ }^{*}$ and $i w i^{*}$ with a significant interest in resource management matters. <br> 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. <br> 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 $/ w{ }^{*}$ Contacts Database
He Pātengi Raraunga ā-Ipurangi o Ngā Iwi
Ka hoahoatia tētahi whārangi ipurangi ki runga i te ipurangi a te Kaunihera āRohe 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 <br> Ko wai mā | Regional Council, the Region's hapū $\bar{u}^{*}$ and $\overline{i w l}^{*}$ and Te Puni Kokiri. <br> Te Kaunihera ā-Rohe me ngā hapū me ngā iwi o te Rohe me Te Puni Kōkiri. |
| :--- | :--- |
| Links to Policy <br> Ngā Hononga Kaupapa | This method links to Policy 2-1(h) and (i). <br> Ka hono atu tēnei mahi ki ngā Kaupapa 2-1(h) me (i). |
| Target <br> Ngā Keonga | To complete this project by 2009 and to maintain the web page on an ongoing <br> basis. <br> Kia oti pai te kaupapa mahi nei hei mua mai i te tau 2007 me te tiaki i te <br> whārangi ipurangi haere ake nei. |


| Method 2-8 <br> Mahi 2-8 | Joint Management Agreements He Whakaaetanga Whakahaere Ngātahi |
| :---: | :---: |
| Description He Whakamārama | The Regional Council and relevant hapū* and $i w i^{*}$ 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. <br> 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. |
| Who Ko wai mā | Regional Council and the Region's hapū* and $i w i^{*}$. 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(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 <br> Mahi 2-9 | Cultural Monitoring Framework <br> He Anga Aroturuki Ahurea |
| :--- | :--- |
| Description <br> He Whakamārama | The Regional Council will work with hapū* and iwi*̄ to develop and implement a <br> cultural monitoring framework for natural and physical resources. <br> Ka mahi tahi te Kaunihera ā-Rohe me ngā hapū me ngā iwi ki te whakahiato, ki <br> te whakatinana hoki i tētahi anga aroturuki ahurea e pā ana ki ngā rauemi māori <br> me ngā rauemi ōkiko. |
| Who <br> Ko wai mā | Regional Council and the Region's hapū* and iwi*. <br> Te Kaunihera ā-Rohe me ngā hapū me ngā iwi o te Rohe. |
| Links to Policy <br> Ngā Hononga Kaupapa | This method links to Policies 2-1(d), 2-2 and 2-3. <br> Ka hono atu tēnei mahi ki ngā Kaupapa 2-1(d), 2-2 me 2-3. |
| Target <br> Ngā Keonga | Implementation of a cultural monitoring framework for natural and physical <br> resources by June 2011. <br> Kia whakatinanahia tētahi anga aroturuki ahurea e pā ana ki ngā rauemi māori <br> me ngā rauemi ōkiko hei mua mai i te marama o Pipiri 2011. |


| Method 2-10 <br> Mahi 2-10 | Resource Consent Processes <br> Ngā Tikanga Whakatau Whakaaetanga Rauemi |
| :---: | :---: |
| Description He Whakamārama | To develop protocols within the Regional Council's consents team to enable affected hapū${ }^{*}$ and $i w i^{*}$ to participate in resource consent processes. These include: <br> - notifying affected hapū* and $i w i^{*}$ of relevant resource consent activities <br> - appointing Māori hearing commissioners to resource consent hearings <br> - providing the ability to present evidence to hearings in Māori <br> - presenting hapū ${ }^{*}$ and $i w i^{*}$ submissions on marae <br> - imposing cultural monitoring requirements as a condition of resource consents where appropriate. <br> Ko te whakarite tikanga me te tira whakahaere whakaaetanga o te Kaunihera āRohe kia taea ai e ngā hapū me ngā iwi whai pānga te uru ki roto i ngā tikanga whakatau whakaaetanga, ehara tonu: <br> - ko te whakamōhio atu i ngā hapū me ngā iwi mō ngā ngohe whakaaetanga rauemi whai pānga <br> - ko te whakatū kaikomihana Māori mō ngā hui whakatau whakaaetanga rauemi <br> - kia whakaratongia te āhei ka taea te tuku taunakitanga mā te kōrerotia o te reo Māori <br> - ko te whakatakoto tāpaetanga ngā hapū me ngā iwi i runga marae <br> - 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. <br> He kaupapa tēnei ka haere tonu. |

### 2.6 Anticipated Environmental Results

## Ngā Hua Ka Tūmanakotia Mā Te Taiao

| Anticipated Environmental Result <br> Te Hua Ka Tūmanakotia Mâ 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. <br> Ka tika ngā mahi me te hāngai tonu ki ngā tikanga Māori i ngā wā ka huraina ngā wāhi tapu, wāhi tūpuna hoki. | - Policy 2.2 <br> - Kaupapa 2.2 | - Reduction in the number of wāhi tapu* and wāhi tūpuna* dealt with inappropriately (including when damaged by inappropriate subdivision, use or development) <br> - 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) | Accidental wāhi tapu* and wāhi tūpuna* discoveries reported to the Regional Council and Heritage New Zealand <br> $H a p \bar{u}^{*}$ and $i w i^{*}$ <br> Ka whakamōhiotia te Kaunihera ā-Rohe me te Pouhere Taonga ingā ka huraina kōpeka noa ngā wāhi tapu me ngā wāhi tūpuna <br> 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 Ngā Tohu | Data Source Ngā Puna Raraunga |
| :---: | :---: | :---: | :---: |
| outcomes across the Region. Ko te piki ake o te whakauru a te Māori ki te whakatutuki i ingā 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 <br> - Ko te nama o ngā kaupapa mahi taiao ka whakaritea, ka whai putea, à, ka whakatinanahia me ngā hapū, ngā iwi, ngā kōmiti o ngā marae, ko ētahi rōpū whakahaere Māori rānei <br> - Number of monitoring programmes developed with hapū* and iwi* <br> - Ko te nama o ngā kaupapa aroturuki kua whakaritea me ngā hapū me ngā iwi <br> - Number of seminars or research projects conducted with hapū ${ }^{*}$ or $i w i^{*}$ catchment collectives <br> - Ko te nama o ngā awheawhe, kaupapa rangahau rānei, ka mahia me ngā hapū, iwi rānei - i roto ingā takiwā o ngā kohinga iwi/hapū | Ko tētahi putea e kīia nei ko te Regional Iwi Environmental Projects Fund |
| Improved wetland protection and restoration. <br> Ka pai kē ake te whakamarumaru me te whakahou ingā papa waiwai. | - Policy 2-4 <br> - Kaupapa 2-4 | - Number of wetland projects developed with Māori landowners <br> - Ko te nama o ngā kaupapa mahi e pā ana ki ngā papa waiwai ka whakaritea me ngā kaipupuri whenua Māori <br> - Research projects, seminars undertaken <br> - Ko ngā kaupapa rangahau me ngā awheawhe rangahau ka mahia | He Tini Awa Trust Ko te tarāti o He Tini Awa, arā, ko He Tini Awa Trust <br> Regional Iwi Environmental Projects Fund Ko tētahi putea e kïla nei ko te Regional Iwi Environmental Projects Fund |
| Improved working relationships with $h a p \bar{u}^{*}$ and $i{ }^{\prime} i^{*}$ 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 | - Policies 2-1 and 2-4 <br> - Kaupapa 2-1 me 2-4 | - Number of environmental partnership agreements with hapū${ }^{*}$ and $i w i^{*}$ <br> - Ko te nama o ngā manatū rangapū me ngā hapū me ngā iwi e pā ana ki te taiao <br> - Improved localised environmental results <br> - Ka pai kē ake ngā hua e pā ana ki te taiao ki ngā takiwā | Memoranda of partnership Ko ngā manatū rangapū <br> Iwi management plans* Ko ngā mahere whakahaere ā-iwi |

### 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 $i w i^{*}$ to effect key decision-making on natural resources. The rationale for the Regional Council to provide for relationships with hapu${ }^{*}$ and $i w i^{*}$ 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 āiwi, 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 hapū ${ }^{*}$ and $i w i^{*}$ 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 hapū ${ }^{*}$ and $i w i^{*}$ in order to adequately identify the relationship that hapū ${ }^{*}$ and $i w i^{*}$ 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 kia 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 rāhui* may be facilitated with the support of $h a p \bar{u}^{*}, i w i^{*}$ 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 hapū ${ }^{*}$ and $i w i^{*}$ 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 <br> Infrastructure, Energy, Waste*, Substances* and Contaminated Land

## $3.1 \quad$ 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 $7(\mathrm{ba}), 7(\mathrm{i})$ and $7(\mathrm{j})$ 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 responsiblities 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 <br> 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^ 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^ with land^ 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 $I^{1}$ versatile soils ${ }^{2}$ for use as production land ${ }^{\wedge}$ 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^ 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^ from the use, storage, disposal and transportation of hazardous substances*, and
(iii) manage adverse effects ${ }^{\wedge}$ from contaminated land^.

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.

[^4]
### 3.4 Policies

### 3.4.1 Infrastructure^ and other Physical Resources of Regional or National Importance

Policy 3-1: Benefits of infrastructure^ and other physical resources of regional or national importance
(a) The Regional Council and Territorial Authorities^ must recognise the 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 ${ }^{\wedge}$ where the electricity generated is supplied to the electricity distribution and transmission networks
(ii) the National Grid and electricity distribution and transmission networks defined as the system of transmission lines, subtransmission and distribution feeders ( 6.6 kV and above) and all associated substations and other works to convey electricity
(iii) pipelines and gas facilities used for the transmission and distribution of natural and manufactured gas
(iv) the road^ and rail networks as mapped in the Regional Land Transport Strategy
(v) the Palmerston North and Wanganui airports^
(vi) the RNZAF airport^ at Ohakea
(vii) telecommunications and radiocommunications facilities
(viii) public or community sewage treatment plants and associated reticulation and disposal systems
(ix) public water supply* intakes, treatment plants and distribution systems
(x) public or community drainage systems, including stormwater systems
(xi) the Port of Wanganui.
(b) The Regional Council and Territorial Authorities^ must recognise the following facilities and assets as being physical resources of regional or national importance:
(i) solid waste* facilities including landfills*, transfer stations and 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^ 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.
(d) The Regional Council and Territorial Authorities^ must achieve as much 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^ of other activities on infrastructure^ and other physical resources of regional or national importance

The Regional Council and Territorial Authorities^ must ensure that adverse effects $^{\wedge}$ on infrastructure ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 $^{\wedge}$ and considering applications for buildings, structures ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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^ of infrastructure^ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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^ ${ }^{\wedge}$ with land^ use

Territorial Authorities^ must proactively develop and implement appropriate land ${ }^{\wedge}$ use strategies to manage urban growth, and they should align their infrastructure ${ }^{\wedge}$ 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^ 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^ must generally not restrict the use of small domestic-scale renewable energy^ production for individual domestic use.

## Policy 3-7: Energy efficiency*

(a) The Regional Council and Territorial Authorities^ 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^ decisions and controls on subdivision and land^ use must ensure that sustainable transport options such as public transport, walking and cycling can be integrated into land^ 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 ${ }^{\wedge}$, 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: Landfil/* 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$

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

The Regional Council and Territorial Authorities^ shall jointly identify priority contaminated land^.

Priority contaminated land ${ }^{\wedge}$ is land ${ }^{\wedge}$ 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
(c) is expected to be subject to a change of land^ use within the next 10 years that is likely to increase the risks to human health or the environment^, including where land ${ }^{\wedge}$ is identified for future residential zoning or where a specific development is proposed.

## Policy 3-15: Management of priority contaminated land^ ${ }^{\wedge}$

Where land^ use changes are likely to increase the risks to human health or the environment ${ }^{\wedge}$ from priority contaminated land^ (as identified under Policy 3-14) the Regional Council and Territorial Authorities^ must ensure that:
(a) the landowner or land ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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: <br> - hazardous waste* disposal facilities <br> - recycling facilities <br> - resource recovery network waste* exchange <br> - public information <br> - waste* education in schools <br> - consistent waste* data collection and reporting <br> - development of Region-wide waste* reduction targets in line with the New Zealand Waste Strategy 2002 <br> - cleanfill* management and monitoring <br> - waste* minimisation and cleaner production in business/trade sectors <br> - 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 | - Continue Regional Territorial Authority Waste Forum <br> - Implement initiatives <br> - Report to central Government on New Zealand Waste Strategy targets on a two-yearly basis. |


| 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: <br> - cleanfill ${ }^{\star}$ management and guidelines <br> - waste* minimisation <br> - availability of waste* disposal and recovery facilities (including for campervans) <br> - fly tipping <br> - hazardous substances* <br> - burning of waste* <br> - offal pits and farm dumps <br> - septic tank discharges <br> - 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 <br> develop and implement a regionally consistent recording and category <br> system and a procedure for the consistent handling of information for <br> registered contaminated land. Appropriate information will be supplied on <br> land information memoranda (LIM). |
| A regional register of contaminated land will be maintained and updated. |  |


| Method 3-4 | Contaminated Land - Identification of Priority Sites* |
| :--- | :--- |
| Description | The Regional Council, together with Territorial Authorities, will identify <br> areas of land where pressure for residential development exists and those <br> areas where there is potential for contaminated land issues according to <br> land use activities listed on the Hazardous Activities and Industries List <br> (Ministry for the Environment, 2004a), in particular horticultural sites* and <br> 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. |

### 3.6 Anticipated Environmental Results

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


| Anticipated Environmental Result | Link to Policy | Indicator | Data Source |
| :---: | :---: | :---: | :---: |
| No "clean" sites* prior to this Plan becoming operative will become contaminated by 2017. | $\begin{aligned} & \text { Policies: } 3-9 \\ & 3-10,3-11,3-12, \\ & 3-13 \text { and 3-14 } \end{aligned}$ | - Number of clean sites becoming contaminated | - Regional register of contaminated land <br> - Regional Council's incidents database |
| Priority contaminated sites* 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.


4
Land

## $4.1 \quad$ 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 stockcarrying 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.


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

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.

## $4.3 \quad$ 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*.

Land

## 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 $^{\wedge}$ 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^ management

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^ subject to an elevated risk of accelerated erosion* to prepare voluntary management plans under the Council's Sustainable Land Use Initiative or Whanganui Catchment Strategy, which identify sustainable land^ management practices for each farm and work programmes for implementing any agreed changes
(b) monitoring the implementation of voluntary management plans and sustainable land ${ }^{\wedge}$ management practices within hill country land ${ }^{\wedge}$ 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 ${ }^{\wedge}$ that is not within hill country land^ subject to an elevated risk of accelerated erosion* 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 ${ }^{\wedge}$.
(b) Territorial Authorities^ may regulate, through rules^ in district plans ${ }^{\wedge}$ 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 $\wedge$ ) 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^ use, and incorporate them within the regulatory framework where applicable, and
(c) make information describing best management practices for reducing erosion and maintaining water^ quality and soil health available to all relevant landowners, occupiers, asset owners, consultants, developers and contractors.

Land

### 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*. <br> While the emphasis will be on hill country, all land at risk of erosion will <br> be eligible for assistance under this programme. Staff from the Regional <br> Council and other agencies will work with landowners and occupiers to <br> develop voluntary management plans. These plans will provide the <br> blueprint for long-term environmental, economic and social sustainability. <br> Research, publicity, education, information, incentives, joint ventures and <br> land purchase will be used to encourage the landowner or occupier to <br> manage their land in a sustainable manner. |
| Who | Regional Council, central government, Territorial Authorities, Crown <br> Research Institutes, landowners or occupiers, recognised organisations <br> 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 <br> accelerated erosion* will have a voluntary management plan in place by <br> 2017. |


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


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


| Method 4-4 | Sustainable Land Use Codes of Practice and Best Management <br> Practices |
| :--- | :--- |
| Description | This method will provide support for the development of codes of <br> practice, best management practices and other sector-based initiatives <br> for sustainable land use, construction, production and operating methods <br> on all types of land within the Region - hill country, plains, sand country <br> and along the coast. <br> 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. |  |$|$


| Method 4-5 | Land Research, Monitoring and Reporting Programme |
| :--- | :--- |
| Description | The aim of this method is to develop an integrated research, monitoring <br> and reporting programme that supports delivery and refinement of <br> existing policies and methods, guides implementation planning, and <br> allows implementation effectiveness to be assessed. This will include a <br> five-yearly assessment of the effectiveness of the above methods, <br> particularly the Sustainable Land Use Initiative - Hill Country Erosion <br> Method. |
| Who | Regional Council, landowners and occupiers, research institutes, <br> 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 <br> and refinement of existing policies and methods, and guides and <br> assesses implementation. |


| Method 4-6 | Infrastructure Protection |
| :--- | :--- |
| Description | The aim of this method is to reduce the erosion risk to, and caused by, <br> the provision, maintenance* or upgrade* of infrastructure. <br> Advice and information will be provided to infrastructure owners in the <br> planning stages of new works, the carrying out of maintenance* or <br> upgrade*, and protection of existing networks from erosion risks. |
| Who | Regional Council, Territorial Authorities and owners of major <br> infrastructure. |
| Links to Policy | This method implements Policy 4-3. |
| Target | The Regional Council will have formed working partnerships with all <br> major infrastructure owners for the purposes of assessing and identifying <br> 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 <br> awareness amongst the youth of the Region of the significance of the <br> land and soil resource, the threats to it, and what they can do to <br> protect/restore it. This will be achieved through various environmental <br> education programmes/initiatives eg., Green RIG, Trees for Survival etc. |
| Who | Regional Council, national and local environmental education providers <br> 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 <br> environmental education programme. |

### 4.6 Anticipated Environmental Results

| Anticipated <br> 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. <br> Advice Note: There are linkages from this AER to the AERs within s5.6 | $\begin{array}{\|l} \text { Policies } 4-1,4-2,4-3, \\ 5-1,5-2,5-3,5-4 \text { and } \\ 5-8 \end{array}$ | - Water quality monitoring results, especially for "muddy waterways" in the Whanganui and Rangitikei Rivers <br> - Rate of deposition of sediment in coastal river reaches, focusing on the Whanganui, Rangitikei and Manawatu Rivers <br> - Costs of storm damage <br> - \% of Region's land being used in accordance with sustainable use guidelines <br> - Level of achievement of deposited sediment, visual clarity and phosphorus water quality targets* specified in Schedule E. <br> - Changes to long-term mean sediment discharges of rivers to sea. <br> - \% of farms within the SLUI priority catchments that have voluntary management plans in place and are being implemented | - Regional Council's state of environment water quality monitoring programme <br> - Regional Council's and Territorial Authorities' incidents databases <br> - Regional Council's river bed level survey results <br> - Regional Council's and Territorial Authorities' storm damage reports <br> - Land use mapping <br> - Regional Council's Sustainable Land Use Initiative monitoring and implementation reports |

### 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 nonregulatory 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.

### 5.1 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.

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 | $1997\left(\mathrm{~m}^{3} / \mathrm{d}\right)$ | $2009\left(\mathrm{~m}^{3} / \mathrm{d}\right)$ | Increase (\%) |
| Groundwater | All Sectors | 287,000 | 537,179 | $+85 \%$ |

1997 to 2009 Percentage Change in Consented Water Takes

|  |  |  | 1997 to $\mathbf{2 0 0 9}$ Percentage Change in Consented Water Takes |  |
| :--- | :--- | ---: | ---: | :---: |
| Source | Sector | $\mathbf{1 9 9 7}\left(\mathbf{m}^{3} / \mathbf{d}\right)$ | $\mathbf{2 0 0 9}\left(\mathbf{m}^{3} / \mathrm{d}\right)$ | Increase $(\%)$ |
| Surface <br> water | Agriculture | 70,668 | 385,579 | $+446 \%$ |
|  | Industry | 38,835 | 97,782 | $+152 \%$ |
|  | Water supply | 162,024 | 133,259 | $-18 \%$ |
|  | All Sectors | $\mathbf{2 7 1 , 5 2 7}$ | $\mathbf{6 1 6 , 6 2 0}$ | $\mathbf{+ 1 2 7 \%}$ |

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. Saltwatercontaminated 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.

## $5.3 \quad$ Objectives

## Objective 5-1: Water^ management Values

Surface water bodies^ and their beds^ are managed in a manner which safe guards their life supporting capacity and recognises and provides for the Values in Schedule B ${ }^{1}$.

## 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^ quality is managed to ensure that:
(i) water^ quality is maintained in those rivers ${ }^{\wedge}$ 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 ${ }^{\wedge}$ in the Region is prevented or minimised
(iv) the special values of rivers^ protected by water conservation orders ${ }^{\wedge}$ 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

[^5]waiopapa, ka whakaparungia rānei, ka tuhenetia te tuaritanga rānei nā te mahi a te tangata.

## Objective 5-3: Water^ quantity and allocation

Water^ quantity is managed to enable people, industry and agriculture to take and use water^ 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 lifesupporting capacity of rivers ${ }^{\wedge}$ and their beds^${ }^{\wedge}$ 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^ taken from lakes ${ }^{\wedge}$ 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^ or $w^{2}$ tlands ${ }^{\wedge}$ are managed to protect the life-supporting capacity of the lakes^ or wetlands^
(iv) the significant adverse effects ${ }^{\wedge}$ of a groundwater take on other groundwater and surface water^ 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^ of rivers^ and lakes^

The beds ${ }^{\wedge}$ of rivers ${ }^{\wedge}$ and lakes ${ }^{\wedge}$ 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 ${ }^{\wedge}$ and flood mitigation purposes.

The land ${ }^{\wedge}$ adjacent to the $b e d^{\wedge}$ 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.

## $5.4 \quad$ 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 ${ }^{\wedge}$ of rivers^${ }^{\wedge}$ and lakes ${ }^{\wedge}$, the catchments in the Region have been divided into Water Management Zones* and Water Management Sub-zones* in Schedule A. ${ }^{2}$ Groundwater has been divided into Groundwater Management Zones* in Schedule D. ${ }^{3}$

The rivers ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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^ Management Values and Management Objectives

| Value Group |  | Individual Values | Management Objective |
| :---: | :---: | :---: | :---: |
| Ecosystem Values | NS | Natural State | The river ${ }^{\wedge}$ and its bed ${ }^{\wedge}$ 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 |
|  | SOS-R | Sites of Significance Riparian | Sites of significance for indigenous riparian biodiversity are maintained or enhanced |
|  | IS | Inanga Spawning | The water body ${ }^{\wedge}$ and its $b d^{\wedge}$ 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* |
|  |  |  |  |
| Recreational and Cultural Values | CR | Contact Recreation | The water body^ and its bed^ are suitable for contact recreation |
|  | AM | Amenity | The amenity values of the water body ${ }^{\wedge}$ and its bed ${ }^{\wedge}$ (and its margins where in public ownership) are maintained or enhanced |
|  | MAU | Mauri* | The mauri* of the water body ${ }^{\wedge}$ and its bed ${ }^{\wedge}$ is maintained or enhanced |
|  | SOS-C | Sites of Significance - Cultural | Sites of significance for cultural values are maintained |

[^6]| 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 ${ }^{\wedge}$ and its $b e d^{\wedge}$ meet the requirements of rainbow and brown trout spawning and larval and fry development |
|  | AE | Aesthetics | The aesthetic values of the water body^ and its bed ${ }^{\wedge}$ are maintained or enhanced |
| Water^ Use | WS | Water^ Supply | The water ${ }^{\wedge}$ is suitable, after treatment, as a drinking wate $r^{\wedge}$ source for human consumption |
|  | IA | Industrial Abstraction | The water ${ }^{\wedge}$ is suitable as a water ${ }^{\wedge}$ source for industrial abstraction or use, including for hydroelectricity generation ${ }^{+}$ |
|  | I | Irrigation | The water^ is suitable as a water ${ }^{\wedge}$ 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 |
| Social/ <br> Economic Values | CAP | Capacity to Assimilate Pollution | The capacity of a water body ${ }^{\wedge}$ and its bed ${ }^{\wedge}$ to assimilate pollution is not exceeded |
|  | FC/D | Flood Control and Drainage | The integrity of existing flood and river^ bank erosion protection structures ${ }^{\wedge}$ and existing drainage structures ${ }^{\wedge}$ 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 |

[^7]
### 5.4.2 Water Quality

### 5.4.2.1 Surface Water Quality

## Policy 5-2: Water quality targets*

In Schedule $E^{4}$, 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.

[^8]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 ${ }^{\wedge}$ 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^ quality in areas where existing water^ 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^ 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 ${ }^{\wedge}$ from an identifiable location.

### 5.4.2.2 Groundwater Quality

## Policy 5-6: Maintenance of groundwater quality

(a) Discharges ${ }^{\wedge}$ and land ${ }^{\wedge}$ 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 ${ }^{\wedge}$, provided that the best practicable option ${ }^{\wedge}$ is adopted for the treatment and discharge^ ${ }^{\wedge}$ 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^ and Land^ use Activities Affecting Water^ Quality

Policy 5-7: Land^ use activities affecting groundwater and surface water^ quality

The management of $l a n d^{\wedge}$ use activities affecting groundwater and surface water ${ }^{\wedge}$ must give effect to the strategy 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, by managing diffuse discharges ${ }^{\wedge}$ 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 land^ use activities. Intensive farming land^ use activities are rural land^ use activities that (either individually or collectively) make a significant contribution to elevated contaminant levels in the targeted Water Management Subzones* 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^ 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^ uses are included in the management regime set out in (c).

Policy 5-8: Regulation of intensive farming land ${ }^{\wedge}$ use activities affecting groundwater and surface water^ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ use activities anywhere in the Region must be required, amongst other things, to:
(A) prevent cattle access to some surface water bodies^ and their beds ${ }^{\wedge}$
(B) mitigate faecal contamination of surface water^ 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^ to water^

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 ${ }^{\wedge}$, including non-point source discharges^ ${ }^{\wedge}$ 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 ${ }^{\wedge}$
(e) whether the discharge ${ }^{\wedge}$ 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^ resulting from the discharge ${ }^{\wedge}$ 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^ to land^ ${ }^{\wedge}$

Discharges ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ onto or into land ${ }^{\wedge}$ 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^ on rare habitats*, threatened habitats* and at-risk habitats* 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^ on the mauri* of the receiving water body^, and
(b) all existing direct discharges^ of treated human sewage into a surface water body^ 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^ 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^ must be taken into account when considering consent applications to take water^ for irrigation, public water supply*, animal drinking water^, dairy shed washdown or industrial use, and during reviews of consent conditions ${ }^{\wedge}$ 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 ${ }^{\wedge}$ use, crop water^ use requirements, on-site physical factors such as soil water^-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^ and dairy shed washdown water^, 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 $n^{\wedge}$ 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 ${ }^{\wedge}$ of the abstraction on the relevant Schedule B Values for the reach of river ${ }^{\wedge}$ or its bed ${ }^{\wedge}$ affected by the take.

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

Water^ must be used efficiently, including by the following measures:
(a) requiring water^ audits and water^ budgets to check for leakages and water^-use efficiency as appropriate
(b) requiring the use of, or progressive upgrade* to, infrastructure^ for water ${ }^{\wedge}$ 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^ efficiency issues and techniques
(f) requiring monitoring of water^ takes, including by installing water^ 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 ${ }^{\wedge}$ 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^ from rivers ${ }^{\wedge}$ 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^ from rivers^ must be determined in accordance with Policy 5-17.
(e) Takes from rivers ${ }^{\wedge}$ 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^ from lakes^ must comply with Policy 5-19.

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

(a) The taking of water^ from rivers^ 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 ${ }^{\wedge}$ may be provided:
(a) 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 ${ }^{\wedge}$ that are more than minor on the Schedule B Values of the water body^ or its bed ${ }^{\wedge}$
(iv) limit the ability of anyone to take water^ under a core allocation
(v) derogate from water^ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$
(c) Supplementary takes - must cease at a flow specified in their consent conditions ${ }^{\wedge}$ 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 ${ }^{\wedge}$ ) 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^ flow, but must be required to minimise the amount of water^ 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^ applications to take water^ from a lake^ must ensure that there are no significant adverse effects ${ }^{\wedge}$ on the Schedule B Values of the lake^ and have regard to the policies for indigenous biological diversity^ 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^ of a proposed groundwater take on other groundwater users, surface water bodies^ 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^ of rivers $^{\wedge}$ and lakes^
Activities in, on, under or over the beds ${ }^{\wedge}$ of rivers ${ }^{\wedge}$ and lakes ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ on the stability and function of the beds^ of rivers ${ }^{\wedge}$ 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^ or lake^ or its $b e d^{\wedge}$
(e) manages effects^ 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 ${ }^{\wedge}$, such as bed ${ }^{\wedge}$ style and width and the quality and quantity of $b e d^{\wedge}$ 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 ${ }^{\wedge}$ of rivers ${ }^{\wedge}$ and lakes ${ }^{\wedge}$ must be managed in a manner which:
(a) avoids adverse effects ${ }^{\wedge}$ on these Values in the first instance, or
(b) for infrastructure ${ }^{\wedge}$ and other resources of regional and national importance, or activities that result in an environmental benefit, remedies or mitigates those effects ${ }^{\wedge}$ 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^${ }^{\wedge}$ or lakes $^{\wedge}$ and their beds^ ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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^ ${ }^{\wedge}$ or lakes ${ }^{\wedge}$ and their beds^ ${ }^{\wedge}$ 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 ${ }^{\wedge}$ and lakes^ must be managed in a manner which:
(a) in the first instance avoids, remedies or mitigates significant adverse effects^ ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 <br> abstractors to identify options for improving the water abstraction, <br> distribution and use components of their activities. It is expected this <br> method will reduce the abstraction pressure on the groundwater and <br> surface water resources, while providing abstractors with financial <br> benefits and their business/customers with greater certainty of <br> supply. <br> The emphasis will be on working with large abstractors to identify <br> and implement opportunities for increasing water use efficiency, <br> reducing distribution network leakages, agreeing priority of use <br> within distribution networks, and consideration of alternative water <br> supply and storage options. |
| Who | The Regional Council, Territorial Authorities, industry (including <br> hydroelectricity generators) and large irrigators will work together to <br> 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 <br> assistance provided where requested by 2016. |


| Method 5-2 | Sewage Treatment Plant Upgrades |
| :--- | :--- |
| Description | The aim of this method is to assist Territorial Authorities to seek <br> central Government funding for sewage treatment plant upgrades, <br> given that the plants make a significant contribution to contaminants <br> to water bodies during low flows. The Regional Council will work <br> with Territorial Authorities to analyse their treatment and disposal <br> options and to develop a package to present to Government with the <br> aim of securing capital works funding to reduce the environmental <br> impact of these discharges. |
| Who | Regional Council, Territorial Authorities, Ministry of Health, local <br> 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 <br> 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 <br> Council's Manual for On-Site Wastewater Systems Design and <br> Management. <br> The Regional Council will establish a forum to aid understanding and <br> implementation of the manual and will undertake regular reviews of <br> new types of on-site treatment and disposal systems. |
| Who | The forum will comprise, as a minimum, representatives from the <br> Regional Council, Territorial Authorities, consulting engineers and <br> 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 <br> to upgrade existing sewage treatment systems that directly <br> discharge treated human sewage to the Region's water bodies. <br> The Regional Council to work with Territorial Authorities to reduce <br> water volume, explore land application options and assist with <br> 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 <br> wanting to upgrade the treatment of their existing urban stormwater <br> system discharges, where these are into water bodies. <br> The Regional Council to work with Territorial Authorities to reduce <br> water volume, explore land disposal options and assist with funding <br> 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 <br> discharges by 2016. |


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


| Method 5-7 | Lake Quality Research, Monitoring and Reporting |
| :--- | :--- |
| Description | The aim of this method is to develop an integrated research, <br> monitoring and reporting programme. The focus will be to define the <br> current state of the quality of the Region's lakes, particularly the <br> Region's coastal lakes. The method will seek to assess the state <br> 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 Water Management Sub-zones* 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 <br> to protect and enhance water bodies and their beds that serve as <br> spawning sites for brown and rainbow trout and native fish. <br> Resources will be directed towards the most significant sites*. <br> Landowners will be provided with advice and financial/project <br> management assistance to carry out enhancement and protection <br> measures including fencing, planting, providing fish passage and <br> pest plant and pest animal control. The Regional Council will seek <br> funding from third parties to assist with this method. <br> The effectiveness of the protection and enhancement works will be <br> monitored. <br> The method will include publicity to increase public awareness about <br> the importance of trout and native fish. |
| Who | Regional Council, Territorial Authorities, Fish \& Game New Zealand, <br> Department of Conservation, landowners and funding agencies <br> including He Tini Awa Trust. |
| Links to Policy | This method implements Policies 5-2, 5-22 and 5-25. <br> Target30 of the top trout spawning habitat sites* and native fish habitat <br> spawning sites* are actively managed, including protection and <br> enhancement measures, within 10 years of this Plan becoming <br> operative. |


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


| Method 5-10 | Education in Schools - Water |
| :--- | :--- |
| Description | The aim of this method is to raise awareness amongst the youth of <br> the Region of the significance of the water (quantity and quality) <br> resource, the threats to it, and what they can do to protect/restore it. <br> This will be achieved through various environmental education <br> programmes/initiatives - for example, Green RIG, Enviroschools and <br> Trees for Survival. |
| Who | Regional Council, various national and local environmental <br> 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 <br> 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. |

## $5.6 \quad$ Anticipated Environmental Results

| Anticipated Envi | Link to Policy | Indicator | Data Source |
| :---: | :---: | :---: | :---: |
| During the life of this Plan, water quality and quantity maintain the Values set in this Plan. <br> In Water Management Sub-zones*: <br> - where water quality targets* are met prior to this Plan becoming operative, they continue to be met <br> - 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 <br> Land Policies: <br> 4-1, 4-2 and 4-3 <br> Living Heritage <br> Policies: 6-1, 6-2, <br> 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 <br> - Incidents where surface water quality is confirmed as unfit for use <br> - 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 <br> - The Regional Council's incidents database <br> - Ministry of Health raw water monitoring |
| By 2017, the natural, physical and cultural qualities of the beds of rivers are suitable for specified Water | Water Policies: <br> 5-1, 5-22, 5-23, <br> 5-24, 5-25 and | - Confirmed incidents of damage to the beds of rivers <br> - Consents granted for activities | - The Regional Council's incidents database |

Water

| 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 <br> - Groundwater quality Regionwide, but with a focus on nitrates in Horowhenua and Tararua districts and conductivity along the FoxtonTangimoana coast <br> - 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 <br> - The Regional Council's compliance monitoring programme <br> - The Regional Council's incidents database <br> - 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).

# 6 <br> 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:

Indigenous biological diversity, landscape and historic heritage
(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 $\mathrm{G}^{1}$. 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.

[^9]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
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
(a) The Region's outstanding natural features and landscapes can be 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 $s 9(2)$ 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 kïrehe 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
(ii) the natural character of the coastal environment, wetlands ${ }^{\wedge}$, rivers ${ }^{\wedge}$ and lakes^ and their margins
are protected from inappropriate subdivision, use and development.
(b) Adverse effects ${ }^{\wedge}$, including cumulative adverse effects ${ }^{\wedge}$, on the natural 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.
(c) Promote the rehabilitation or restoration of the natural character of the coastal environment, wetlands ${ }^{\wedge}$, rivers $^{\wedge}$ and lakes ${ }^{\wedge}$ and their margins.

Whāinga 6-2: $\quad$ 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 ite 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 ite 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 $l^{\prime}{ }^{\wedge}{ }^{\wedge}$ 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 $\wedge$, including enhancement where appropriate
(ii) developing rules^ controlling the use of land ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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.
(c) Both the Regional Council and Territorial Authorities^ must be responsible for:
(i) 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:
(a) Habitats determined to be rare habitats* and threatened habitats* under Schedule $F$ must be recognised as areas of significant indigenous vegetation or significant habitats of indigenous fauna.
(b) At-risk habitats* that are assessed to be significant under Policy 13-5 must be recognised as significant indigenous vegetation or significant habitats of indigenous fauna.
(c) The Regional Council must protect rare habitats*, threatened habitats* and 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.
(e) When regulating the activities described in (c) and (d), the Regional Council must, and when exercising functions and powers described in Policy 6-1, Territorial Authorities ${ }^{\wedge}$ must:
(i) allow activities undertaken for the purpose of pest plant and pest animal control or habitat maintenance or enhancement,
(ii) consider indigenous biological diversity^ offsets in appropriate circumstances as defined in Policy 13-4,
(iii) allow the maintenance*, operation* and upgrade* of existing structures ${ }^{\wedge}$, including infrastructure ${ }^{\wedge}$ and other physical resources of regional or national importance as identified in Policy 3-1, and
(iv) not unreasonably restrict the existing use of production land ${ }^{\wedge}$ where the effects of such land^ use on rare habitat ${ }^{\star}$, 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
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 ${ }^{\wedge}$, 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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
(b) considering adding to, deleting from, or otherwise altering, redefining or 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 ${ }^{\wedge}$ 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: <br> (i) Representative: the combination of natural components that form the feature or landscape strongly typifies the character of an area. <br> (ii) Research and education: all or parts of the feature or landscape are important for natural science research and education. <br> (iii) Rarity: the feature or landscape is unique or rare within the district or Region, and few comparable examples exist. <br> (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: <br> (i) Coherence: the patterns of land $d^{\wedge}$ cover and land ${ }^{\wedge}$ use are largely in harmony with the underlying natural pattern of landform and there are no, or few, discordant elements of land ${ }^{\wedge}$ cover or land ${ }^{\wedge}$ use. <br> (ii) Vividness: the feature or landscape is visually striking, widely recognised within the local and wider community, and may be regarded as iconic. <br> (iii) Naturalness: the feature or landscape appears largely unmodified by human activity and the patterns of landform and land ${ }^{\wedge}$ cover are an expression of natural processes and intact healthy ecosystems. <br> (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 |


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

## Policy 6-8: Natural character

(a) The natural character of the coastal environment, wetlands ${ }^{\wedge}$, rivers ${ }^{\wedge}$ and lakes ${ }^{\wedge}$ 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 ${ }^{\wedge}$, rivers ${ }^{\wedge}$ and lakes ${ }^{\wedge}$ 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 ${ }^{\wedge}$, river $^{\wedge}$ or lake^ and no reasonably practicable alternative locations exist,
(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^ ${ }^{\wedge}$ and lakes^ and their margins

(a) Activities within or near rivers^ and lakes^ 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^.
(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 ${ }^{\wedge}$

## 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^ identification

(a) Territorial Authorities^ must develop and maintain a schedule of known historic heritage ${ }^{\wedge}$ for their district to be included in their district plan ${ }^{\wedge}$.
(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 ${ }^{\wedge}$ 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 <br> and enhance priority wetlands throughout the Region. Resources will be <br> directed towards the most significant sites*. |
| Wetland owners will be provided advice and financial/project management <br> assistance to carry out enhancement and protection measures including <br> 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 <br> the establishment of covenants. <br> Monitoring of the effectiveness of the protection and enhancement works will <br> be undertaken. <br> This method will include publicity to increase public awareness about the <br> importance of wetlands and indigenous biological diversity. |
| Who | Regional Council, landowners, foresters, relevant consent holders, Federated <br> Farmers, Territorial Authorities, Department of Conservation, hapū* and iwi*, <br> non-government agencies including NZ Fish and Game, QEII Trust, NZ <br> Wetland Trust, NZ Landcare Trust and relevant funding agencies including the <br> He Tini Awa Trust, Biodiversity Condition Fund, Nga Whenua Rahui and <br> Ducks Unlimited. |
| Links to Policy | This method implements Policy 6-3. |
| Targets | The top 100 wetlands in the Region are actively managed, including protection <br> 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 <br> and enhance priority bush remnants throughout the Region. Resources will <br> be directed towards the most significant sites*. <br> Bush remnant owners will be provided with advice and financial/project <br> management assistance to carry out enhancement and protection measures <br> including fencing, planting, and pest (plant and animal) control. The Regional <br> Council will seek funding from third parties to assist with this method, and <br> encourage the establishment of covenants. <br> Monitoring of the effectiveness of the protection and enhancement works will <br> be undertaken. <br> This method will include publicity to increase public awareness about the <br> importance of bush remnants and indigenous biological diversity. |
| Who | Regional Council, landowners, foresters, relevant consent holders, Federated <br> Farmers, Territorial Authorities, Department of Conservation, hapū* and iwi*, <br> non-government agencies including QEII Trust and NZ Landcare Trust, and <br> relevant funding agencies including the He Tini Awa Trust, Biodiversity <br> 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, <br> including protection or enhancement measures, within 10 years of this Plan <br> becoming operative. |


| Method 6-3 | Sites of Significance - Aquatic |
| :--- | :--- |
| Description | The Regional Council and other agencies will work with landowners to protect <br> and enhance water bodies and parts of water bodies that serve an important <br> role in the lifecycle of the Region's rare and threatened native fish. Resources <br> will be directed towards the most significant sites*. |
| Owners of land adjacent to water bodies will be provided advice and <br> financial/project management assistance to carry out enhancement and <br> protection measures including fencing, planting, replacement of perched <br> 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. <br> Monitoring of the effectiveness of the protection and enhancement works will <br> be undertaken. <br> This method will include publicity to increase public awareness about the <br> importance of native fish and indigenous biological diversity. |
| Who | Regional Council, landowners, foresters, relevant consent holders, Federated <br> Farmers, Territorial Authorities, Department of Conservation, hapū <br> and funding and iwí <br> Fundies including the He Tini Awa Trust, Biodiversity Condition |
| Links to Policy | This method implements Policy 6-3. |
| Targets | The top 100 Sites of Significance - Aquatic are actively managed, including <br> protection or enhancement measures, within 10 years of this Plan becoming <br> operative. |


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


| Method 6-5 | Biodiversity (Terrestrial and Aquatic) Research, Monitoring and <br> Reporting |
| :--- | :--- |
| Description | The aim of this method is to develop an integrated research, monitoring and <br> reporting programme that supports delivery and refinement of existing policies <br> and methods, guides implementation planning, and allows implementation <br> effectiveness to be assessed. |
| Who | Predominantly the Regional Council, with assistance from research institutes, <br> 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 <br> Reporting |
| :--- | :--- |
|  | refinement of existing policies and methods, and guides and assesses <br> implementation. |


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


| Method 6-7 | District Planning - Natural Features, Landscapes, Historic Heritage and <br> Indigenous Biological Diversity |
| :--- | :--- |
| Description | The Regional Council will formally submit on resource consent applications <br> received by Territorial Authorities for land use activities where there is <br> potential for effects on outstanding natural features, landscapes or indigenous <br> biological diversity. <br> The Regional Council will formally seek changes to district plans if necessary <br> to ensure provisions are in place to provide an appropriate level of protection <br> to natural features, landscapes, historic heritage and indigenous biological <br> diversity. <br> The Regional Council will formally seek changes to district plans if necessary <br> to ensure district plan rules requiring protection of significant indigenous <br> vegetation and the significant habitats of indigenous fauna do not contradict <br> 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. |


| Method 6-8 | Consistent Landscape Assessment |
| :--- | :--- |
| Description | The aims of this method are: <br> (a) to develop a consistent and robust characterisation of the landscape <br> within the Region and consistent identification of outstanding natural <br> features and landscapes, and |
| (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 |  |


|  | Policy 6-7 and the factors detailed in Table 6.1. <br> The Regional Council will make available relevant resource data including maps suitable for the study area description. <br> 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: <br> (i) Central North Island tussocklands <br> (ii) Eastern Desert Road landscape <br> (iii) Moawhango Ecological Region including the Moawhango Gorge, Makirikiri Tarns and Reporoa Bog, and the Kutaroa and Otahupitara Swamps (Irirangi Swamp) <br> (iv) Waimarino - Erua - National Park fault scarp <br> (v) Western Edge of the Volcanic Plateau <br> (vi) Landguard Bluff <br> (vii) Lake Horowhenua and its margins <br> (viii) Lake Papatonga and its adjacent scenic reserve. <br> 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 <br> interest in biodiversity with advice and information about the state of <br> biodiversity in the Region, information about the rules and methods contained <br> within this Plan to manage indigenous biodiversity, and advice about how <br> these methods and rules will be implemented. This includes providing <br> guidance on the rules contained within this Plan so that they can be easily <br> understood and used by landowners. |
| Who | Regional Council, with assistance from landowners and community groups as <br> 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 <br> interested to understand and use the methods and rules provided for in this <br> Plan. |


| Method 6-10 | Proactive Identification of Historic Heritage |
| :--- | :--- |
| Description | The aim of this method is to determine an approach to provide for the <br> proactive identification of historic heritage resources within the Region and <br> should be read in conjunction with Method 8-4. |
| The approach may include the development of a Region-wide database or list <br> of areas with a high potential for containing unidentified historic heritage sites* <br> and structures, amendments or variations to existing regional or Territorial <br> 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 <br> Archaeological Association, hāpu* and iwi* 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. |

### 6.6 Anticipated Environmental Results

| 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 <br> Administration Policies: 12-4, 12-5, 12-6 and 12-8 <br> Water Policies: 5-1, 5-2, 5-3, 5-4, 5-5, 5-8, 5-16, 5-17, 5-18 and 5-23 | - Extent of each habitat type compared to former extent <br> - Number of rare habitats*, threatened habitats* and at-risk habitats* damaged by unauthorised activities | - Landcare Research: Land Environments NZ Tool, EcoSat tool and Land Cover Database 2 tool <br> - 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. | Indigenous biological diversity, landscape and historic heritage Policies: 6-1, 6-2, 6-3, 6-4, 6-5 and 6-8 <br> Administration Policies: 12-4, 12-5, 12-6 and 12-8 <br> 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 <br> - 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 <br> - 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. <br> - Portion of Regional Council submissions accepted versus total Regional Council submissions made on historic heritage to Territorial Authority consent planning processes | - District plans <br> - 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 |


| 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 <br> - Level of protection afforded to Schedule G outstanding landscapes and natural features in Territorial Authority district plans <br> - 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 <br> - Regional Council's incidents database <br> - Regional Council's Subdivision Enquiry Database (SED) <br> - Territorial Authority district plans <br> - 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
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, and
(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.


## 7. Air

## $7.1 \quad$ 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 200414 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 $\mathrm{H}^{1}$ ) 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 $\left(P M_{10}{ }^{*}\right)$ 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 ( $P M_{10}{ }^{*}$ ) levels. $P M_{10}{ }^{*}$ are of concern as they can be drawn into the lungs causing or aggravating health problems, particularly respiratory problems. The main cause of the $P M_{10}{ }^{*}$ problem is emissions from domestic woodburners, although vehicle emissions, backyard burning and, to a lesser extent, industry, may also contribute.

[^10]As $P M_{10}{ }^{*}$ can adversely affect people's health, the national standard has been included in the airshed monitoring programmes. Direct monitoring results for wintertime $P M_{10}{ }^{*}$, between 2001 and 2003 in 11 population centres in the Region showed that Taumarunui and Taihape exceeded the $P M_{10}{ }^{*}$ standard and Ohakune, Feilding, Dannevirke and Pahiatua had the potential to exceed it. Wintertime $P M_{10}{ }^{*}$ levels in the other five centres - Wanganui, Palmerston North, Levin, Marton and Ashhurst - were under the $P M_{10}{ }^{*}$ standard. $P M_{10}{ }^{*}$ 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 ( $P M_{10}{ }^{*}$ ) levels

The use of home heating appliances is likely to be causing fine particle levels to exceed the national ambient air* quality standard for $P M_{10}{ }^{*}$ 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 ${ }^{\wedge}$, 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 ( $P M_{10}{ }^{*}$ ) levels

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

[^11]
## Whāinga 7-2: $\quad$ Ngā taumata ira meroiti ( $\mathrm{PM}_{10}{ }^{*}$ )

(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 ( $P M_{10}{ }^{*}$ ) 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 $\left(P M_{10}{ }^{*}\right)$ o te motu.

## $7.4 \quad$ 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^ for Ambient Air* Quality ${ }^{3}$

| Contaminant ${ }^{\wedge}$ | Threshold Concentration | Permissible Excess |
| :---: | :---: | :---: |
| Carbon monoxide | $10 \mathrm{mg} / \mathrm{m}^{3}$ <br> (running 8-hour mean) | One 8-hour period in any 12-month period |
| Nitrogen dioxide | $200 \mu \mathrm{~g} / \mathrm{m}^{3}$ <br> (1-hour mean) | Nine 1-hour periods in any 12-month period |
| Ozone | $150 \mu \mathrm{~g} / \mathrm{m}^{3}$ <br> (1-hour mean) | Not to be exceeded at any time |
| Fine particles ( $P \mathrm{M}_{10}{ }^{*}$ ) | $50 \mu \mathrm{~g} / \mathrm{m}^{3}$ <br> (24-hour mean) | One 24-hour period in any 12-month period |
| Sulphur dioxide | $350 \mu \mathrm{~g} / \mathrm{m}^{3}$ <br> (1-hour mean) | Nine 1-hour periods in any 12-month period |
|  | $570 \mu \mathrm{~g} / \mathrm{m}^{3}$ <br> (1-hour mean) | Not to be exceeded at any time |

[^12]Table 7.2 Air Quality Categories and Designated Response

| Category | Measured Value | Designated Response |
| :--- | :--- | :--- |
| Unacceptable | Greater than the threshold concentration <br> in the National Environmental <br> Standards^ for Air Quality, and exceeds <br> the permissible excess in Table 7.1 | - Enhance <br> - Establish long-term strategy <br> • Monitor <br> - Publicly notify exceedances |
| Degraded | $66 \%$ to $100 \%$ of the threshold <br> concentration in the National <br> Environmental Standards for Air Quality <br> in Table 7.1, with one exceedance | - Maintain, and enhance where practicable <br> - Establish awareness programmes <br> - Monitor where practicable |
| Acceptable | Up to 66\% of the threshold concentration <br> in the National Environmental <br> Standards^ for Air Quality in Table 7.1, <br> with one exceedance | • Maintain |

## Policy 7-2: Regional standards for ambient air* quality

In addition to the National Environmental Standards ${ }^{\wedge}$ 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
$\left.\begin{array}{|l|l|}\hline \text { Contaminant^} & \text { Regional Standard } \\ \hline \text { Odour } & \begin{array}{l}\text { - A discharge^ } \\ \text { the property }\end{array} \\ \hline \text { Dust not caundary. }\end{array}\right]$

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^ to air

Discharges^ of contaminants^ into air will be generally allowed, provided:
(a) the effects^ of the discharge ${ }^{\wedge}$ 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.

## Policy 7-4: Incompatible land^ uses

Air quality problems arising from incompatible land ${ }^{\wedge}$ uses establishing near each other must be avoided, remedied or mitigated primarily through district plans ${ }^{\wedge}$ and Territorial Authority^ consent decisions which:
(a) prevent the future establishment of potentially incompatible land^ 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 $\left(P M_{10}{ }^{*}\right)$ 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 $\left(P M_{10}{ }^{*}\right)$ 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 ${ }^{\wedge}{ }^{4}$.
(b) Strategies to reduce fine particle $\left(P M_{10}{ }^{*}\right)$ 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 $\left(P M_{10}{ }^{*}\right)$ in the Taihape and Taumarunui airsheds (and within any other airsheds with concentrations of fine particles that breach the National Environmental Standards ${ }^{\wedge}$ and which are gazetted by the Regional Council) that are likely to increase significantly the concentration of fine particles ( $P M_{10}{ }^{*}$ ) 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^ to discharge ${ }^{\wedge}$ fine particles $\left(P M_{10}{ }^{*}\right)$ 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
(b) if the applicant can show that the discharge^ of $P M_{10}{ }^{*}$ will be offset by a reduction in other sources of $P M_{10}{ }^{*}$ within the same area.

[^13]
## Policy 7-7: Fine particles in airsheds within the Region

(a) All applications to discharge^ fine particles $\left(P M_{10}{ }^{*}\right)$ 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 $\left(P M_{10}{ }^{*}\right)$ 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 $\left(P M_{10}{ }^{*}\right)$ - Long-term Strategies: <br> Taumarunui and Taihape and Other Unacceptable Airsheds |
| :--- | :--- | :--- |
| Description | Long-term strategies will be developed to improve air quality in Taumarunui and <br> Taihape, and other unacceptable airsheds, to meet the national ambient air* <br> quality standard for fine particles $\left(P M_{10} 0^{*}\right)$. |
| The primary focus of the long-term strategies will be to reduce PM10* 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 $P M_{10}{ }^{*}$ |  |
| - encouraging practices that will reduce $P M_{10}{ }^{*}$ emissions, including reduction |  |
| of backyard burning. |  |


| Method 7-2 | Improving Air Quality $\left(P M_{10}{ }^{*}\right)$ - Awareness Programme: Ohakune, Feilding, <br> Dannevirke, Pahiatua and Other Degraded Areas |
| :--- | :--- |
| Description | The aim of this method is to increase awareness of air quality issues in <br> Ohakune, Feilding, Dannevirke and Pahiatua, and other degraded areas, and to <br> encourage practices that may improve air quality such as: |
|  | - use of more efficient woodburners <br> - upgrading of woodburners to reduce $P M_{10}{ }^{*}$ emissions <br> - reducing backyard burning <br> - monitoring of $P M_{10}{ }^{*}$ where practicable. |
| Who | Regional Council, Ministry for the Environment, Ministry of Social Development, <br> Energy Efficiency Conservation Authority, district health boards, Territorial |


| Method 7-2 | Improving Air Quality $\left(P M_{10} 0^{*}\right)$ - Awareness Programme: Ohakune, Feilding, <br> Dannevirke, Pahiatua and Other Degraded Areas |
| :--- | :--- |
|  | Authorities, industry and the community. |
| Links to Policy | This method implements Policy 7-6. |
| Target | $P M_{10}{ }^{*}$ levels in Ohakune, Feilding, Dannevirke and Pahiatua will be maintained <br> or improved to ensure ongoing compliance with the national ambient air <br> standard for fine particles $\left(P M_{10}{ }^{*}\right)$. |


| Method 7-3 | Monitoring by the Regional Council |
| :--- | :--- |
| Description | Air quality will be monitored for particulate matter $\left(P M_{10}{ }^{*}\right)$ in Taumarunui and <br> Taihape in accordance with National Environmental Standards requirements and <br> in Dannevirke, Ohakune, Feilding and Pahiatua as practicable. Air quality will <br> also be monitored for particulate matter $\left(P M_{10}{ }^{*}\right)$ in Palmerston North and <br> possibly Wanganui, because of the increased potential for population exposure. <br> This method will also provide for the revision of the status of airsheds, including <br> the gazettal of new airsheds in relation to National Environmental Standards for <br> ambient air* quality. |
| Who | Regional Council, Ministry for the Environment, National Institute of Water and <br> 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 <br> Standards for ambient air* quality. <br> To revise airshed status every two years after this Plan becomes operative and <br> 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 <br> understanding with Territorial Authorities and district health boards for air quality <br> issues to agree on respective responsibilities, in particular: <br> - smoky fires and incinerators <br> - <br> - fire permits and outdoor burning* <br> - dust complaints <br> - odour complaints <br> - complaints about airborne contaminants, gases and fumes, and dangerous <br> 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 |
| :--- | :--- |
|  | $\bullet ~ P M_{10}{ }^{*}$ and home heating <br> $\bullet$ <br> agrichemical |
| Who spay drift*. |  |


| Method 7-6 | $\mathbf{2 4}$ Hour Pollution Hotline |
| :--- | :--- |
| Description | This service relates to the ongoing provision of a 24 hour Pollution Hotline to <br> 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 |
| :--- | :--- | :--- | :--- |

### 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 $\left(P M_{10}{ }^{*}\right)$ 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 ( $P M_{10}{ }^{*}$ ) 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 $P M_{10}{ }^{*}$ which can adversely affect people's health. The regulations require that airsheds are established where exceedance of standards is likely, that $P M_{10}{ }^{*}$ 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 $P M_{10}{ }^{*}$ between 2001 and 2003 confirmed that Taumarunui and Taihape exceeded the $P M_{10}{ }^{*}$ 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 $P M_{10}{ }^{*}$ monitoring results mentioned above. Domestic home heating is the most likely main contributor to wintertime $P M_{10}{ }^{*}$ 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 $P M_{10}{ }^{*}$ ambient standard, monitoring will continue, to ensure that $P M_{10}{ }^{*}$ 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 <br> 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 $3,000 \mathrm{~km}^{2}$ 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 coast.

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 freshwaterbased activities (including discharges^) on the CMA.

## Whāinga 8-1: $\quad$ 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 ite 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 ite tika.

## Objective 8-3: Water^ quality

Water^ 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^ quality is maintained in those parts of the CMA where the existing water^ quality is 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, 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 1.4 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 kï̀a nei ko Tables l. 2 me I.3, me ngā keunga kounga wai kei roto i ngā rārangi e kīia nei ko Tables l. 4 ki I. 7 o Puka Āpiti $l$.
(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 kïia nei ko Tables l. 2 me l.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*),
(c) provisions in district plans ${ }^{\wedge}$ that identify the landward extent of the coastal environment, sustainably manage land ${ }^{\wedge}$ 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
(d) joint initiatives where resource management issues arise and are not 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 <br> 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:
(i) facilitate the operation* of the Wanganui Port and marina, including restricting public access where it is necessary for safety reasons
(ii) involve maintenance dredging and associated disposal to maintain a navigational depth
(iii) involve the maintenance*, upgrade* or extension of existing structures^.
(b) various Protection Activity Management Areas for the purposes of 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^ of activities other than activities which:
(i) appropriately enable or restrict public access, or
(ii) are essential for public safety, or
(iii) are intended to restore or conserve a site* or characteristics within a site*, or
(iv) have no more than minor adverse environmental effects ${ }^{\wedge}$ on the 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. The purpose of the General Activity Management Area is to ensure that adverse effects ${ }^{\wedge}$ 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 ${ }^{\wedge}$ in the CMA require the establishment of an aquaculture management area by way of a notified change^ to Chapter 18 of this Plan.

## Policy 8-4: Appropriate use and development

Any use or development in the CMA must:
(a) have a functional necessity to be located in the CMA,
(b) facilitate restoration or rehabilitation of natural features where reasonably practicable, and
(c) avoid, as far as reasonably practicable, any adverse effects^ on the following important values:
(i) any characteristic listed in Table I. 1 in Schedule I: Part B for each Protection Activity Management Area
(ii) elements and processes that contribute to the natural character and open space characteristics of the CMA
(iii) the landscape and seascape elements that contribute to the natural character of the CMA
(iv) areas of significant indigenous vegetation and significant habitats of indigenous fauna, and the maintenance of indigenous biological diversity^$^{\wedge}$
(v) the intrinsic values of ecosystems
(vi) the natural integrity and functioning of physical processes (including recognition of sea level rise*)
(vii) historic heritage ${ }^{\wedge}$.

When avoidance is not reasonably practicable, the adverse effects ${ }^{\wedge}$ 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 ${ }^{\wedge}$.
(b) Public access in the CMA for recreational purposes must be provided in a 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:
(a) has regard to the Values and water^ quality targets for the Seawater Management Zone* and Estuary Water Management Sub-zones*, as set out in Schedule I: Part C
(b) applies Policies 5-3 (ongoing compliance where water ${ }^{\wedge}$ quality targets are met), 5-4 (enhancement where water^ quality targets are not met), 5-9 (point source discharges ${ }^{\wedge}$ to water^) and 5-11 (human sewage discharges ${ }^{\wedge}$ ) 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 sitespecific 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, hapū ${ }^{*}$ and $i w w^{*}$, 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: <br> 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: <br> - vehicles on beaches and dunes <br> - land use pressures on coastal resources <br> - illegal dumping of waste <br> - restrictions on shellfish gathering or bathing due to water quality reasons <br> - restoration work. <br> Year 2 onwards: <br> - 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, <br> communities and landowners to restore and enhance the natural <br> character of the coastal environment and promote sustainable land use <br> practices, through establishing a regional coast care coordinator to <br> support and resource coast care groups. |
| Who | The Regional Council will seek funding from a range of interested <br> agencies to provide the funding needed to employ a regional coast care <br> coordinator. |
| Links to Policy | This method implements Policies 8-1, 8-2, 8-4 and 8-5. |
| Targets | Years 1-5: <br> $\bullet$ <br> Establish and develop working relationships with existing coast care <br> groups, identify priorities for any new coast care groups, and help <br> with resourcing of groups. <br> Establish working links with land care groups for areas inland of <br> MHWS. |


| Method 8-2 | Coast Care |
| :--- | :--- |
|  | - Provide advice on dune stabilisation and hazard risks. <br> Years 5-10: <br> - Work with groups to achieve improvements to the coastal <br> environment including weeding, planting, wetland enhancement, <br> dune lake enhancement, stream enhancement, litter removal, <br> monitoring of beach quality and monitoring of vehicle use on <br> beaches. |


| Method 8-3 | Vehicle Bylaw |
| :--- | :--- |
| Description | The Regional Council recognises that vehicles on dunes and beaches is <br> an increasing issue, particularly for the Region's west coast. This issue <br> cannot be successfully managed through the RMA or consent processes. <br> It is considered that a bylaw should be developed and applied <br> consistently across the west coast, to control the future use of vehicles on <br> dunes and beaches. |
| Who | The Regional Council will take a lead role in convening the Territorial <br> Authorities and Police to discuss the appropriate provisions to be included <br> in a "model" bylaw. |
| Links to Policy | This method implements Policies 8-1, 8-2 and 8-5. |
| Targets | Year 1: <br> Encourage Territorial Authorities to extend their territorial boundary <br> down to mean low water spring to enable Local Government Act <br> bylaws to apply to the whole of the foreshore area. |
| Years 2-5: <br> - Each Territorial Authority to adopt a bylaw for their district to control <br> vehicles on dunes and beaches. Seek commitment from Police to <br> 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 <br> biology, coastal processes, historic heritage and significant sites* and <br> values within the CMA. This will enable refinement of the Protection <br> Activity Management Areas and build upon the existing coastal <br> information. |
| Who | The Regional Council, in conjunction with the Department of <br> Conservation, will undertake to scope this work area. This will include a <br> focus on natural features, historic heritage and Māori cultural information <br> where appropriate. In guiding future development, it will also contribute <br> significantly to a planning constraints map. The Regional Council is <br> developing a monitoring strategy that will include coastal information. The <br> Regional Council will seek to work with and involve other relevant <br> agencies in this programme. |
| Links to Policy/ <br> Method | This method implements Policies 8-2, 8-3, 8-4, 8-6, 6-11, 6-12 and <br> Method 6-10. |
| Targets | Years 1-3: <br> - Identify scope (including costings) of further information required and <br> 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 <br> from other agencies, responding to activities landward of MHWS that <br> could impact on the CMA, and ensuring coastal activities are undertaken <br> in a way that is compatible with the management framework set out in the <br> One Plan. The method may also involve working with other agencies, <br> such as the Department of Conservation, on special projects. |
| Who | The Regional Council will undertake this work on an "as needs" basis. As <br> issues arise in the Region that affect the coast, the Council will take an <br> active advocacy role and work with other relevant agencies as <br> 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 | - Measured water quality compared to water quality targets in Schedule I, especially measures for "safe swimming", "safe food gathering" and "aquatic ecosystem health" <br> - Incidents where water quality in the CMA is confirmed as unfit for use | - Regional Council's state of environment water quality monitoring programme <br> - Regional Council's incidents database |
| 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, $8-2,8-3,8-4 \text { and } 8-5$ | - 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 <br> - Regional Council's incidents database <br> - Regional Council's SED (Subdivision Enquiry Database) <br> - Territorial Authority district plans <br> - 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 <br> - Confirmed incidents of property or infrastructure damage | - Regional Council's state of environment land monitoring programme |


| Anticipated Environmental Result | Link to Policy | Indicator | Data Source |
| :---: | :---: | :---: | :---: |
| coastal environment. |  |  | - Regional Council and Territorial Authority incidents databases <br> - Land use mapping <br> - Sustainable Land Use Initiative implementation reports (twoyearly) |

### 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.

WASHOUT

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 <br> Natural Hazards

## $9.1 \quad$ 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.

## $9.3 \quad$ Objective

## Objective 9-1: Effects^ of natural hazard^ events

The adverse effects^ of natural hazard^ events on people, property, infrastructure ${ }^{\wedge}$ 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.

## $9.4 \quad$ 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^ 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 ${ }^{\wedge}$ ) 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 ${ }^{\wedge}$ must be responsible for:
(i) developing objectives, policies and methods (including rules^) for the control of the use of land ${ }^{\wedge}$ 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 $\mathrm{J}^{1}$ ) and other areas known to be inundated by a $0.5 \%$ annual exceedance probability (AEP) flood event ${ }^{2}$ on planning maps in district plans ${ }^{\wedge}$, and controlling land^ use activities in these areas in accordance with Policies 9-2 and 9-3.

[^14]
## 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 ${ }^{\wedge}$ 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^ ${ }^{\wedge}$ 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 ${ }^{2}$ on it are avoided or mitigated, and
(iii) the structure ${ }^{\wedge}$ or activity is designed so that adverse effects ${ }^{\wedge}$ on the environment^, including the functioning of the floodway, arising from the structure^ or activity during a flood event ${ }^{2}$ are avoided or mitigated,
in which case the structure^ 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 ${ }^{2}$ 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 ${ }^{\wedge}$ or activity is on production land ${ }^{\wedge}$, or
(iii) there is a functional necessity to locate the structure ${ }^{\wedge}$ 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 ${ }^{2}$ the inundation of access between occupied structures^ 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 $1.0 \mathrm{~m} / \mathrm{s}$, or some other combination of water depth and velocity that can be shown to result in no greater risk to human life, infrastructure^ ${ }^{\wedge}$ 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^ 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 ${ }^{2}$ (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^,
(b) will not cause any adverse effects^ on the environment ${ }^{\wedge}$ 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^ must manage future development and activities in areas susceptible to natural hazard^ 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^ events.

## Policy 9-5: Climate change^

The Regional Council and Territorial Authorities^ must take a precautionary approach when assessing the effects of climate change and sea level rise* on the scale and frequency of natural hazards ${ }^{\wedge}$ with regard to decisions on:
(a) stormwater discharges^ and effluent disposal,
(b) coastal development and coastal land ${ }^{\wedge}$ use,
(c) activities adjacent to rivers ${ }^{\wedge}$,
(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 <br> parts of the Region that are at risk from natural hazards, including seismic, <br> volcanic, land subsidence, tsunami, flooding and coastal erosion hazards. It <br> includes consideration of sea level rise* and climate change implications on <br> those hazards. <br> This information will be provided to Territorial Authorities for district planning <br> purposes and to other interested parties, and maps will be updated as <br> required. |
| Who | Civil Defence and Emergency Management Group, Regional Council, <br> 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 <br> level rise* and climate change implications, will be carried out to update flood <br> maps and information in order to assist Territorial Authorities in the <br> development of district plans, and the Regional Council's advice service. |
| Who | Civil Defence and Emergency Management Group, Regional Council, and <br> 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 <br> parties with up-to-date natural hazard information to assist in the assessment <br> 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 <br> public awareness of the risks of natural hazards, including earthquake, <br> volcanic action, land subsidence, tsunami, flooding and coastal erosion, <br> including consideration of sea level rise* and climate change implications. <br> Up-to-date natural hazard information will be provided to the general public <br> and other interested parties (for example, advance warning flood and lahar <br> systems and civil defence literature), together with advice on appropriate <br> options for avoiding or mitigating natural hazards. |
| Who | Civil Defence and Emergency Management Group, Regional Council, <br> 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 critical infrastructure* 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 <br> Land Policies: 4-1, 4-2 and 4-3 <br> Water Policies: 5-24 and 5-26 | - Number of new dwelling houses in areas prone to flooding consistent with Policy 9-2 <br> - Number of incidents where activities are affecting schemes, especially stopbanks <br> - Natural hazard information shared with Territorial Authorities and interested parties <br> - District plans incorporating hazardous areas on planning maps and associated regulation of land use in those areas | - Territorial Authorities <br> - Regional Council's Operations Group maintenance records <br> - Regional Council's compliance database <br> - Regional Council's incidents database |
| 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 | - Public perception <br> - Number of requests for information <br> - District plans incorporating hazardous areas on planning maps and associated regulation of land use in those areas | - Customer surveys <br> - Subdivision Enquiry Database (SED) |

### 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 $\mathrm{J}: 2$ ) are defined as those areas that would be inundated by a $0.5 \%$ AEP ( 1 in 200 year) flood event ${ }^{2}$. 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 ${ }^{2}$, 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.


## 10 <br> 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, hap $^{*}$ and $i w i^{*}$
- 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 ManawatuWanganui 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:
(a) 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 <br> management plans and district plans are methods to implement <br> 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 already gives <br> effect to Part I) and district plans must be changed to give effect to <br> Part I - Regional Policy Statement of this Plan on the first review <br> or change or variation to the regional plan or district plan or within <br> 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 <br> effect to Part I of the Plan. |

Part II: Regional Plan
Controls on resource use


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 $\mathbf{1 3}$ to $\mathbf{1 8}$ 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.


## 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.

## 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.

## 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 <br> contains the <br> rule number | This column <br> describes the <br> and rule <br> title. | activity or activities <br> covered by the <br> rule. | This column contains the <br> classification of the activity - <br> ie., permitted, controlled, <br> restricted discretionary, <br> discretionary, non- <br> complying or prohibited. | This column contains conditions, standards and <br> terms for permitted activities, controlled activities <br> and restricted discretionary activities. The <br> conditions, standards and terms are ongoing <br> requirements that must be met for as long as <br> the activity is undertaken. Failure to comply <br> with these conditions, standards and terms <br> amounts to a breach of the rule. | | This column is relevant only for controlled activities and restricted |
| :--- |
| discretionary 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 11.1 Summary of regional rules:

## Rule Number and Title <br> Classification

CHAPTER 13: LAND USE ACTIVITIES AND INDIGENOUS BIOLOGICAL DIVERSITY
Vegetation clearance*, land disturbance*, forestry * and cultivation* and indigenous biological diversity
13-1 Small-scale land disturbance*
Permitted
13-2 Large-scale land disturbance*, including earthworks
Controlled
13-3 Forestry*
Permitted
13-4 Cultivation*
Permitted
13-5 Vegetation clearance*
13-6 Specified vegetation clearance*, land disturbance* or cultivation* in a Hill Country Erosion Management Area*
Permitted
13-7 Vegetation clearance*, land disturbance ${ }^{*}$, cultivation ${ }^{*}$ or forestry* that does not comply with Rules 13-2 to 13-6
Restricted Discretionary
13-8 Some activities within at-risk habitats
Discretionary
Discretionary
13-9 Some activities within rare habitats* and threatened habitats*
Non-complying

## CHAPTER 14: DISCHARGES TO LAND AND WATER

## Agricultural Activities

14-1 Existing intensive farming land ${ }^{\wedge}$ use activities
Controlled
14-2 Existing intensive farming land ${ }^{\wedge}$ use activities not complying with Rule 14-1
14-3 New intensive farming land ${ }^{\wedge}$ use activities
14-4 New intensive farming land ${ }^{\wedge}$ use activities not complying with Rule 14-3
Restricted Discretionary

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
Permitted
Permitted
Permitted
Restricted Discretionary
Permitted
Permitted
Controlled
Discharges of Water
14-12 Discharges^ of water^ to water^

## 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

14-16 Human effluent storage and treatment facilities
14-17 Discharges ${ }^{\wedge}$ of untreated human effluent ${ }^{*}$ directly into surface wate $\wedge^{\wedge}$

## Stormwater

14-18 Discharges $^{\wedge}$ of stormwater to surface water^^ and land ${ }^{\wedge}$
14-19 Discharges^ of stormwater to surface water^ or land^ not complying with Rule 14-18

## Dyes and Tracers

14-20 Discharges^ of dye and salt tracers

## Cleanfill Material*, Composting*, Landfills* and Solid Waste

14-21 Discharges ${ }^{\wedge}$ of cleanfill material*
14-22 Composting* activities
14-23 Closed landfills*
14-24 Discharges^ of persistent and harmful contaminants^
Discharges of Contaminants to Natural State Reaches and Sites of Significance - Aquatic
14-25 Discharges ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ to a reach of a river ${ }^{\wedge}$ or its bed ${ }^{\wedge}$ with Schedule B Values of Natural State and Sites of Significance - Aquatic
Generic Discharge Rules
14-26 Discharges ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ to surface water ${ }^{\wedge}$
14-27 Discharges^ of contaminants^ onto or into land^ that will not enter water^
14-28 Discharges^ of contaminants^ onto or into land^ that may enter water^
14-29 Replacement consents for discharges^ of water ${ }^{\wedge}$ and contaminants $\wedge$ to wate $\wedge^{\wedge}$ and land ${ }^{\wedge}$ from existing hydroelectricity schemes
Default Discharge Rule
14-30 Discharges^ of water^ or contaminants^ to land ${ }^{\wedge}$ or water ${ }^{\wedge}$ not covered by other rules ${ }^{\wedge}$ in this Plan or chapter
Classification
Permitted
Prohibited

## Permitted

Restricted Discretionary

Permitted
Permitted
Permitted
Controlled
Non-complying
Discretionary
Permitted
Permitted
Permitted
Controlled

## CHAPTER 15: DISCHARGES TO AIR

## Agrichemicals* (Discharges into Air, Land and Water)

15-1 Small-scale application of agrichemicals* ${ }^{*}$
15-2 Widespread application of agrichemicals*
15-3 Small-scale and widespread application of vertebrate pest control products*
15-4 Small-scale and widespread application of vertebrate pest control products* not complying with Rule 15-3
15-5 Discharges^ of agrichemicals* not complying with permitted activity^ rules ${ }^{\wedge}$ and small-scale and widespread application of vertebrate pest control products* not complying with Rule 15-4

## Burning

15-6 Small-scale fuel burning
15-7 Outdoor burning*
15-8 Burning activities regulated by RM Regulations 2004, including woodburners*
15-9 Prohibited burning activities
Discretionary

15-10 Other burning activities

## Permitted

Permitted
Permitted
Restricted Discretionary
Discretionary

Permitted
Permitted
As described under "Activity" in rule
Prohibited
Discretionary

| Rule Number and Title | Classification |
| :---: | :---: |
| Other Discharges to Air |  |
| 15-11 Abrasive blasting* within an enclosure | Permitted |
| 15-12 Wet abrasive blasting* and water^ blasting | Permitted |
| 15-13 Dry abrasive blasting* using a moveable source | Discretionary |
| 15-14 Miscellaneous discharges^ into air from industrial or trade premises^ | Permitted |
| 15-15 Flaring of hydrocarbons | Controlled |
| 15-16 Discharges ${ }^{\wedge}$ from specified mobile sources | Permitted |
| 15-17 Other discharges^ | 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^ | Permitted |
| 16-2 Minor takes and uses of groundwater | Permitted |
| 16-3 Use of heat or energy from surface water^ | Permitted |
| 16-4 Bore* and groundwater testing | Permitted |
| 16-5 Takes and uses of surface water^ complying with core allocations | Controlled |
| 16-6 Existing essential takes and uses of surface water^ complying with core allocations taken at or below the minimum flow | Discretionary |
| 16-7 Replacement consents for takes and uses of surface water^ by existing hydroelectricity schemes | Controlled |
| 16-8 Takes and uses of surface water^ not complying with core allocations or takes and uses of water ${ }^{\wedge}$ taken at or below minimum flow | Non-complying |
| 16-9 Other takes and uses of water ${ }^{\wedge}$ | Discretionary |
| Diversions of Water including Drainage |  |
| 16-10 Lawfully established diversions, including existing drainage | Permitted |
| 16-11 New drainage | Permitted |
| 16-12 New diversions | Permitted |
| 16-13 Diversions that do not comply with permitted activity ${ }^{\wedge}$ and controlled activity ${ }^{\wedge}$ rules ${ }^{\wedge}$ | Discretionary |
| Bore* Drilling and Bore* Sealing |  |
| 16-14 The drilling, construction or alteration of any bore* and any ancillary discharge ${ }^{\wedge}$ of water^ ${ }^{\wedge}$ or contaminants ${ }^{\wedge}$ | Controlled |
| 16-15 Unsealed bores* | Prohibited |
| CHAPTER 17: ACTIVITIES IN ARTIFICIAL WATERCOURSES*, BEDS OF RIVERS AND LAKES, AND DAMMING |  |
| Special Rivers and Lakes |  |
| 17-1 Damming of protected rivers^ | Prohibited |
| 17-2 Reclamation and drainage of regionally significant lakes ${ }^{\wedge}$ | Non-complying |
| 17-3 Structures ${ }^{\wedge}$ and disturbances involving a reach of river^ or its bed ${ }^{\wedge}$ with Schedule B Values of Natural State, Sites of Significance - Aquatic, and Sites of Significance - Cultural | Discretionary |
| Use, Maintenance*, Upgrade*, Removal and Demolition of Structures 17-4 Use of structures^ | Permitted |

## Rule Number and Titte

17-5 Maintenance* and upgrade* of structures ${ }^{\wedge}$, and ancillary removal of bed ${ }^{\wedge}$ material and plants
17-6 Removal and demolition of structures ${ }^{\wedge}$

## Dams and Damming

17-7 New and existing small dams
17-8 Replacement consents for existing damming of water^

## Other Structures

17-9 Lines, cables, pipelines and ropeways
17-10 Culverts
17-11 Other structures^ including bridges, fords and other access structures ${ }^{\wedge}$
17-12 Recording sites*
17-13 Bridges and culverts constructed to comply with Rules 14-1 to 14-4

## Activities Within Rivers with a Schedule B Value of Flood Control and Drainage

17-14 Activities undertaken by or on behalf of the Regional Council in rivers ${ }^{\wedge}$ with a Schedule B Value of Flood Control and Drainage
17-15 Activities affecting Schedule B Value of Flood Control and Drainage

## Gravel Extraction, Bed Disturbances and Plants

17-16 Small-scale gravel extraction
17-17 Other gravel extraction
17-18 Other minor bed ${ }^{\wedge}$ disturbances
17-19 Plants

## Activities in Artificial Watercourses* and Non-natural Lakes^

17-20 Minor activities involving artificial watercourses*
17-21 Bed ${ }^{\wedge}$ disturbance of non-natural lakes ${ }^{\wedge}$ to maintain their function
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 permitted activity^ ${ }^{\wedge}$ rule^ general conditions^
17-23 Activities that do not comply with permitted activity^, controlled activity^ and restricted discretionary activity^ rules^ and all other s13(1) RMA activities not covered by this chapter

## Classification

Permitted
Permitted

Permitted
Controlled
Permitted
Permitted
Permitted
Permitted
Controlled

Permitted
Discretionary
Permitted
Discretionary
Permitted
Permitted

Permitted
Controlled

Restricted Discretionary
Discretionary

## Rule Number and Titte

## CHAPTER 18: ACTIVITIES IN THE COASTAL MARINE AREA

## Occupation

18-1 Occupation^ by existing structures^
18-2 Temporary occupation^
18-3 Occupation^ of space^ by aquaculture
18-4 Exclusive occupation ${ }^{\wedge}$
18-5 Occupation^ of space^ in Protection Activity Management Areas

## Structures

## 18-6 Maintenance* of structures

18-7 Removal or demolition of structures^
18-8 Navigation aids, lines, cables, pipelines and ropeways, whitebait* stands and maimai
18-9 Structures ${ }^{\wedge}$ in the Port Activity Management Area
18-10 Wharf extension in the Port Activity Management Area
18-11 Structures ${ }^{\wedge}$ for public access
18-12 Aquaculture structures ${ }^{\wedge}$
18-13 Large structures ${ }^{\wedge}$ which impound the CMA, are parallel to shore, or are oblique or perpendicular to shore
18-14 Petroleum and chemical storage
18-15 Energy generation structures^ in a Protection Activity Management Area
18-16 Structures^ in a Protection Activity Management Area

## Reclamation and Drainage

18-17 Drainage
18-18 Small reclamations except in Protection Activity Management Areas
18-19 Small reclamations within the Port Activity Management Area
18-20 Large reclamations except in Protection Activity Management Areas
18-21 Small reclamations in Protection Activity Management Areas
18-22 Large reclamations in Protection Activity Management Areas

## Disturbances, Removal and Deposition

18-23 Removal of minor quantities of material
18-24 Minor disturbances, removal and deposition
18-25 Minor disturbances from drilling
18-26 Shellfish enhancement
18-27 Beach nourishment
18-28 Port Activity Management Area and Whanganui River maintenance dredging
18-29 Port and General Activity Management Areas: Large-scale disturbances, removal and deposition
18-30 Protection Activity Management Areas: Small-scale to medium-scale disturbances, removal and deposition
18-31 Protection Activity Management Areas: Large-scale disturbances, removal and deposition

## Classification

## Permitted

Permitted
Controlled
Discretionary
Non-complying

Permitted
Permitted
Permitted
Controlled
Permitted
Restricted Discretionary
Controlled
Discretionary
Discretionary
Non-complying
Prohibited

## Discretionary

Discretionary
Restricted Discretionary
Discretionary
Non-complying
Non-complying
Permitted
Permitted
Permitted
Permitted
Controlled
Discretionary
Discretionary
Non-complying
Non-complying

## Rule Number and Titte

## Classification

Water Takes, Uses, Damming and Diversions
18-32 Take and use of water ${ }^{\wedge}$
Permitted
18-33 Drainage and diversions of water in the CMA

## Discharges

18-34 Discharges $^{\wedge}$ into water ${ }^{\wedge}$ from ships ${ }^{\wedge}$, boats, fire-fighting and oil${ }^{\star}$ spills
18-35 Discharges $^{\wedge}$ of stormwater
18-36 Discharges^ of stormwater not complying with Rule 18-35
18-37 Discharges^ of dye and salt tracers
18-38 Application of agrichemicals*
18-39 Application of agrichemicals* not complying with Rule 18-38
18-40 Sewage and s107(2) RMA discharges^
18-41 Dumping^ of hazardous substances*

## Noise and Discharges into Air

18-42 Noise emissions

## Exotic and Introduced Plants

18-43 Exotic and introduced plants
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^

Permitted

## Permitted

Permitted
Controlled
Permitted
Permitted
Controlled
Discretionary
Prohibited

Permitted

Discretionary
Discretionary


## General Objectives and Policies

## 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.

## 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.

Policies

## Policy 12-1: $\quad$ Regional rules ${ }^{\wedge}$ 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 ${ }^{\wedge}$ conditions ${ }^{\wedge}$ and do not require any site ${ }^{\star}$-specific regulation by way of resource consents^;
(b) classify as controlled those activities that can have more than minor adverse effects ${ }^{\wedge}$ on the environment ${ }^{\wedge}$, 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$, 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 ${ }^{\wedge}$, 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 ${ }^{\wedge}$ 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^ on the environment ${ }^{\wedge}$; and
(b) regional rules ${ }^{\wedge}$ 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 ${ }^{\wedge}$, standards and terms in regional rules ${ }^{\wedge}$

Regional rules^ must contain measurable and enforceable conditions ${ }^{\wedge}$, 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ that ensure:
(i) the applicant is certain how compliance will be achieved and monitored;
(ii) the conditions ${ }^{\wedge}$ are specific to the activity being undertaken;
(iii) the conditions ${ }^{\wedge}$ are fair, reasonable and practical;
(iv) the conditions ${ }^{\wedge}$ are in plain English; and
(v) the conditions ${ }^{\wedge}$ are enforceable.

## Policy 12-5: Consent durations

(a) Other than as provided for under (b), the Regional Council will generally grant resource consents ${ }^{\wedge}$ for the term sought by the applicant unless reasons are identified during the consent process that make this inappropriate.
(b) Resource consent 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 ${ }^{\wedge}$; water^, sewage or stormwater treatment plants and facilities; or publicly accessible solid waste* facilities including landfills*, 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 / <br> review <br> (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, <br> Oruakeretaki and Raparapawai | 2011 |
| Hopelands-Tiraumea | Hopelands-Tiraumea | 2011 |
| Tiraumea | Upper and Lower Tiraumea, Mangaone, Makuri and <br> Mangaramarama | 2010 |
| Mangatainoka | Upper, Middle and Lower Mangatainoka and Makakahi | 2010 |
| Upper Gorge | Upper Gorge, Mangapapa, Mangaatua, Upper and Lower <br> Mangahao | 2013 |
| Middle Manawatu | Middle Manawatu, Upper, Middle and Lower Pohangina, <br> and Aokautere | 2013 |
| Lower Manawatu | Lower Manawatu, Turitea, Kahuterawa, Upper and Lower <br> Mangaone Stream and Main Drain | 2013 |
| Oroua | Upper, Middle and Lower Oroua, Kiwitea and Makino | 2019 |
| Coastal Manawatu | Coastal Manawatu, Upper and Lower Tokomaru, <br> Mangaore, Koputaroa and Foxton Loop | 2018 |
| Upper Rangitikei | Upper Rangitikei | 2017 |
| Middle Rangitikei | Middle Rangitikei, Pukeokahu-Mangaweka, Upper, <br> Middle and Lower Moawhango, Upper and Lower <br> 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, <br> 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 I 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 Iwi | Kai Iwi | 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 ${ }^{\wedge}$ that specify a review of consent conditions^ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ to avoid, remedy or mitigate any adverse effects ${ }^{\wedge}$ of the activity on the environment ${ }^{\wedge}$.

The Regional Council will generally initiate reviews of conditions ${ }^{\wedge}$ when monitoring results or other evidence demonstrate a review is required.

## Policy 12-7: $\quad$ 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 ${ }^{\wedge}$, 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 ${ }^{\wedge}$ are required to address site*-specific circumstances and effects ${ }^{\wedge}$.

## Policy 12-8: Enforcement procedures

(a) The Regional Council will generally use abatement notices ${ }^{\wedge}$, infringement notices, enforcement orders ${ }^{\wedge}$ 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: $\quad$ Regional rules^ for vegetation clearance ${ }^{\star}$, land disturbance ${ }^{\star}$, forestry ${ }^{\star}$ and cultivation ${ }^{\star}$

The Regional Council must:
(a) regulate vegetation clearance*, land disturbance*, forestry ${ }^{*}$ and cultivation through regional rules ${ }^{\wedge}$ 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 ${ }^{\wedge}$,
(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 ${ }^{\star}$

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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ of forestry ${ }^{\star}$ by requiring sustainable forestry ${ }^{\star}$ 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 ${ }^{\wedge}$,
(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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ on resource consents ${ }^{\wedge}$,
(k) sediment and erosion control measures required to reasonably minimise adverse effects ${ }^{\wedge}$, 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 ${ }^{\wedge}$, including review provisions, enabling site*-specific matters to be addressed as necessary, and
(m) for activities involving an ancillary discharge^ to surface water^, the matters in Policy 14-9.

Advice note: The rules ${ }^{\wedge}$ in this regional plan^ do not authorise the modification or disturbance of any archaeological or registered waahi tapu ${ }^{\star}$ 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
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.

## Policies

## Policy 13-3: Regional rules^ for activities affecting indigenous biological diversity^

The Regional Council must require resource consents^ to be obtained for vegetation clearance*, land disturbance*, cultivation*, bores*, discharges ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ into or onto land ${ }^{\wedge}$ or water ${ }^{\wedge}$, taking, use, damming or diversion of water^ and activities in the beds^ of rivers^ or lakes^ within rare habitats*, threatened habitats* and at-risk habitats*, and for forestry ${ }^{*}$ that does not minimise potential adverse effects ${ }^{\wedge}$ on those habitats, through regional rules ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$, 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 $\wedge$ 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 ${ }^{\wedge}$ are avoided.
(iii) where any significant adverse effects ${ }^{\wedge}$ cannot reasonably be avoided, they are remedied or mitigated at the point where the adverse effect occurs.
(iv) where significant adverse effects ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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.

Rules - Vegetation clearance*, land disturbance*, forestry* and cultivation* and indigenous biological diversity

| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| 13-1 <br> Small-scale land disturbance* | Except as regulated by Rules 13-6, 13-8 and 13-9, any land disturbance* pursuant to $s 9(2)$ RMA of a total area up to 2500 $\mathrm{m}^{2}$ per property* per 12-month period and any ancillary: <br> (a) diversion of water^ pursuant to s14(2) RMA on the land ${ }^{\wedge}$ where the land disturbance* is undertaken, or <br> (b) discharge^ of sediment into water^ pursuant to s15(1) RMA resulting from the land disturbance*. | Permitted | (a) The activity must not take place on land ${ }^{\wedge}$ that is within a coastal foredune*. <br> (b) Erosion and sediment control methods, which may include bunding, silt traps, interception drains or other alternative methods, to minimise sediment discharge ${ }^{\wedge}$ to water ${ }^{\wedge}$ must be installed prior to, and maintained during, the land disturbance* activity <br> (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^. <br> (d) The activity must not occur on land ${ }^{\wedge}$ that is in, or within 5 m of: <br> (i) the bed^ of a river ${ }^{\wedge}$ that is permanently flowing, <br> (ii) the bed ${ }^{\wedge}$ of a river ${ }^{\wedge}$ that is not permanently flowing and has an active bed* width greater than 1 m , <br> (iii) the bed^ of a lake^^. <br> (e) The activity must not occur on land ${ }^{\wedge}$ that is in, or within 10 m of: <br> (i) A wetland^ as identified in Schedule F, <br> (ii) Sites valued for Trout Spawning as identified in Schedule B , <br> (iii) Sites of Significance - Aquatic as identified in Schedule B. |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| 13-2 <br> Large-scale land disturbance*, including earthworks | Except as regulated by Rules 13-6, 13-8 and 13-9, any land disturbance* pursuant to $\operatorname{s9}(2)$ RMA of a total area greater than $2500 \mathrm{~m}^{2}$ per property* *er 12-month period and any ancillary: <br> (a) diversion of water^ pursuant to s14(2) RMA on the land ${ }^{\wedge}$ where the land disturbance* is undertaken, or <br> (b) discharge^ of sediment into water^ pursuant to s15(1) RMA resulting from the land disturbance*. | Controlled | (a) The activity must not take place on land ${ }^{\wedge}$ that is within a coastal foredune*. <br> (b) The activity must be undertaken in accordance with an Erosion and Sediment Control Plan*. <br> (c) Any ancillary discharge ${ }^{\wedge}$ 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^. <br> (d) The activity must not occur on land^^ that is in, or within 5 m of: <br> (i) the bed^ of a river ${ }^{\wedge}$ that is permanently flowing, <br> (ii) the bed^ of a river^ that is not permanently flowing -and has an active bed* width greater than 1 m , <br> (iii) the bed^ of a lake^. <br> (e) The activity must not occur on land ${ }^{\wedge}$ that is in, or within 10 m of: <br> (i) A wetland ${ }^{\wedge}$ as identified in Schedule F, <br> (ii) Sites valued for Trout Spawning as identified in Schedule B , <br> (iii) Sites of Significance - Aquatic as identified in Schedule B. | Control is reserved over: <br> (a) the location, nature, scale, timing and duration of the activity <br> (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 <br> (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 <br> (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 <br> (e) duration of consent <br> (f) review of consent conditions ${ }^{\wedge}$ <br> (g) compliance monitoring <br> (h) the matters in Policy 14-9. <br> Resource consent ${ }^{\wedge}$ 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: <br> 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 <br> Forestry* | Except as regulated by Rule 13-8 and 13-9, any forestry* pursuant to s9(2) RMA, and any ancillary: <br> (a) disturbance of the bed^ of a river^ or lake^ pursuant to s13(1) RMA by forestry*, or <br> (b) diversion of water^ pursuant to s14(2) RMA on the land^ (but not within a river ${ }^{\wedge}$ ) where the forestry * is undertaken, or <br> (c) discharge^ of sediment or slash* into water^ or onto or into land ${ }^{\wedge}$ that may enter water^ pursuant to $\mathrm{s} 15(1)$ or 15(2A) RMA resulting from the forestry*. | Permitted | (a) The activity must not take place on land ${ }^{\wedge}$ that is within a coastal foredune*. <br> (b) Any earthworks, the formation of any new track* and any planting or replanting of forestry* trees must not occur on land ${ }^{\wedge}$ that is in, or within 5 m of: <br> (i) the bed ${ }^{\wedge}$ of a river ${ }^{\wedge}$ that is permanently flowing <br> (ii) the bed^ of a lake ${ }^{\wedge}$ <br> (iii) a rare habitat** threatened habitat* or at-risk habitat*. unless the new track* or earthworks in (b)(i) or (b)(ii) is: <br> (A) necessary to connect to and from a formed river ${ }^{*}$ crossing point that is a consented or permitted activity, and/or <br> (B) for the purpose of the maintenance* or upgrade* of an existing track* or earthwork. <br> (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 ${ }^{\wedge}$ habitat types (including lakes ${ }^{\wedge}$ ) as defined in Schedule F. <br> (d) Any earthworks or the formation of any new track* must not occur on land ${ }^{\wedge}$ that is in, or within 10 m of a reach of a river^ or its bed ${ }^{\wedge}$ with a Schedule B Value of Trout Spawning or Trout Fishery, unless the new track* or earthworks is: <br> (A) necessary to connect to and from a formed river ${ }^{*}$ crossing point that is a consented or permitted activity, and/or <br> (B) for the purpose of the maintenance* or upgrade* of an |  |

(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*.
(h) Batters, cuts and side castings must be established by methods that prevent slumping.
(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
(i) 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, and
(ii) the activity must not occur in a water body^ ${ }^{\wedge}$ with a Trout Spawning Value identified in Schedule B during the trout spawning season (1 May to 30 September inclusive), and
(iii) the activity must not occur in a water body^ greater than 5 $m$ in width, and
(iv) the activity must not occur in an area listed in (b) (iii).
Rune

| 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). <br> (k) Slash* must be removed from within areas listed in (b)(i) where it is blocking river ${ }^{\wedge}$ flow, or is diverting river ${ }^{\wedge}$ flow and causing bank erosion. <br> (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. <br> (m) The use of mobile machinery in or on the bed ${ }^{\wedge}$ of a river ${ }^{\wedge}$ with a Schedule B Value of Trout Spawning in a manner that disturbs the bed ${ }^{\wedge}$ of the active flowing channel must not take place during the trout spawning season (1 May to 30 September inclusive). <br> ( $n$ ) The use of mobile machinery in or on the bed^ of a river ${ }^{\wedge}$ with a Schedule B Value of Whitebait Migration in a manner that disturbs the bed ${ }^{\wedge}$ of the active flowing channel must not take place 15 August to 30 November (inclusive). <br> (0) The activity must be undertaken in accordance with an Erosion and Sediment Control Plan* which must be submitted to the Regional Council upon request. <br> (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. <br> (q) Regional Council must be notified at least 48 hours prior to the activity commencing. |  |
| 13-4 <br> Cultivation* | Except as regulated by Rules 13-6, 13-8 and 13-9, any cultivation* and ancillary land disturbance* for the purposes of constructing erosion and sediment control methods to minimise sediment run-off into water^ pursuant to s9(2) RMA and any ancillary: | Permitted | (a) The activity must not take place on land^ that is within a coastal foredune*. <br> (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*. <br> (c) Any ancillary discharge ${ }^{\wedge}$ of sediment into water^ must not, |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  | (a) diversion of water^ pursuant to s14(2) RMA on the land ${ }^{\wedge}$ where the cultivation* is undertaken, or <br> (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^. |  | 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^. <br> (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. <br> (e) The activity must not occur on land ${ }^{\wedge}$ that is in, or within 5 m of: <br> (i) the bed^ of a river^ that is permanently flowing, <br> (ii) the bed^ of a river^ that is not permanently flowing and has an active bed* width greater than 1 m , <br> (iii) the bed ${ }^{\wedge}$ of a lake^. <br> (f) The activity must not occur on land ${ }^{\wedge}$ that is in, or within 10 m of: <br> (i) A wetland^${ }^{\wedge}$ as identified in Schedule F, <br> (ii) Sites valued for Trout Spawning as identified in Schedule $B$, <br> (iv) Sites of Significance - Aquatic as identified in Schedule B. <br> Advice Note: <br> 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 <br> Vegetation Clearance* | Except as regulated by Rules 13-6, 13-8 and 13-9, any vegetation clearance* pursuant to $99(2)$ RMA and any ancillary: <br> (a) diversion of water^ pursuant to s14(2) RMA on the land ${ }^{\wedge}$ where the vegetation clearance* is undertaken, <br> (b) discharge^ of sediment into water^ pursuant to s15(1) RMA resulting from the vegetation clearance. | Permitted | (a) The activity must not take place on land ${ }^{\wedge}$ that is within a coastal foredune*. <br> (b) Any ancillary discharge ${ }^{\wedge}$ of sediment into wate ${ }^{\wedge}$ 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^. <br> (c) The activity must not occur on land ${ }^{\wedge}$ that is in, or within 5 m of: <br> (i) the bed^ of a river^ that is permanently flowing |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | (ii) the bed ${ }^{\wedge}$ of a river ${ }^{\wedge}$ that is not permanently flowing and has an active bed ${ }^{*}$ width greater than 1 m <br> (iii) the bed^ of a lake^. <br> (d) The activity must not occur on land ${ }^{\wedge}$ that is in, or within 10 m of: <br> (i) A wetland ${ }^{\wedge}$ as identified in Schedule F <br> (ii) Sites valued for Trout Spawning as identified in Schedule B |  |
| 13-6 <br> Specified vegetation clearance*, land disturbance* or cultivation* in a Hill Country Erosion Management Area* | Pursuant to $s 9(2)$ RMA, except as regulated by Rule 13-8 and 13-9, any: <br> (a) land disturbance* of more than $100 \mathrm{~m}^{2}$ per property* per 12-month period, or <br> (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 <br> (c) cultivation*, <br> undertaken within a Hill Country Erosion Management Area* and any ancillary: <br> (a) diversion of water ${ }^{\wedge}$ pursuant to s14(2) RMA on the land ${ }^{\wedge}$ where the vegetation clearance*, land disturbance* or cultivation* is undertaken, or <br> (b) discharge $\wedge$ of sediment into water^ pursuant to s15(1) RMA resulting from the vegetation clearance*, land disturbance* or cultivation*. | Restricted Discretionary | (a) The activity must not take place on land ${ }^{\wedge}$ that is within a coastal foredune*. <br> (b) The activity must not occur on land ${ }^{\wedge}$ that is in, or within 10 m of: <br> (i) the bed^ of a river ${ }^{\wedge}$ that is permanently flowing, <br> (ii) the bed ${ }^{\wedge}$ of a river ${ }^{\wedge}$ that is not permanently flowing and has an active bed* width greater than 1 m , <br> (iii) the bed^ of a lake^, <br> (iv) a wetland^ as identified in Schedule F, <br> (v) sites valued for Trout Spawning as identified in Schedule B , <br> (vi) Sites of Significance - Aquatic as identified in Schedule B. | Discretion is restricted to: <br> (a) the location, nature, scale, timing and duration of the activity, <br> (b) effects ${ }^{\wedge}$ 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, <br> (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, <br> (d) the provision of greater setback distances from water bodies ${ }^{\wedge}$ than those specified under condition (b) to provide greater protection to a water body^ if required, <br> (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 |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (f) duration of consent, <br> (g) review of consent conditions ${ }^{\wedge}$, <br> (h) compliance monitoring, <br> (i) the matters in Policy 14-9. <br> Resource consent ${ }^{\wedge}$ 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 ${ }^{\wedge}$ on affected persons). <br> Advice Note: <br> Examples of alternative methods to avoid, remedy or mitigate sediment run-off can be found in: <br> (a) Chapters 3-9 of the Erosion and Sediment Control Guidelines for the Wellington Region" (September 2002, and <br> (b) The Code of Practice for Commercial Vegetable Growing in the Horizons Region (Horticulture New Zealand). |
| 13-7 <br> Vegetation clearance*, land disturbance*, cultivation* or forestry* that does not comply with Rules 13-1 to 13-6 | Except as regulated by Rule 13-8 and 13-9, any vegetation clearance*, land disturbance* ${ }^{*}$, cultivation* or forestry* pursuant to $\mathrm{s} 9(2)$ RMA that does not meet the conditions ${ }^{\wedge}$, standards or terms of Rules 13-1, 13-2, 13-3, 13-4, 13-5 or 13-6 and any ancillary: <br> (a) disturbance of the bed^ of a river^ or lake^ by forestry* authorised by those rules^ pursuant to s13(1) | Discretionary |  |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  | RMA <br> (b) diversion of water^ authorised by those rules^ pursuant to s14(2) RMA, or <br> (c) discharge^ of sediment or slash* authorised by those rules^ ^ pursuant to s15(1) RMA. |  |  |  |
| 13-8 <br> 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*: <br> (a) vegetation clearance*, land disturbance* or cultivation* pursuant to $\mathrm{s} 9(2) \mathrm{RMA}$ <br> (b) forestry* pursuant to s9(2) RMA that does not meet condition^, standard or term of Rule 13-3(b)(iii) or (e) <br> (c) the drilling, construction or alteration of any bore* pursuant to s9(2) RMA <br> (d) activities restricted by s13(1) or s13(2) RMA in the beds^ of rivers^ or lakes^ <br> (e) the taking, using, damming or diverting of water ${ }^{\wedge}$ pursuant to s14(2) RMA <br> (f) discharge^ of water^ or contaminants ${ }^{\wedge}$ into water $\wedge^{\wedge}$ or onto or into land ${ }^{\wedge}$ pursuant to $\mathrm{s} 15(1)$ or s15(2A) RMA. <br> This rule does not apply to activities described in paragraphs (a) to (f) where they are carried out for the purposes of | Discretionary |  |  |


| 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 <br> 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, <br> 17-7 in relation to any existing small dam structure^, 17-14 and 17-15, any of the following activities within a rare habitat* ${ }^{*}$, threatened habitat*: <br> (a) vegetation clearance*, land disturbance* or cultivation* pursuant to $\mathrm{s} 9(2) \mathrm{RMA}$ <br> (b) forestry* pursuant to s9(2) RMA that does not meet condition^, standard or term of Rule 13-3 (b)(iii) or (e) <br> (c) the drilling, construction or alteration of any bore* pursuant to s9(2) RMA <br> (d) activities restricted by s13(1) or s13(2) RMA in the beds^ of rivers^ or lakes^ <br> (e) the taking, using, damming or diverting of water ${ }^{\wedge}$ pursuant to s14(2) RMA <br> (f) discharge ${ }^{\wedge}$ of water^ or contaminants ${ }^{\wedge}$ into water^ or onto or into land ${ }^{\wedge}$ pursuant to s15(1) or s15(2A) RMA. <br> 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. | Non-Complying |  |  |



## 14 Discharges to Land and Water

## $14.1 \quad$ Objectives

## Objective 14-1: Management of discharges ${ }^{\wedge}$ to land ${ }^{\wedge}$ and water^${ }^{\wedge}$ and land^${ }^{\wedge}$ uses affecting groundwater and surface water quality

The management of discharges^ onto or into land^ (including those that enter water ${ }^{\wedge}$ ) or directly into water ${ }^{\wedge}$ and land ${ }^{\wedge}$ 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 ${ }^{\wedge}$ is onto or into $l a n d^{\wedge}$, avoids, remedies or mitigates adverse effects ${ }^{\wedge}$ on surface water ${ }^{\wedge}$ or groundwater.

## Policies

## Policy 14-1: Consent decision-making for discharges^ to water^

When making decisions on resource consent ${ }^{\wedge}$ applications, and setting consent conditions ${ }^{\wedge}$, for discharges ${ }^{\wedge}$ of water^ or contaminants ${ }^{\wedge}$ 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 ${ }^{\wedge}$ which contain any persistent contaminants $\wedge^{\wedge}$ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ on land ${ }^{\wedge}$ 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 ${ }^{\wedge}$.

## Policy 14-2: Consent decision-making for discharges ${ }^{\wedge}$ to land ${ }^{\wedge}$

When making decisions on resource consent ${ }^{\wedge}$ applications, and setting consent conditions ${ }^{\wedge}$, for discharges ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ onto or into land $\wedge$ 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 ${ }^{\wedge}$ on any sensitive receiving environment^ or potentially incompatible land ${ }^{\wedge}$ 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 ${ }^{\wedge}$, surface water bodies ${ }^{\wedge}$ and the coastal marine area^,
(d) the appropriateness of adopting the best practicable option^ to prevent or minimise adverse effects ${ }^{\wedge}$ 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 ${ }^{\wedge}$ are small in comparison to the costs of investigating the likely effects ${ }^{\wedge}$ on land ${ }^{\wedge}$ and water^,
(e) avoiding discharges ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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^ ${ }^{\wedge}$ to surface water^ and land^

When applying for consents and making decisions on consent applications for discharges ${ }^{\wedge}$ 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 ${ }^{\wedge}$ onto or into land ${ }^{\wedge}$ as an alternative to discharging contaminants ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ uses:
(i) Dairy farming*
(ii) Commercial vegetable growing*
(iii) Cropping*
(iv) Intensive sheep and beef*
(b) The intensive farming land ${ }^{\wedge}$ uses identified in (a) must be regulated where:
(i) They are existing intensive farming land ${ }^{\wedge}$ 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 ${ }^{1}$ ) intensive farming land ${ }^{\wedge}$ uses, in all Water Management Subzones* in the Region.
(c) Nitrogen leaching maximums have been established in Table 14.2.
(d) Existing intensive farming land ${ }^{\wedge}$ uses regulated in accordance with (b)(i) must be managed to ensure that the leaching of nitrogen from those land^ uses does not exceed the cumulative nitrogen leaching maximum* values for each year contained in Table 14.2, unless the circumstances in Policy 14-6 apply.
(e) New intensive farming land ${ }^{\wedge}$ uses regulated in accordance with (b)(ii) must be managed to ensure that the leaching of nitrogen from those land ${ }^{\wedge}$ uses does not exceed the cumulative nitrogen leaching maximum ${ }^{*}$ values for each year contained in Table 14.2.
(f) Intensive farming land ${ }^{\wedge}$ 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.

[^15]
## Policy 14-6: Resource consent decision-making for intensive farming land^^ uses

When making decisions on resource consent $\wedge$ applications, and setting consent conditions ${ }^{\wedge}$, for intensive farming land ${ }^{\wedge}$ 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 ${ }^{\wedge}$ uses in the following circumstances:
(i) where the existing intensive farming land ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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^ ${ }^{\wedge}$ of domestic wastewater^

When making decisions on resource consent ${ }^{\wedge}$ applications, and setting consent conditions ${ }^{\wedge}$, for on-site discharges ${ }^{\wedge}$ of domestic wastewater${ }^{\star}$, the Regional Council must generally ensure that the discharge^ is in accordance with the Manual for On-site Wastewater Systems Design and Management (Horizons Regional Council 2010).

For discharges^ 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^ applications, and set consent conditions^, for on-site discharges^ of domestic wastewater*, to ensure that:
(a) the site* is suitable for the intended on-site wastewater management system,
(b) the discharge ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ is set aside as a reserve disposal area.

## Policy 14-8: Monitoring requirements for consent holders

Point source discharges ${ }^{\wedge}$ of contaminants $\wedge$ to water^ must generally be subject to the following monitoring requirements:
(a) the regular monitoring of discharge ${ }^{\wedge}$ volumes on discharges ${ }^{\wedge}$ smaller than $100 \mathrm{~m}^{3} /$ 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 ${ }^{\wedge}$ of $100 \mathrm{~m}^{3} /$ day or greater,
(c) the installation of a Regional Council compatible telemetry system on discharges^ of $300 \mathrm{~m}^{3} /$ day or greater, and
(d) monitoring and reporting on the quality of the discharge ${ }^{\wedge}$ at the point of discharge ${ }^{\wedge}$ 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 ${ }^{\wedge}$ -
of any contaminant^ into fresh water^, or onto or into land ${ }^{\wedge}$ in circumstances that may result in that contaminant^ (or, as a result of any natural process from the discharge ${ }^{\wedge}$ of that contaminant ${ }^{\wedge}$, any other contaminant ${ }^{\wedge}$ ) entering fresh water ${ }^{\wedge}$.
(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 ${ }^{\wedge}$; and
(ii) the extent to which it is feasible and dependable that any more than minor adverse effect on fresh water ${ }^{\wedge}$, 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 ${ }^{\wedge}$; 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.

## Rules - Agricultural Activities

Table 14.1 sets out the target Water Management Sub-zones* where management of existing intensive farming land ${ }^{\wedge}$ 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 <br> legal effect² in relation to Rule 14-1 |
| :--- | :--- | :--- |
| Mangapapa | Mangapapa Mana_9b | 1 July 2014 |
| Waikawa | Waikawa West_9a <br> Manakau West_9b | 1 July 2014 |

[^16]| Catchment | Water Management Sub_zone* | Date the Rules of the Plan have <br> legal effect in relation to Rule 14-1 |
| :--- | :--- | :--- |
| Other south-west catchments (Papaitonga) | Lake Papaitonga West_8 | 1 July 2014 |
| Mangatainoka | Upper Mangatainoka Mana_8a <br> Middle Mangatainoka Mana_8b <br> Lower Mangatainoka Mana_8c <br> Makakahi Mana_8d | 1 July 2015 |
| Other coastal lakes | Northern Manawatu Lakes West_6 <br> Kaitoke Lakes West_4 <br> Southern Wanganui Lakes West_5 | Coastal Rangitikei Rang_4 |
| Coastal Rangitikei July 2015 |  |  |
| Lake Horowhenua | Lake Horowhena Hoki_1a <br> Hokio Hoki_1b | 1 July 2015 |
| Upper Manawatu above Hopelands | Upper Manawatu Mana_1a <br> Mangatewainui Mana_1b <br> Mangatoro Mana_1c <br> Weber-Tamaki Mana_2a <br> Mangatera Mana_2b <br> Upper Tamaki Mana_3 <br> Upper Kumeti Mana_4 <br> Tamaki-Hopelands Mana_5a <br> Lower Tamaki Mana_5b <br> Lower Kumeti Mana_5c <br> Oruakeretaki Mana_5d <br> Raparapawai Mana_5e | 1 July 2016 |
| Manawatu above gorge | Hopelands-Tiraumea Mana_6 <br> Upper Gorge Mana_9a <br> Mangaatua Mana_9c | 1 July 2016 |

Table 14.2 sets out the cumulative nitrogen leaching maximum ${ }^{*}$ for the land ${ }^{\wedge}$ 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 ${ }^{3}$ ) | LUC* 1 | 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: <br> (i) dairy farming* <br> (ii) commercial vegetable growing* <br> (iii) cropping* <br> (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 ${ }^{\wedge}$ pursuant to ss15(1) or $15(2 \mathrm{~A})$ RMA associated with that intensive farming: <br> (a) the discharge^ of fertiliser* onto or into land ${ }^{\wedge}$ <br> (b) the discharge ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ onto or into land ${ }^{\wedge}$ from | Controlled | (a) A nutrient management plan* must be prepared for the land ${ }^{\wedge}$, and provided annually to the Regional Council. <br> (b) The activity must be undertaken in accordance with the nutrient management plan* prepared under (a). <br> (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. <br> (d) Cattle must be excluded from: <br> (i) wetlands^ and lakes^ that are a rare habitat* or threatened habitat*, and <br> (ii) the beds^ ${ }^{\wedge}$ of rivers ${ }^{\wedge}$ that are permanently flowing or have an active bed* width greater than 1 m . <br> (e) Rivers ${ }^{\wedge}$ 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 | Control is reserved over: <br> (a) the implementation of the nutrient management plan* <br> (b) compliance with the cumulative nitrogen leaching maximum* specified in Table 14.2 <br> (c) the matters of control in Rule 14-11 <br> (d) avoiding, remedying or mitigating the effects of odour, dust, fertiliser* drift or effluent drift <br> (e) provision of information including the nutrient management plan* <br> (f) duration of consent <br> (g) review of consent conditions ${ }^{\wedge}$ <br> (h) compliance monitoring <br> (i) the matters in Policy 14-9. |

[^17]| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
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|  | (i) the preparation, storage, use or transportation of stock feed on production land ${ }^{\wedge}$ <br> (ii) the use of a feedpad* <br> (c) the discharge^ of grade Aa biosolids* or compost* onto or into production land ${ }^{\wedge}$ <br> (d) the discharge^ of poultry farm litter* onto or into production land ${ }^{\wedge}$ <br> (e) the discharge^ of farm animal effluent* onto or into production land^ (or upon expiry or surrender of any existing consent for that discharge ${ }^{\wedge}$ ) including: <br> (i) effluent from dairy sheds and feedpads* <br> (ii) effluent received from piggeries <br> (iii) sludge from farm effluent ponds <br> (iv) poultry farm effluent <br> and any ancillary discharge^ of contaminants^ into air pursuant to ss15(1) or $15(2 A)$ RMA. <br> Where the existing intensive farming land ${ }^{\wedge}$ 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: <br> (a) if at least $20 \%$ of the existing intensive farming land ${ }^{\wedge}$ use is located on land within the listed water management sub-zones*; and <br> (b) to the portion of the existing intensive farming land ${ }^{\wedge}$ use that is located within |  | cross via that bridge or culvert, and run-off originating from the carriageway of the bridge or culvert must be discharged ${ }^{\wedge}$ onto or into land ${ }^{\wedge}$. <br> (f) The discharge^ of fertiliser ${ }^{\star}$ onto or into land ${ }^{\wedge}$ and any ancillary discharge ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ into air must comply with the conditions ${ }^{\wedge}$ of Rule 14-5. <br> (g) The discharge^ of contaminants ${ }^{\wedge}$ onto or into land ${ }^{\wedge}$ from: <br> (i) the preparation, storage, use or transportation of stock feed on production land ${ }^{\wedge}$, or <br> (ii) the use of a feedpad ${ }^{*}$ <br> and any ancillary discharge ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ into air must comply with the conditions ${ }^{\wedge}$ of Rule 14-6. <br> (h) The discharge^ of grade Aa biosolids* or compost* onto or into production land ${ }^{\wedge}$ and any ancillary discharge^ of contaminants ${ }^{\wedge}$ into air must comply with the conditions ${ }^{\wedge}$ of Rule 14-7. <br> (i) The discharge^ of poultry farm litter* onto or into production land $\wedge$ and any ancillary discharge ${ }^{\wedge}$ of contaminants^ into air must comply with the conditions ${ }^{\wedge}$ of Rule 14-9. <br> (j) The discharge^ of farm animal effluent* onto or into production land^ including: <br> (i) effluent from dairy sheds and feedpads* <br> (ii) effluent received from piggeries <br> (iii) sludge from farm effluent ponds <br> (iv) poultry farm effluent <br> and any ancillary discharge ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ into air must comply with the conditions ${ }^{\wedge}$, standards and terms of Rule 14-11. | 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 ${ }^{\wedge}$ on affected persons). |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
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|  | the listed water management subzones*. |  |  |  |
| 14-2 Existing intensive farming land^ ${ }^{\wedge}$ use activities not complying with Rule 14-1 | The use of land^ pursuant to s9(2) RMA for any of the following intensive farming: <br> (i) dairy farming* <br> (ii) commercial vegetable growing* <br> (iii) cropping* <br> (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 $15(2 \mathrm{~A})$ RMA associated with intensive farming, that do not comply with one or more of the conditions ${ }^{\wedge}$, standards and terms of Rule 14-1: <br> (a) the discharge^ of fertiliser* onto or into land ${ }^{\wedge}$ <br> (b) the discharge ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ onto or into land^ from <br> (i) the preparation, storage, use or transportation of stock feed on production land ${ }^{\wedge}$ <br> (ii) the use of a feedpad* <br> (c) the discharge^ of grade Aa biosolids* or compost* onto or into production land ${ }^{\wedge}$ <br> (d) the discharge^ of poultry farm litter* onto or into production land ${ }^{\wedge}$ <br> (e) the discharge^ of farm animal effluent* onto or into production land^ (or upon | Restricted Discretionary |  | Discretion is restricted to: <br> (a) preparation of and compliance with a nutrient management plan* for the land ${ }^{\wedge}$ <br> (b) the extent of non-compliance with the cumulative nitrogen leaching maximum* specified in Table 14.2 <br> (c) measures to avoid, remedy or mitigate nutrient leaching, faecal contamination and sediment losses from the land ${ }^{\wedge}$ <br> (d) measures to exclude cattle from wetlands^ and lakes ${ }^{\wedge}$ that are a rare habitat** or threatened habitat*, and rivers^ that are permanently flowing or have an active bed* width greater than 1 m <br> (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 <br> (f) the matters referred to in the conditions ${ }^{\wedge}$ of Rules 14-5, 14-6, 14-7, and 14-9 <br> (g) the matters referred to in the conditions ${ }^{\wedge}$ of Rule 14-11 and the matters of control in Rule 14-11 <br> (h) avoiding, remedying or mitigating the effects of odour, dust, fertiliser* drift or effluent drift <br> (i) provision of information including the |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
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|  | expiry or surrender of any existing consent for that discharge^) including: <br> (i) effluent from dairy sheds and feedpads* <br> (ii) effluent received from piggeries <br> (iii) sludge from farm effluent ponds <br> (iv) poultry farm effluent <br> and any ancillary discharge^ of contaminants^ into air pursuant to ss15(1) or $15(2 \mathrm{~A})$ RMA. |  |  | annual nutrient management plan* <br> (j) duration of consent <br> (k) review of consent conditions ${ }^{\wedge}$ <br> (I) compliance monitoring <br> (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: <br> (i) dairy farming* <br> (ii) commercial vegetable growing* <br> (iii) cropping* <br> (iv) intensive sheep and beef farming* that occurs from the date this rule has legal effect ${ }^{4}$ anywhere within the Region and any of the following discharges^ pursuant to ss15(1) or 15(2A) RMA associated with that intensive farming: <br> (a) the discharge^ of fertiliser* onto or into land ${ }^{\wedge}$ <br> (b) the discharge ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ onto or into land ${ }^{\wedge}$ from <br> (i) the preparation, storage, use or transportation of stock feed on production land ${ }^{\wedge}$ | Controlled | (a) A nutrient management plan* must be prepared for the land ${ }^{\wedge}$ and provided annually to the Regional Council. <br> (b) The activity must be undertaken in accordance with the nutrient management plan* prepared under (a). <br> (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. <br> (d) Cattle must be excluded from: <br> (i) wetlands^ and lakes^ that are a rare habitat* or threatened habitat*, and <br> (ii) the beds^^ of rivers^ that are permanently flowing or have an active bed* width greater than 1 m . <br> (e) Rivers ${ }^{\wedge}$ that are permanently flowing or have an active $b e d^{*}$ 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 ${ }^{\wedge}$ onto or into land ${ }^{\wedge}$. | Control is reserved over: <br> (a) the implementation of the nutrient management plan* <br> (b) compliance with the cumulative nitrogen leaching maximum* specified in Table 14.2 <br> (c) the matters of control in Rule 14-11 <br> (d) avoiding, remedying or mitigating the effects of odour, dust, fertiliser* drift or effluent drift <br> (e) provision of information including the nutrient management plan* <br> (f) duration of consent <br> (g) review of consent conditions ${ }^{\wedge}$ <br> (h) compliance monitoring <br> (i) the matters in Policy 14-9. <br> Resource consent ${ }^{\wedge}$ applications under this rule^ will not be notified and written approval |

[^18]| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
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|  | (ii) the use of a feedpad* <br> (c) the discharge^ of grade Aa biosolids*, or compost* onto or into production land ${ }^{\wedge}$ <br> (d) the discharge^ of poultry farm litter* onto or into production land ${ }^{\wedge}$ <br> (e) the discharge^ of farm animal effluent* onto or into production land ${ }^{\wedge}$ including: <br> (i) effluent from dairy sheds and feedpads* <br> (ii) effluent received from piggeries <br> (iii) sludge from farm effluent ponds <br> (iv) poultry farm effluent <br> and any ancillary discharge^ of contaminants ${ }^{\wedge}$ into air pursuant to ss15(1) or $15(2 \mathrm{~A})$ RMA. |  | (f) The discharge^ of fertiliser* onto or into land ${ }^{\wedge}$ and any ancillary discharge ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ into air must comply with the conditions ${ }^{\wedge}$ of Rule 14-5. <br> (g) The discharge^ of contaminants ${ }^{\wedge}$ onto or into land ${ }^{\wedge}$ from: <br> (i) the preparation, storage, use or transportation of stock feed on production land ${ }^{\wedge}$, or <br> (ii) the use of a feedpad* <br> and any ancillary discharge ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ into air must comply with the conditions ${ }^{\wedge}$ of Rule 14-6. <br> (h) The discharge^ of grade Aa biosolids* or compost* onto or into production land ${ }^{\wedge}$ and any ancillary discharge^ of contaminants $\wedge$ into air must comply with the conditions ${ }^{\wedge}$ of Rule 14-7. <br> (i) The discharge^^ of poultry farm litter* onto or into production land ${ }^{\wedge}$ and any ancillary discharge ${ }^{\wedge}$ of contaminants^ into air must comply with the conditions ${ }^{\wedge}$ of Rule 14-9. <br> (j) The discharge^ of farm animal effluent* onto or into production land^ including: <br> (i) effluent from dairy sheds and feedpads* <br> (ii) effluent received from piggeries <br> (iii) sludge from farm effluent ponds <br> (iv)poultry farm effluent <br> and any ancillary discharge^ of contaminants ${ }^{\wedge}$ into air must comply with the conditions ${ }^{\wedge}$, standards and terms of Rule 14-11. | of affected persons will not be required (notice of applications need not be served ${ }^{\wedge}$ on affected persons). |
| 14-4 New intensive farming land^ use activities not complying with Rule | The use of land^ pursuant to s9(2) RMA for any of the following intensive farming <br> (i) dairy farming* <br> (ii) commercial vegetable growing* | Restricted Discretionary |  | Discretion is restricted to: <br> (a) preparation of and compliance with a nutrient management plan* for the land ${ }^{\wedge}$ |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
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| 14-3 | (iii) cropping* <br> (iv) intensive sheep and beef farming* that occurs from the date this rule has legal effect ${ }^{5}$ anywhere within the Region, and any of the following discharges ${ }^{\wedge}$ pursuant to ss15(1) or $15(2 \mathrm{~A})$ RMA associated with intensive farming, that do not comply with one or more of the conditions ${ }^{\wedge}$, standards and terms of Rule 14-3: <br> (a) the discharge^ of fertiliser* onto or into land ${ }^{\wedge}$ <br> (b) the discharge ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ onto or into land^ from <br> (i) the preparation, storage, use or transportation of stock feed on production land ${ }^{\wedge}$ <br> (ii) the use of a feedpad* <br> (c) the discharge^ of grade Aa biosolids* or compost* onto or into production land ${ }^{\wedge}$ <br> (d) the discharge^ of poultry farm litter* onto or into production land ${ }^{\wedge}$ <br> (e) the discharge^ of farm animal effluent ${ }^{*}$ onto or into production land ${ }^{\wedge}$ including: <br> (i) effluent from dairy sheds and feedpads* <br> (ii) effluent received from piggeries <br> (iii) sludge from farm effluent ponds <br> (iv) poultry farm effluent |  |  | (b) the extent of non-compliance with the cumulative nitrogen leaching maximum*specified in Table 14.2 <br> (c) measures to avoid, remedy or mitigate nutrient leaching, faecal contamination and sediment losses from the land ${ }^{\wedge}$ <br> (d) measures to exclude cattle from wetlands ${ }^{\wedge}$ and lakes ${ }^{\wedge}$ that are a rare habitat* or threatened habitat**, and rivers^ that are permanently flowing or have an active bed* width greater than 1 m <br> (e) the bridging or culverting of rivers ${ }^{\wedge}$ that are permanently flowing or have an active bed ${ }^{\star}$ width greater than 1 m that are crossed by cattle <br> (f) the matters referred to in the conditions^ of Rules 14-5, 14-6, 14-7, and 14-9 <br> (g) the matters referred to in the conditions ${ }^{\wedge}$ of Rule 14-11 and the matters of control in Rule 14-11 <br> (h) avoiding, remedying or mitigating the effects of odour, dust, fertiliser* drift or effluent drift <br> (i) provision of information including the annual nutrient management plan* <br> (j) duration of consent <br> (k) review of consent conditions ${ }^{\wedge}$ <br> (I) compliance monitoring |

[^19]| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
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|  | and any ancillary discharge^ of contaminants^ into air pursuant to ss15(1) or $15(2 \mathrm{~A})$ RMA. |  |  | (m) the matters in Policy 14-9. |
| 14-5 <br> Fertiliser* | The discharge^ of fertiliser ${ }^{*}$ onto or into land^ pursuant to ss15(1) or $15(2 \mathrm{~A})$ RMA and any ancillary discharge^ of contaminants ${ }^{\wedge}$ 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 | (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). <br> (b) All reasonable measures must be taken to prevent: <br> (i) any discharge ${ }^{\wedge}$ of fertiliser* within the bed^${ }^{\wedge}$ of a river ${ }^{\wedge}$ 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 <br> (ii) any discharge^ into any rare habitat*, threatened habitat ${ }^{*}$ or at-risk habitat*, except for the purpose of enhancing such habitats. <br> Under condition (b) "reasonable measures" includes the use of GPS technology. <br> (c) For production land^ the fertiliser* must be discharged^${ }^{\wedge}$ in accordance with the Code of Practice for Nutrient Management (New Zealand Fertiliser Manufacturers' Research Association, 2007). <br> (d) Where nitrogen fertiliser* is discharged ${ }^{\wedge}$ onto land $d^{\wedge}$ in excess of $60 \mathrm{kgN} / \mathrm{ha} / \mathrm{year}$ averaged across the whole farm area or in excess of an average rate of 150 $\mathrm{kgN} / \mathrm{ha} /$ year on any application area a nutrient budget undertaken using the OVERSEER ${ }^{\circledR}$ 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 ${ }^{\wedge}$ 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 |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
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|  |  |  | budget required by this condition^ must be consistent with it and the activity must be carried out in accordance with it. <br> (e) The discharge^ must not result in any offensive or objectionable odour or fertiliser* drift beyond the property* boundary. |  |
| 14-6 <br> Stock feed including feedpads* | The discharge^ of contaminants ${ }^{\wedge}$ onto or into land ${ }^{\wedge}$ pursuant to $\operatorname{ss15(1)~or~15(2A)~}$ RMA from: <br> (a) the preparation, storage, use or transportation of stock feed on production land ${ }^{\wedge}$, or <br> (b) the use of a feedpad* <br> and any ancillary discharge^ of contaminants ${ }^{\wedge}$ into air pursuant to ss15(1) or 15(2A) RMA, except where the discharge ${ }^{\wedge}$ is undertaken in association with a use of land ${ }^{\wedge}$ controlled by Rule 14-1 to 14-4. | Permitted | (a) All silage (excluding maize silage) storage pits that have an area greater than $500 \mathrm{~m}^{2}$ and all feedpads*, must be sealed to restrict seepage of contaminants $\wedge$. The permeability of the sealing layer must not exceed $1 \times 10^{-9} \mathrm{~m} / \mathrm{s}$. <br> (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: <br> (i) run-off from the area into surface water^ or artificial watercourses*, is prevented <br> (ii) run-off from the surrounding catchment is prevented from entering the area. <br> (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: <br> (i) 50 m from rare habitats*, threatened habitats* and at-risk habitats*, <br> (ii) 20 m from bores*, surface water bodies^, artificial watercourses*, and the coastal marine area^, and <br> (iii) 50 m from any historic heritage^ identified in any district plan^ or regional plan^. <br> (d) All animal effluent* collected from feedpads* must be treated and discharged^ in accordance with Rule 14-11. <br> (e) The discharge^ must not result in any offensive or |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
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|  |  |  | objectionable odour or dust beyond the property* boundary. |  |
| 14-7 <br> Discharges^ of grade Aa biosolids* and compost to production land^ ${ }^{\wedge}$ | The discharge^ of grade Aa biosolids* or compost* onto or into production land ${ }^{\wedge}$ pursuant to ss15(1) or $15(2 A)$ RMA, and any ancillary discharge ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ into air pursuant to ss15(1) or 15(2A) RMA, except where the discharge^ is undertaken in association with a use of $/ a^{\prime} d^{\wedge}$ controlled by Rules 14-1 to 14-4. | Permitted | (a) There must be no direct discharge ${ }^{\wedge}$ or run-off into any surface water body ${ }^{\wedge}$ or its bed ${ }^{\wedge}$ or artificial watercourse*. <br> (b) For compost* the material must not contain any human or animal pathogens, or any hazardous substances*. <br> (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). <br> (d) The discharge^ must comply with the following separation distances: <br> (i) 50 m from rare habitats*, threatened habitats* and at-risk habitats* <br> (ii) 20 m from bores*, surface water bodies^, artificial watercourses* and the coastal marine area^ <br> (iii) 50 m from any historic heritage^ identified in any district plan^ or regional plan^. <br> (e) A nutrient budget undertaken using the OVERSEER ${ }^{\circledR}$ 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. <br> (f) The discharge^ must not result in any offensive or |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
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|  |  |  | objectionable odour or dust beyond the property* boundary. <br> (g) The discharger must keep the following records: <br> (i) a daily record of the discharge ${ }^{\wedge}$ volume and location <br> (ii) a monthly (or more frequent) analysis of the nitrogen concentration of a discharge^ sample and make these records available to the Regional Council upon request. |  |
| $\begin{array}{\|l\|} \hline 14-8 \\ \hline \end{array}$ <br> Grade Ab, Ba or Bb biosolids* | The discharge^ ${ }^{\wedge}$ of grade $\mathrm{Ab}, \mathrm{Ba}$ or Bb biosolids* onto or into production land ${ }^{\wedge}$ pursuant to ss15(1) or $15(2 A)$ RMA, and any ancillary discharge ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ into air pursuant to ss15(2) or 15(2A) RMA, except where the discharge^ is undertaken in association with a use of $/ a^{\prime} d^{\wedge}$ controlled by Rules 14-1 to 14-4. | Restricted Discretionary | (a) There must be no direct discharge^ ${ }^{\wedge}$ or run-off into any surface water body ${ }^{\wedge}$ or its bed ${ }^{\wedge}$ or artificial watercourse*. <br> (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). <br> (c) The discharge^ must comply with the following separation distances: <br> (i) 150 m from residential buildings, public places and amenity areas where people congregate, education facilities and public roads <br> (ii) 50 m from property* boundaries <br> (iii) 50 m from rare habitats*, threatened habitats* and at-risk habitats* <br> (iv) 20 m from bores*, surface water bodies^, artificial watercourses* and the coastal marine area^ <br> (v) 50 m from any historic heritage^ identified in any | Discretion is reserved over: <br> (a) the rate of discharge^ and frequency of discharge^ to control nutrient and contaminant loading rates <br> (b) maintenance of vegetative cover in the area of discharge ${ }^{\wedge}$ <br> (c) avoiding, remedying or mitigating the effects of odour or dust <br> (d) contingency measures, including for events of mechanical failure and prolonged wet weather <br> (e) monitoring and information requirements <br> (f) duration of consent <br> (g) review of consent conditions ${ }^{\wedge}$ <br> (h) compliance monitoring <br> (i) the matters in Policy 14-9. |


$\left.\begin{array}{|l|l|l|l|l|}\hline \text { Rule } & \text { Activity } & \text { Classification } & \text { Conditions/Standards/Terms }\end{array}\right]$| Control/Discretion |
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| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
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|  |  |  | (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. <br> (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. <br> (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: <br> (i) run-off from the area into water^ or an artificial watercourse* is prevented <br> (ii) run-off from the surrounding catchment is prevented from entering the area. |  |
| 14-10 <br> Offal holes and farm dumps | The discharge^ of contaminants^ onto or into production land ${ }^{\wedge}$ pursuant to ss15(1), 15(2) or 15(2A) RMA associated with an offal hole or farm dump, and any ancillary discharge ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ into air pursuant to ss15(1) or $15(2 A)$ RMA, except where the discharge^ is undertaken in association with a use of $/$ and $^{\wedge}$ controlled by Rules 14-1 to 14-4. | Permitted | (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. <br> (b) The waste* must not contain any hazardous substances* or sewage. <br> (c) There must be no discharge^ into any surface water body^ 아 its bed ${ }^{\wedge}$ or artificial watercourse*. <br> (d) The lowest point of the offal hole or farm dump must be at least 1 m above the seasonally highest water ${ }^{\wedge}$ table. <br> (e) The offal hole or farm dump must comply with the following separation distances: |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | (i) 150 m from any residential buildings, public places and amenity areas where people congregate, education facilities and public roads <br> (ii) 10 m from property ${ }^{*}$ boundaries <br> (iii) 50 m from rare habitats*, threatened habitats* and at-risk habitats* <br> (iv) 20 m from bores*, surface water bodies ${ }^{\wedge}$, artificial watercourses* and the coastal marine area^ <br> (v) 50 m from any historic heritage ${ }^{\wedge}$ identified in any district plan^ or regional plan^. <br> (f) Measures must be used as necessary to minimise animal pests from entering the offal hole or farm dump. <br> (g) There must be no offensive or objectionable odour or dust beyond the property* boundary. |  |
| 14-11 <br> Farm animal effluent* including effluent from dairy sheds, poultry farms and piggeries | The discharge^ of farm animal effluent* onto or into production land ${ }^{\wedge}$ pursuant to ss15(1) or 15(2A) RMA including: <br> (a) effluent from dairy sheds and feedpads* <br> (b) effluent from piggeries <br> (c) sludge from farm effluent ponds <br> (d) poultry farm effluent <br> and any ancillary discharge ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ into air pursuant to ss15(1) or 15(2A) RMA, except where the discharge ${ }^{\wedge}$ is undertaken in association with a use of land ${ }^{\wedge}$ controlled by Rules 14-1 to 14-4. | Controlled | (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. <br> (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 $\wedge$. The permeability of the sealing layer must not exceed $1 \times 10^{-9} \mathrm{~m} / \mathrm{s}$ subject to the following exceptions: <br> (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 | Control is reserved over: <br> (a) amount of effluent per discharge^ and frequency of discharge^ <br> (b) effluent discharge ${ }^{\wedge}$ volume and rate in relation to the infiltration rate and the available water^ storage capacity of the soil (deferred irrigation) <br> (c) nitrogen loading in terms of $\mathrm{kgN} / \mathrm{ha} / \mathrm{year}$ and $\mathrm{kgN} / \mathrm{ha}$ in any 24 hour period <br> (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 <br> (e) measures to manage the ponding of |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | (ii) The establishment or extension of sumps, weeping walls or stone traps alone do not trigger a requirement for sealing of existing ponds. <br> (c) The discharge^ must comply with the following separation distances: <br> (i) for discharges^ of piggery effluent, 150 m from any residential buildings, public places and amenity areas where people congregate and education facilities <br> (ii) for other discharges ${ }^{\wedge}$, 20 m from any residential buildings, public places and amenity areas where people congregate and education facilities <br> (iii) for all discharges^, 50 m from rare habitats*, threatened habitats* and at-risk habitats* <br> (iv) for all discharges^, 20 m from bores*, surface water bodies ${ }^{\wedge}$, artificial watercourses* and the coastal marine area^ <br> (v) for all discharges^, 50 m from any historic heritage^ identified in any district plan^ or regional plan^. <br> (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. <br> (e) A nutrient budget, undertaken using the OVERSEER ${ }^{\circledR}$ 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 | effluent on the discharge ${ }^{\wedge}$ area <br> (f) maintenance of vegetative cover on the discharge ${ }^{\wedge}$ area <br> (g) management of odours arising from the effluent discharge^ <br> (h) contingency measures, including for events of mechanical failure and prolonged wet weather <br> (i) duration of consent <br> (j) review of consent conditions ${ }^{\wedge}$ <br> (k) compliance monitoring <br> (I) the matters in Policy 14-9. <br> Except for new piggeries, resource consent ${ }^{\wedge}$ 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 ${ }^{\wedge}$ on affected persons). |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion <br> Non-Notification |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | in accordance with it. <br> (f)There must be no offensive or objectionable odour, <br> dust, or effluent drift beyond the property* boundary. |  |

## Rule Guide:

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 $\operatorname{ss15(1)}$ 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 $15(2 \mathrm{~A})$ 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 <br> 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 | (a) The discharge^ must not cause or exacerbate the flooding of any neighbouring property*. <br> (b) The discharge^ ${ }^{\wedge}$ must not cause any scouring or erosion of any land ${ }^{\wedge}$ or bed^ of a water body^ beyond the point of discharge ${ }^{\wedge}$. <br> (c) The discharge^ must not alter the natural course of any water body ${ }^{\wedge}$. <br> (d) The discharge^ must not be to any rare habitat ${ }^{*}$, threatened habitat* or at-risk habitat* (discharges ${ }^{\wedge}$ into at-risk habitats* are discretionary activities^ under Rule 13-8 and into rare habitats*or threatened habitats* are non-complying activities under Rule 139). <br> (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. |  |

## Rule Guide:

Activities that do not comply - Discharges of water pursuant to $s 15(1)$ 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 <br> 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 ${ }^{\wedge}$ application system and any ancillary discharge ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ into air pursuant to ss15(1) or 15(2A) RMA lawfully in existence at 1 July 2011. <br> New and upgraded discharges^ of domestic wastewater* are controlled by Rule 14-14. | Permitted | (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 $2 \mathrm{~m}^{3} / \mathrm{d}$ ( 2,000 litres per day). <br> (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 ${ }^{\wedge}$ supply. <br> (c) The discharge^ must consist only of contaminants ${ }^{\wedge}$ normally associated with domestic sewage and greywater. <br> (d) There must be no direct discharge^ of wastewater to groundwater. <br> (e) The discharge^ must comply with the following separation distances: <br> (i) at least 20 m from any bore* used for drinking water ${ }^{\wedge}$ supply <br> (ii) at least 20 m from surface water bodies ${ }^{\wedge}$, artificial watercourses* and the coastal marine area^. <br> (f) The discharge^ ${ }^{\wedge}$ must not cause any offensive or objectionable odour beyond the property* boundary. <br> (g) There must be no increase in the concentration of pathogenic organisms in any surface water body^ as a result of the discharge^. <br> (h) The wastewater treatment and land ${ }^{\wedge}$ application system must be maintained by a manufacturerapproved contractor in accordance with the supplier's |  |


| 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 <br> 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 $15(2 A)$ RMA from a new or upgraded onsite wastewater treatment and land ${ }^{\wedge}$ application system which either: <br> (a) is newly established after this rule^ becomes operative ${ }^{\wedge}$, or <br> (b) involves the upgrade* of a system that existed at the date that this rule^ becomes operative ${ }^{\wedge}$. | Permitted | (a) The activity must comply with conditions (a) to (g) of Rule 14-13. <br> (b) All aspects of the wastewater treatment and land ${ }^{\wedge}$ 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). <br> (c) Where the property* within which the discharge^ occurs is 10 ha or greater: <br> (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 <br> (ii) the areal loading rate within the wastewater land ${ }^{\wedge}$ 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). <br> (d) Where the property ${ }^{*}$ within which the discharge^ occurs is less than 10 ha but 4 ha or greater: <br> (i) the treatment system must be either secondary treatment which must achieve, as a minimum, the following discharge^ quality standards: 20 $\mathrm{g} / \mathrm{m}^{3}$ Biochemical Oxygen Demand and $30 \mathrm{~g} / \mathrm{m}^{3}$ |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Suspended Solids or an improved primary septic tank and outlet filter <br> (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) <br> (iii) the areal loading rate within the wastewater land ${ }^{\wedge}$ application area must be no greater than 5 $\mathrm{mm} / \mathrm{d}$ ( 5 litres per $\mathrm{m}^{2}$ per day) for secondary treated effluent and no greater than $3 \mathrm{~mm} / \mathrm{d}$ ( 3 litres per $\mathrm{m}^{2}$ per day) for primary treated effluent. <br> (e) Where the property ${ }^{*}$ within which the discharge ${ }^{\wedge}$ occurs is less than 4 ha: <br> (i) the property* must cover an area of at least either $5,000 \mathrm{~m}^{2}$ for properties* created by subdivision after this rule^ becomes operative ${ }^{\wedge}$, or $2,500 \mathrm{~m}^{2}$ for properties* that existed at the date that this rule^ becomes operative ${ }^{\wedge}$ <br> (ii) the wastewater treatment system must include secondary treatment which must achieve, as a minimum, the following discharge^ quality standards: $20 \mathrm{~g} / \mathrm{m}^{3}$ Biochemical Oxygen Demand, $30 \mathrm{~g} / \mathrm{m}^{3}$ Suspended Solids, and 60 $\mathrm{g} / \mathrm{m}^{3}$ Total Nitrogen <br> (iii) the land ${ }^{\wedge}$ application system must be via pumping to dose load pressure compensating dripper irrigation lines <br> (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 $3 \mathrm{~mm} / \mathrm{d}$ ( 3 litres per $\mathrm{m}^{2}$ 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). <br> (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). <br> (g) The placement, burial, covering and exclusion of the land ${ }^{\wedge}$ application area must be as specified in section 6 in the Manual for On-Site Wastewater Systems Design and Management (Horizons Regional Council, 2010). <br> (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 $100 \%$. <br> (i) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*. <br> (j) The activity must not be to any historic heritage^ identified in any district plan^ or regional plan^. <br> (k) The wastewater treatment and land ${ }^{\wedge}$ application system must be maintained by a manufacturerapproved 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 |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | agents upon request. <br> (I) The discharge^ must not cause any offensive or objectionable odour beyond the property* boundary. |  |
| 14-15 <br> Discharges ${ }^{\wedge}$ of domestic wastewater* not complying with Rules 14-13 and 14-14 | The discharge^ of domestic wastewater* onto or into land^ pursuant to ss15(1) or $15(2 A)$ RMA and any ancillary discharge^ of contaminants ${ }^{\wedge}$ 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 ${ }^{\wedge}$ of Rules 14-13 or 14-14. | Restricted Discretionary | (a) The design flow must not exceed $6 \mathrm{~m}^{3} / \mathrm{d}$. <br> (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 ${ }^{\wedge}$ collection, or no less than 180 litres per person per day for other sources of water ${ }^{\wedge}$ supply. <br> (c) The discharge^ must consist only of contaminants ${ }^{\wedge}$ normally associated with domestic sewage and greywater. <br> (d) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*. <br> (e) The activity must not be to any historic heritage^ identified in any district plan^ or regional plan^. | Discretion is restricted to: <br> (a) the volume of wastewater and design of the treatment system <br> (b) compliance with the Manual for On-Site Wastewater Systems Design and Management (Horizons Regional Council, 2010) <br> (c) the design of the disposal system, the disposal method, and the rate of land ${ }^{\wedge}$ application <br> (d) the discharge^ quality, and allowable level of contamination <br> (e) environmental^ ${ }^{\wedge}$ effects $^{\wedge}$ arising from the location and method of disposal <br> (f) the reserve application area <br> (g) duration of consent <br> (h) review of consent conditions ${ }^{\wedge}$ <br> (i) compliance monitoring <br> (j) the matters in Policy 14-9. <br> Resource consent ${ }^{\wedge}$ 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 |
| :---: | :---: | :---: | :---: | :---: |
| $14-16$ <br> Human effluent storage and treatment facilities | The discharge ${ }^{\wedge}$ onto or into land ${ }^{\wedge}$ 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. <br> Advice Note: <br> 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 | (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 $1 \times 10^{-9} \mathrm{~m} / \mathrm{s}$. <br> (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: <br> (i) effluent run-off from the area into surface water bodies^, artificial watercourses* and the coastal marine area^ is prevented <br> (ii) run-off from the surrounding catchment is prevented from entering the area. <br> (c) The discharge^ must not result in any offensive or objectionable odour beyond the boundary of the subject property*. <br> (d) The discharge^ must comply with the following separation distances: <br> (i) 150 m from any residential buildings, public places and amenity areas where people congregate, education facilities and public roads <br> (ii) 50 m from rare habitats*, threatened habitats* and at-risk habitats* <br> (iii) 30 m from bores*, surface water bodies ${ }^{\wedge}$, artificial watercourses* and the coastal marine area^ <br> (iv) 50 m from historic heritage ${ }^{\wedge}$ as identified in any district plan^ or regional plan^. |  |
| 14-17 <br> Discharges ${ }^{\wedge}$ 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 |  |  |

## Rule Guide:

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.

| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| 14-18 <br> Discharges^ of stormwater to surface water^ and land^ | The discharge^ of stormwater into surface water^ pursuant to s15(1) RMA or onto or into land ${ }^{\wedge}$ 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 | (a) The discharge^ must not include stormwater from any: <br> (i) industrial or trade premises^ where hazardous substances* stored or used may be entrained by the stormwater <br> (ii) contaminated land ${ }^{\wedge}$ where the contaminants ${ }^{\wedge}$ of concern may be entrained by the stormwater <br> (iii) operating quarry or minera/^ extraction site* unless there is an interceptor system* in place. <br> (b) The discharge^ must not cause or exacerbate the flooding of any other property*. <br> (c) The activity must not cause erosion of any land ${ }^{\wedge}$ or the bed^ of any water body ${ }^{\wedge}$ beyond the point of discharge ${ }^{\wedge}$ 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. <br> (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. <br> (e) For discharges ${ }^{\wedge}$ of stormwater onto or into land^: <br> (i) 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 <br> (ii) 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 |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
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|  |  |  | than the 10\% annual exceedance probability design storm <br> (iii) the discharge^ ${ }^{\wedge}$ must not contain concentrations of hazardous substances* that are toxic to aquatic ecosystems, or accumulate in soil. <br> (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 ${ }^{\wedge}$ or its bed ${ }^{\wedge}$ to convey flood flows. <br> (g) For discharges^ of stormwater into surface water bodies^ the discharge^ must not cause, after reasonable mixing ${ }^{\star}$, any of the following effects ${ }^{\wedge}$ in the receiving water body^: <br> (i) the production of conspicuous oilt or grease films, scums or foams, or floatable or suspended materials <br> (ii) any conspicuous change in the colour or visual clarity of the receiving water^ <br> (iii) any emission of objectionable odour <br> (iv) the rendering of fresh water^ unsuitable for consumption by farm animals <br> (v) toxicity to aquatic ecosystems. <br> (h) The activity must not be to any historic heritage^ identified in any district plan^ or regional plan^. |  |
| 14-19 <br> Discharges^ of stormwater to surface water^ or land not complying with Rule 14-18 | The discharge^ of stormwater into surface water ${ }^{\wedge}$ pursuant to s15(1) RMA or onto or into land ${ }^{\wedge}$ 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 ${ }^{\wedge}$ to any rare habitat*, threatened habitat*, at-risk habitat*, or reach of a river^ or its bed ${ }^{\wedge}$ with a Schedule B Value of Natural State. | Discretion is reserved over: <br> (a) measures to control flooding and erosion <br> (b) contaminant ${ }^{\wedge}$ concentrations and loading rates <br> (c) measures to avoid, remedy or mitigate adverse effects^ on groundwater quality <br> (d) measures to manage the level of soil |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | contamination <br> (e) measures required to comply with s107(1) RMA <br> (f) measures to assist with maintaining or achieving the Schedule E water quality targets* for the relevant Water Management Sub-zones* <br> (g) management of odours arising from the stormwater discharge^ ${ }^{\wedge}$ <br> (h) stormwater system maintenance* requirements <br> (i) contingency requirements <br> (j) monitoring and information requirements <br> (k) duration of consent <br> (l) review of consent conditions ${ }^{\wedge}$ <br> (m) the matters in Policy 14-9. |

## 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 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 <br> Discharges^ of dye and salt tracers | The discharge^ of dye and salt tracer material, excluding radioisotope tracers, into surface water $\wedge$ pursuant to s15(1) RMA. | Permitted | (a) The dye or salt tracer material discharged ${ }^{\wedge}$ must not exceed 20 l of dye in solution, 10 kg of salt, or 100 I of salt solution. <br> (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: <br> (i) the name and contact details of the person responsible for the discharge ${ }^{\wedge}$ <br> (ii) the purpose and nature of the discharge ${ }^{\wedge}$ <br> (iii) the nature of the tracer including its type, colour, and product name and description <br> (iv) the location, timing and duration of the discharge^. <br> (c) The dye or salt tracer must not be a hazardous substance in terms of the Hazardous Substances and New Organisms Act 1996. <br> (d) There must be no discharge^ to any rare habitat*, threatened habitat*, at-risk habitat*, or reach of a river^ or its bed ${ }^{\wedge}$ with a Schedule B Value of Natural State or Sites of Significance - Aquatic. |  |

## 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 <br> Discharges^ of cleanfill material* | The discharge^ of cleanfill materia/* onto or into land ${ }^{\wedge}$ pursuant to ss15(1) or 15(2A) RMA and any ancillary discharge^ of contaminants ${ }^{\wedge}$ into water^${ }^{\wedge}$ pursuant to s15(1) RMA or air pursuant to ss15(1) or 15(2A) RMA except as regulated by other rules ${ }^{\wedge}$ in this Plan. <br> The stockpiling of gravel ancillary to gravel extraction and roading activities is not restricted by this rule^. | Permitted | (a) The siting, design, installation and management must be in accordance with A Guide to the Management of Cleanfills (Ministry for the Environment, 2002). <br> (b) The rate of cleanfill material ${ }^{*}$ discharge ${ }^{\wedge}$ must be no more than $2,500 \mathrm{~m}^{3} / \mathrm{y}$ per property*. <br> (c) The cleanfill material* must not be discharged ${ }^{\wedge}$ within: <br> (i) a rare habitat**, threatened habitat* or at-risk habitat* <br> (ii) land ${ }^{\wedge}$ with a slope* greater than $20^{\circ}$ <br> (iii) 50 m from any historic heritage^ identified in any district plan^ or regional plan^. <br> (d) Records of the source and composition of all cleanfill material* discharged ${ }^{\wedge}$ at the site* must be maintained and made available to the Regional Council upon request. <br> (e) The discharge^ of the cleanfill materia/* must be undertaken and maintained in a manner so as to ensure its long-term physical stability. |  |
| 14-22 <br> Composting* activities | The discharge ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ onto or into land ${ }^{\wedge}$ pursuant to ss15(1) or $15(2 \mathrm{~A})$ RMA, or into air pursuant to ss15(1) or 15(2A) RMA arising from a composting* activity. | Permitted | (a) The material to be composted must be green waste*, and must not contain any hazardous substance* or sewage. <br> (b) The activity must not be located within: <br> (i) a rare habitat**, threatened habitat* or at-risk habitat* <br> (ii) the bed^ of a river^ or lake ${ }^{\wedge}$ |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
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|  |  |  | (iii) land ${ }^{\wedge}$ with a slope ${ }^{*}$ greater than $20^{\circ}$ <br> (iv) 50 m from any historic heritage ${ }^{\wedge}$ identified in any district plan^ or regional plan^. <br> (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: <br> (i) run-off from the area into surface water^ or an artificial watercourse* is prevented <br> (ii) run-off from the surrounding catchment is prevented from entering the area. <br> (d) The discharge^ must not cause any offensive or objectionable odour or dust beyond the property* boundary. |  |
| $14-23$ <br> Closed landfills* | The discharge^ of contaminants^ onto or into land^^ or into water^ pursuant to ss15(1) or $15(2 A)$ RMA or air pursuant to ss15(1) or 15(2A) RMA from a closed solid waste* landfill*. | Controlled |  | Control is reserved over: <br> (a) measures to avoid adverse effects ${ }^{\wedge}$ on groundwater quality <br> (b) measures to manage the level of soil contamination <br> (c) measures to assist with maintaining or achieving the Schedule E water quality targets ${ }^{\star}$ for the relevant Water Management Sub-zones* <br> (d) management of odour <br> (e) stormwater management onto and from the site* <br> (f) contingency requirements <br> (g) monitoring and information requirements <br> (h) duration of consent <br> (i) review of consent conditions ${ }^{\wedge}$ <br> (j) the matters in Policy 14-9. |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
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|  |  |  |  | Resource consent ${ }^{\wedge}$ applications under this rule^ ${ }^{\text {will }}$ not be notified and written approval of affected persons will not be required (notice of applications need not be served ${ }^{\wedge}$ on affected persons). |
| 14-24 <br> Discharges^ of persistent and harmful contaminants^ | Any discharge^ onto or into land ${ }^{\wedge}$ pursuant to ss15(1) or 15(2A) RMA, or into water^ pursuant to s15(1) RMA, other than for discharges^ of stormwater which are provided for by Rules 14-18 and 14-19, of: <br> (a) wastewater sludge originating from timber treatment processes using copper chromium arsenic (CCA) wood preservatives <br> (b) perchlorethylene-contaminated waste* from dry cleaning activities <br> (c) persistent organochlorine substances <br> (d) polyaromatic hydrocarbons <br> (e) tributyl tin. | Non-complying |  |  |

## Rule Guide:

(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 $15(2 \mathrm{~A})$ 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 <br> Discharges^ of contaminants ${ }^{\wedge}$ to a reach of a river ${ }^{\wedge}$ or its bed ${ }^{\wedge}$ with Schedule B Values of Natural State and Sites of Significance - Aquatic | Any direct discharge^ of contaminants ${ }^{\wedge}$ into water^ or onto or into land ${ }^{\wedge}$ pursuant to ss15(1) or 15(2A) RMA in: <br> (a) a reach of a river^ or its bed ${ }^{\wedge}$ with a Schedule B Value of Natural State <br> (b) a reach of a surface water body^ or its bed ${ }^{\wedge}$ with a Schedule B Value of Sites of Significance - Aquatic <br> 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 <br> Discharges ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ to surface water ${ }^{\wedge}$ | The discharge^ of contaminants^ into surface water^ pursuant to s15(1) RMA, except as regulated by other rules ${ }^{\wedge}$ in this Plan. | Permitted | (a) The rate of discharge^ ${ }^{\wedge}$ must be no greater than $50 \mathrm{~m}^{3} / \mathrm{d}$. <br> (b) The discharge^ must not contain agricultural waste*, sewage, stormwater, cleanfill material*, contaminants ${ }^{\wedge}$ from composting* activities, or contaminants^ from landfills*. <br> (c) The discharge ${ }^{\wedge}$ must not cause or exacerbate the flooding of any other property*. <br> (d) The discharge^ must not cause any scouring or erosion of any land^ or bed^ of a water body^ beyond the point of discharge^. <br> (e) The discharge^ must not alter the natural course of any water body^ or its bed^. <br> (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 ${ }^{\wedge}$ with a Schedule B Value of Natural State. <br> (g) The discharge^ must not cause, after reasonable mixing*, any of the following effects^ in the receiving water body^: <br> (i) the production of conspicuous oil* or grease films, scums or foams, or floatable or suspended materials <br> (ii) any conspicuous change in the colour or visual clarity of the receiving water ${ }^{\wedge}$ <br> (iii) any emission of offensive or objectionable odour. <br> (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 ${ }^{\wedge}$ itself or in |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | combination with any other discharges ${ }^{\wedge}$. |  |
| 14-27 <br> Discharges ${ }^{\wedge}$ of contaminants^ onto or into land ${ }^{\wedge}$ that will not enter water ${ }^{\wedge}$ | The discharge^ ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ onto or into land ${ }^{\wedge}$ in circumstances that will not result in any contaminant ${ }^{\wedge}$ entering water ${ }^{\wedge}$, pursuant to ss15(1)(d) or 15(2A) RMA, except as regulated by other rules ${ }^{\wedge}$ in this Plan. | Permitted | (a) The rate of discharge ${ }^{\wedge}$ must be no more than $100 \mathrm{~m}^{3} / \mathrm{y}$ per property*. <br> (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 ${ }^{\wedge}$ from composting* activities, or contaminants^ from landfills*. <br> (c) The discharge^ must not be located within: <br> (i) any rare habitat*, threatened habitat* or at-risk habitat* <br> (ii) the bed^ of a river^ or lake ${ }^{\wedge}$ <br> (iii) land ${ }^{\wedge}$ with a slope* greater than $20^{\circ}$ <br> (iv) 50 m from any historic heritage^ identified in any district plan^ or regional plan^. <br> (d) Records of the source and composition of the discharge^ must be maintained and made available to the Regional Council upon request. <br> (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. <br> (f) The discharge ${ }^{\wedge}$ must not cause any increase in the concentration of hazardous substances* or pathogenic organisms on or in any land ${ }^{\wedge}$. <br> (g) The discharge^ must not have any acid-producing potential. <br> With the exception of standard (c)(i) 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. |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| 14-28 <br> Discharges ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ onto or into land ${ }^{\wedge}$ that may enter water ${ }^{\wedge}$ | The discharge ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ onto or into land ${ }^{\wedge}$ in circumstances which may result in those contaminants ${ }^{\wedge}$ (or any other contaminant^ emanating as a result of natural processes from those contaminants ${ }^{\wedge}$ ) entering water ${ }^{\wedge}$, pursuant to ss15(1)(b) or $15(2 \mathrm{~A})$ RMA, except as regulated by other rules^ in this Plan. | Permitted | (a) The discharge^ must comply with all of the conditions ${ }^{\wedge}$ of Rule 14-26. <br> (b) The discharge^ ${ }^{\wedge}$ must comply with all of the conditions ${ }^{\wedge}$ of Rule 14-27, except (a). <br> (c) The discharge^ must be at least 600 mm above the seasonally highest water^ table. <br> (d) The discharge^ must comply with the following separation distances: <br> (i) at least 30 m from any bore* <br> (ii) at least 20 m from any surface water body^, artificial watercourse* and the coastal marine area^. <br> (e) The discharge^ must not be located within any rare habitat*, threatened habitat* or at-risk habitat*. <br> (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^. <br> (g) The discharge^ must not cause any more than minor reduction in the quality of groundwater. <br> (h) The discharge^ must not result in any airborne liquid contaminant^ being carried beyond the boundary of the property*. <br> 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. |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| 14-29 <br> Replacement consents for discharges^ of water^ and contaminants^ to water^ and land^ from existing hydroelectricity schemes | The discharge^ of water^ or contaminants^ into water ${ }^{\wedge}$ or onto or into land ${ }^{\wedge}$ pursuant to ss15(1) or 15(2A) RMA from existing consented hydroelectricity generation schemes for which replacement consents are sought. | Controlled | (a) The consent application is to replace existing consents that are expiring and there is no increase to the existing volume of discharge ${ }^{\wedge}$ or the nature of contaminants ${ }^{\wedge}$. <br> (b) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*. | Control is reserved over: <br> (a) measures to control flooding and erosion <br> (b) contaminant^ concentrations and loading rates <br> (c) measures required to comply with s107(1) RMA <br> (d) measures to assist with maintaining or achieving the Schedule E water quality targets* for the relevant Water Management Sub-zones* <br> (e) measures to avoid, remedy or mitigate any adverse effects^ on the Values of the water body^ at and below the point of discharge <br> (f) measures to avoid, remedy or mitigate any adverse effects on the instream geomorphical components of the natural character of the waterbody <br> (g) water levels, flow regime and minimum flows <br> (h) maintenance and contingency requirements <br> (i) monitoring and information requirements <br> (j) measures to avoid, remedy or mitigate adverse effects^ on tangata whenua^ values <br> (k) duration of consent <br> (I) review of consent conditions ${ }^{\wedge}$ <br> (m) compliance monitoring. <br> Resource consent applications under this rule |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion <br> Non-Notification |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | will be notified to those parties who are <br> adversely affected in relation to the matters <br> over which control is reserved. This clause <br> does not preclude full public notification at the <br> councils discretion in accordance with the <br> RMA. |  |

## Rule Guide:

(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 $\operatorname{ss} 15(1)$ or $15(2 A)$ 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 $s 15(1)$ 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.

## $14.11 \quad$ Rules - Default Discharge Rule

| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| 14-30 <br> Discharges^ of water^ or contaminants^ ${ }^{\wedge}$ to land^ or water^ not covered by other rules^ in this Plan or chapter | The discharge^ of water^ or contaminants^ into surface water ${ }^{\wedge}$ pursuant to $\mathrm{s} 15(1)$ (a) RMA or discharge^ of contaminants ${ }^{\wedge}$ 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 ${ }^{\wedge}$, controlled activity^ or restricted discretionary activity ${ }^{\wedge}$ rules^ in this chapter. | Discretionary |  |  |

CHAPTER 15:
Discharges to Air

## 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 $\left(P M_{10}{ }^{*}\right)$ levels to ensure that they are reduced in unacceptable airsheds and managed in other areas to ensure compliance with the national ambient air ${ }^{\star}$ quality standard for $P M_{10}{ }^{*}$.

### 15.2 Policies

## Policy 15-1: Consent decision-making for agrichemicals*

When making decisions on resource consent^ applications and setting consent conditions^ for discharges^ of agrichemicals* that fail to meet either Rule 15-1 or Rule 15-2 (and which are therefore discretionary activities^), 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 ${ }^{\wedge}$ 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^ applications and setting consent conditions ${ }^{\wedge}$ for discharges ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ 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^ of fine particles, the approaches for managing fine particles ( $P M_{10}{ }^{*}$ ) in Policies 7-5, 7-6 and 7-7, and the likely contribution of the proposed discharge ${ }^{\wedge}$ to cumulative adverse effects^ ${ }^{\wedge}$ 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 ${ }^{\wedge}$,
(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) wāhi tapu*, marae and other sites* of significance to hapu${ }^{*}$ and $i w i^{*}$,
(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 ${ }^{\wedge}$ to prevent or minimise adverse effects ${ }^{\wedge}$ in circumstances where:
(i) numerical guidelines or standards establishing a level of protection for a receiving environment ${ }^{\wedge}$ 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 ${ }^{\wedge}$ are minor, and the costs associated with adopting the best practicable option ${ }^{\wedge}$ 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 ${ }^{\wedge}$ arising from mechanical failure, and
(h) adverse effects^ on aircraft^ safety from high velocity vertical discharges^ to air.

## Policy 15-3: Regional Rules^ 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 <br> Small-scale application of agrichemicals* | The discharge^ of agrichemicals* into air or onto land ${ }^{\wedge}$ from the use of a hand-held appliance* pursuant to ss15(1) or $15(2 \mathrm{~A})$ RMA. | Permitted | (a) The discharge^ must not contravene ${ }^{\wedge}$ any requirement specified in the agrichemical* manufacturer's instructions. <br> (b) There must be no adverse effects ${ }^{\wedge}$ from off-target spray drift. <br> (c) There must be no discharge^ into any water body^. <br> (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. <br> (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. |  |
| 15-2 <br> Widespread application of agrichemicals* | The discharge ${ }^{\wedge}$ of agrichemicals ${ }^{*}$ into air, onto land ${ }^{\wedge}$, or into water ${ }^{\wedge}$, pursuant to ss15(1) or 15(2A) RMA, except as permitted under Rule 15-1. | Permitted | (a) The discharge^ must not contravene ${ }^{\wedge}$ any requirement specified in the agrichemical* manufacturer's instructions. <br> (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. <br> (c) Where the discharge ${ }^{\wedge}$ 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. <br> (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. |  |


| 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. <br> (f) Any agrichemica/* contractor undertaking the groundbased 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. <br> (g) Every pilot undertaking the aerial application of agrichemicals* must hold a Pilot's Agrichemical Rating issued by Civil Aviation Authority. <br> (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). <br> (i) Where the discharge^ is into water^ for the purpose of eradicating, modifying or controlling unwanted aquatic plants: <br> (i) only agrichemicals* approved for aquatic use may be used, <br> (ii) the application must not exceed the quantity or concentration required for that purpose, <br> (iii) the discharge^ must not include disposal to water^ of any agrichemical*, <br> (iv) the discharger must notify every person taking water^ for domestic supply within 1 km downstream of the proposed discharge ${ }^{\wedge}$, 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^. <br> (j) For aerial discharges^, reasonable measures must be taken to prevent: <br> (i) any discharge ${ }^{\wedge}$ of agrichemicals* within 10 m of the bed ${ }^{\wedge}$ of a flowing river ${ }^{\wedge}$, or any lake ${ }^{\wedge}$, or wetland ${ }^{\wedge}$ which has an area of 1 ha or greater <br> (ii) any adverse effects^ on a rare habitat*, threatened habitat* or at-risk habitat*. <br> Under condition (j) "reasonable measures" may include the use of GPS technology, positive airflow indicators on boundaries or direct boundary supervision by qualified personnel. |  |
| 15-3 <br> Small-scale and widespread application of vertebrate pest control products* | The discharge of vertebrate pest control products* into air or onto land ${ }^{\wedge}$ 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 ${ }^{\wedge}$ by all other means pursuant to s15(2) RMA. | Permitted | For all discharges^: <br> (a) The discharge^ must not contravene^ any requirement specified in the manufacturer's instructions. <br> (b) There must be no discharge^ within any rare habitat,* threatened habitat* or at-risk habitat*, except for the control of pest animals. <br> For all small scale applications from the use of a hand-held appliance* or by way of hand dispersal <br> (c) There must be no discharge beyond the boundary of the subject property*. <br> (d) There must be no discharge into any water body*. <br> For aerial discharges of sodium fluoroacetate (1080) and formulated substances containing 1080 <br> (e) The discharge must comply with the controls under the Hazardous Substances and New Organisms Act 1996, particularly sections 77 and 77A. <br> 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: <br> (i) any discharge^ of vertebrate pest control products* within 10 m of the bed^ of a flowing river^ or any lake^ or wetland ${ }^{\wedge}$ which has an area of 1 ha or more <br> (ii) any adverse effects^ on a rare habitat*, threatened habitat* or at-risk habitat*. <br> (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: <br> (i) the period when the application will occur, <br> (ii) the brand name and the chemical name to be used, <br> (iii) method of application, <br> (iv) safety precautions to be taken, <br> (v) the name and contact phone number of those carrying out the application. <br> A record of this notification must be kept and made available to the Manawatu-Wanganui Regional Council upon request. <br> Public signage must be displayed where access to the sensitive area is normally gained. <br> (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. <br> 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 |
| :---: | :---: | :---: | :---: | :---: |
| 15-4 <br> Small scale and widespread application of vertebrate pest control products* not complying with Rule 15-3 | The discharge^ ${ }^{\wedge}$ of vertebrate pest control products* into air or onto land ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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: <br> (a) The location, nature, scale, timing and duration of the activity <br> (b) The nature of the area adjacent to the discharge <br> (c) Any beneficial effects of the discharge <br> (d) Any effects on those species which are not the target of the discharge <br> (e) Any adverse effects or risks to human health or public use of the area <br> (f) Any relevant national regulations ${ }^{\wedge}$ or nationally-accepted guidelines or codes of practice <br> (g) Duration of consent and consent conditions <br> (h) Compliance monitoring. <br> Resource Consent^ applications under this rule^ will not be publicly notified |
| 15-5 <br> 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 ${ }^{\wedge}$, 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 |  |  |

## Rules - Burning

Advice Note: In 2004 regulations $^{\wedge}$ were introduced controlling various discharges ${ }^{\wedge}$ into air. The title of these regulations ${ }^{\wedge}$ 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 ${ }^{\wedge}$ in addition to the rules ${ }^{\wedge}$ in this Chapter.

| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion, Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| 15-6 <br> 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. <br> 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. | Permitted | (a) The burning must comply with the following combustion rates: <br> (i) a rate not exceeding 500 kW for coal and untreated wood*, <br> (ii) a rate not exceeding 2.5 MW for diesel, kerosene, light fuel oil*, oil* and liquid biofuels*, <br> (iii) a rate not exceeding 5 MW for gaseous biofuels*, methane and natural or liquefied petroleum gas. <br> (b) The discharge^ must be from a chimney* designed so that the emission is effectively dispersed upwards and is unimpeded by any structure^ on top of the chimney*, and the chimney* height must be at least 3 m above the highest point of the roof and any other roof within 20 m of the chimney*. <br> (c) The discharge^ must not result from the burning of waste*, waste* oil* or solvents. <br> (d) The discharge^ must not cause a breach of any of the National Environmental Standards ${ }^{\wedge}$ for ambient air* quality set out in Table 7.1 (in Chapter 7). <br> (e) The discharge^ must not result in any offensive or objectionable odour, dust, smoke or water^ vapour beyond the boundary of the property*. <br> (f) The discharge^ must not result in any noxious or dangerous levels of gases or particulates beyond the boundary of the property*. <br> (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. <br> (h) The discharge^ of particulates must be no greater than $250 \mathrm{mg} / \mathrm{m}^{3}$ of non-toxic particulates (corrected to $0^{\circ} \mathrm{C}, 12 \% \mathrm{CO}_{2}, 1$ 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. <br> (i) The discharge^ must not cause a reduction in visibility on any designated commercial or military flight path. |  |
| $15-7$ <br> Outdoor burning* | The discharge ${ }^{\wedge}$ of contaminants $\wedge$ into air and any subsequent discharge^ of contaminants ${ }^{\wedge}$ onto land ${ }^{\wedge}$ pursuant to ss15(1) or 15(2A) RMA from: <br> (a) the outdoor burning* of the following materials: <br> (i) untreated wood* or vegetative matter, <br> (ii) waste* paper or cardboard, <br> (iii) food waste*, <br> (iv) non-halogenated ${ }^{\star}$ plastics, <br> (v) animal carcasses or animal waste* on production land ${ }^{\wedge}$. <br> (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: <br> (i) untreated wood ${ }^{*}$ or vegetative matter, <br> (ii) waste* paper or cardboard, | Permitted | (a) The material to be burned must be sourced only from the property* on which the burning occurs, except for: <br> (i) untreated wood* or vegetative matter, <br> (ii) materials (including vegetative matter) that are burned in barbeques, hāngi, umu and outdoor fireplaces, <br> (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. <br> (b) The discharge^ must not result in any offensive or objectionable odour, dust, smoke or water^ vapour beyond the boundary of the property*. <br> (c) The discharge^ must not result in any noxious or dangerous levels of gases or particulates beyond the boundary of the property*. <br> (d) The discharge^ must not cause a reduction in visibility on any designated commercial or military flight path. |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion, Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  | (iii) food waste*, <br> (iv) non-halogenated* plastics, <br> (v) $o i^{*}$, <br> (vi) buildings including those containing halogenated* materials. |  |  |  |
| 15-8 <br> DELETED (PC 1 2016) |  |  |  |  |
| 15-9 <br> Prohibited burning activities | The discharge ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ to air pursuant to ss15(1) or 15(2A) RMA from the outdoor burning* of: <br> (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 <br> (b) pitch, paint and paint residues on wood or chip board and surface coatings <br> (c) halogenated* plastic and polyvinylchloride (PVC) plastic <br> (d) halogenated* organic chemicals <br> (e) materials containing heavy metals <br> (f) asbestos <br> (g) agrichemicals* and agrichemical* containers containing residues <br> (h) treated timber* <br> (i) rubber <br> (j) hazardous materials from contaminated sites* and buildings <br> (k) components of motor vehicles. | Prohibited |  |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion, Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| 15-10 <br> Other burning activities | The discharge ${ }^{\wedge}$ of contaminants^ into air and any subsequent discharge^ of contaminants $\wedge$ onto land ${ }^{\wedge}$ pursuant to ss15(1) or 15(2A) RMA from burning activities which either: <br> (a) are located on industrial or trade premises ${ }^{\wedge}$ and are not addressed by any other rule^ in this Plan, or <br> (b) do not comply with one or more conditions ${ }^{\wedge}$, 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 |  |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion, Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| $15-11$ <br> Abrasive blasting* within an enclosure | The discharge^ of contaminants^ into air and any subsequent discharge^ onto land ${ }^{\wedge}$ 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 $100 \mathrm{mg} / \mathrm{m}^{3}$ (at $0^{\circ} \mathrm{C}, 1$ atmosphere pressure, dry gas basis) at the point of discharge ${ }^{\wedge}$. <br> (b) There must be no visible discharge^ of dust from the abrasive blasting* enclosure. <br> (c) The discharge^ must not result in noxious or dangerous levels of airborne contaminants^ beyond the property* boundary. <br> (d) Any abrasive media not in use must be covered and protected from water ${ }^{\wedge}$ and wind. |  |
| 15-12 <br> Wet abrasive blasting* and water^ blasting | The discharge^ of contaminants^ into air and any subsequent discharge^ onto land ${ }^{\wedge}$ or into water^ pursuant to ss15(1) or 15(2A) RMA from wet abrasive blasting* or water^ blasting. | Permitted | (a) Any sand or other material used for wet abrasive blasting* must contain less than $5 \%$ free silica on a dry weight basis. <br> (b) Any discharge^ of particulate matter must not be offensive or objectionable beyond the property ${ }^{*}$ boundary. <br> (c) Any abrasive media not in use must be kept covered and protected from erosion. <br> (d) All material that is discharged ${ }^{\wedge}$ to land ${ }^{\wedge}$ 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 ${ }^{\wedge}$ in the material. <br> (e) Measures must be taken to prevent to the extent practicable the discharge^ 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 <br> Dry abrasive blasting* using a moveable source | The discharge ${ }^{\wedge}$ of contaminants $\wedge$ into air and any subsequent discharge^ of contaminants ${ }^{\wedge}$ onto land ${ }^{\wedge}$ or into water^ pursuant to ss15(1) or 15(2A) RMA from dry abrasive blasting* using a moveable source. | Discretionary |  |  |
| 15-14 <br> Miscellaneous discharges^ into air from industrial or trade premises ${ }^{\wedge}$ | The discharge ${ }^{\wedge}$ of contaminants^ into air and any subsequent discharge^ of contaminants ${ }^{\wedge}$ onto land ${ }^{\wedge}$ or into water^ pursuant to ss15(1) or $15(2 \mathrm{~A})$ RMA from the following activities on industrial or trade premises^: <br> (a) fume cupboards <br> (b) premises discharging steam, water^ vapour, energy and heat (except as a result of fuel combustion) <br> (c) the retail or wholesale distribution of automotive fuels, oils*, liquefied gases, gases, and fuels used for industrial processing and home heating <br> (d) funeral parlours, chapels, and stonemasons <br> (e) the manufacture of household, industrial, electrical and garden equipment and appliances, including the manufacture of concrete products, but excluding the manufacture of cement, rubber goods and processes involving the galvanising of steel <br> (f) the application of surface coatings, including printing or manufacture of packaging materials, and printing of | Permitted | (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). <br> (b) The discharge^ must not result in any offensive or objectionable odour, dust, smoke or water^ vapour beyond the boundary of the property*. <br> (c) The discharge^ must not result in any noxious or dangerous levels of gases or particulates beyond the boundary of the property*. <br> (d) The discharge ${ }^{\wedge}$ must not cause a reduction in visibility on any designated commercial or military flight path. <br> (e) The vertical velocity of the discharge^ ${ }^{\wedge}$ must not exceed $4.3 \mathrm{~m} / \mathrm{s}$, at 60 m above ground level or the discharge^ must not penetrate the obstacle limitation surface of an aerodrome. <br> (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 $5 \mathrm{~kg} / \mathrm{hr}$. <br> (g) Fixed asphalt plants must be equipped with temperature sensors and aggregate proximity sensors that limit and control operating temperatures within the drum. <br> (h) Air pollution control equipment for fixed asphalt plants must be designed so that the discharge ${ }^{\wedge}$ of particulates must be no greater than $50 \mathrm{mg} / \mathrm{m}^{3}$ of particulates (corrected to $0^{\circ} \mathrm{C}, 12 \% \mathrm{CO}_{2}$, |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion, Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  | paper <br> (g) the manufacture of furnishings, clothing and carpets, but excluding rubber underlay <br> (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 booth or enclosure that has been designed to contain any emission of paint overspray <br> (i) joinery, including the manufacture, restoration or finishing of furniture and wood crafts, and cabinet making <br> (j) the operation* of dry-cleaning, dying, laundering and cleaning facilities <br> (k) the manufacture of beverages, including soft drinks, extraction of fruit juices, fermentation of wine, distillation of spirits and alcoholic beverages <br> (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 <br> (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^ evaporation capacity greater than $300 \mathrm{~kg} / \mathrm{hr}$ <br> (n) the storage, blending or distribution of |  | 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. |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion, Non-Notification |
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|  | bulk products including fertiliser*, fertiliser* mixing and the coating of existing fertiliser* product, animal feeds, roading materials, gardening materials, and concrete processing materials <br> (o) yards used to hold cattle or stock and buildings used solely for animal slaughtering <br> (p) the drying of grain or vegetable matter <br> (q) powder coating or spray painting <br> (r) sawmilling <br> (s) kiln drying <br> ( t$)$ the extraction, processing in fixed plant (crushing and screening), storage, or distribution of aggregates <br> (u) the development, maintenance*, use, upgrade*, or demolition of industrial or trade premises ${ }^{\wedge}$ 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 ${ }^{\wedge}$, paved areas, buildings, structures^ or equipment <br> (v) fixed asphalt plants. |  |  |  |
| 15-15 <br> Flaring of hydrocarbons | The discharge^ into air pursuant to ss15(1) or $15(2 A)$ RMA of hydrocarbons from flaring on land ${ }^{\wedge}$ associated with petroleum exploration^ for well-testing operations*. | Controlled | (a) The well-testing must be limited to a duration of 45 working days. <br> (b) The flare point must comply with the following separation distances: <br> (i) 300 m from residences, marae, education facilities, public buildings and public recreation | Control is reserved over: <br> (a) the nature of the contaminants ${ }^{\wedge}$ to be emitted during flaring and measures to manage effects ${ }^{\wedge}$ including effects ${ }^{\wedge}$ on sensitive activities <br> (b) duration of consent |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion, Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | areas <br> (ii) 300 m from any rare habitats*, threatened habitats* and at-risk habitats* <br> (iii) 100 m from bores*, surface water bodies ${ }^{\wedge}$, public roads ${ }^{\wedge}$ and the coastal marine area^ <br> (iv) 100 m from any historic heritage ${ }^{\wedge}$ as identified in any district plan^ or regional plan^. <br> (c) No non-petroleum wellstream product is to be combusted. <br> (d) There must be no objectionable odour, dust or waste^ drift beyond the property* boundary. <br> (e) The discharge^ must not cause a reduction in visibility on any designated commercial or military flight path. <br> (f) The vertical velocity of the discharge^ ${ }^{\wedge}$ must not exceed $4.3 \mathrm{~m} / \mathrm{s}$ at 60 m above ground level or the discharge^ must not penetrate the obstacle limitation surface of an aerodrome. | (c) compliance monitoring. <br> 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 ${ }^{\wedge}$ on affected persons). |
| 15-16 Discharges^ from specified mobile sources | The discharge^ of contaminants^ into air pursuant to ss15(1) or 15(2A) RMA from: <br> (a) equipment to treat road ${ }^{\wedge}$ surfaces by heat to remove impaired surfaces except where the burning of bitumen is involved <br> (b) mobile aggregate crushing and screening plants <br> (c) mobile asphalt plants <br> (d) earthmoving or harvesting equipment. | Permitted | (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). <br> (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). <br> (c) The discharge^^ of dust from the source at any site* where minerals ${ }^{\wedge}$ or aggregates are dried or heated or prepared for the manufacture of hot mix asphalt must not exceed $5 \mathrm{~kg} / \mathrm{hr}$. <br> (d) A mobile asphalt plant must not be located at any one site* or property* for more than 24 continuous months. <br> (e) Mobile asphalt plants must be equipped with temperature sensors and aggregate proximity sensors |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion, Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | that limit and control operating temperatures within the drum. <br> (f) Air pollution control equipment for mobile asphalt plants must be designed so that the discharge^ of particulates (corrected to $0^{\circ} \mathrm{C}, 12 \% \mathrm{CO}_{2}, 1$ atmosphere, and a dry gas basis) is no greater than: <br> (i) $50 \mathrm{mg} / \mathrm{m}^{3}$ for plants established after the date of notification of this Plan (31 May 2007); <br> (ii) $150 \mathrm{mg} / \mathrm{m}^{3}$ 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 discharge^ is minimised as far as practicable. <br> (g) The discharge^ must not cause a reduction in visibility on any designated commercial or military flight path. <br> (h) The vertical velocity of the discharge^ must not exceed $4.3 \mathrm{~m} / \mathrm{s}$, at 60 m above ground level or the discharge^ does not penetrate the obstacle limitation surface of an aerodrome. |  |
| 15-17 <br> Other discharges ${ }^{\wedge}$ | The discharge^ of contaminants^ into air pursuant to ss15(1) or 15(2A) RMA and any subsequent discharge^ of contaminants ${ }^{\wedge}$ onto land ${ }^{\wedge}$ from activities which either: <br> (a) are located on industrial or trade premises^ and are not addressed by any other rule^ in this Plan, or <br> (b) do not comply with one or more conditions ${ }^{\wedge}$, standards or terms of a permitted activity ${ }^{\wedge}$ rule^, but which are not expressly classified as a controlled activity^, restricted discretionary activity^, discretionary activity^, noncomplying activity^ or prohibited | Discretionary |  |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion, <br> Non-Notification |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | activity^. <br> Discharges ${ }^{\wedge}$ that are covered by this rule^ <br> under (a) include, but are not limited to, <br> those activities listed in the rule^ guide <br> 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 $300 \mathrm{~kg} / \mathrm{hr}$
(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.


## 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.

## Policies

## Policy 16-1: Consent decision-making for takes and uses of surface water^ and groundwater

When making decisions on resource consent^ applications under s104-104D RMA, and setting consent conditions ${ }^{\wedge}$, for takes and uses of surface water^ 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^ sources

When making decisions on consent applications to take surface water^, the opportunity to utilise alternative sources such as groundwater, $\left.w^{1}\right)^{\wedge}$ storage, water^ harvesting (including during periods of high flow in a river ${ }^{\wedge}$ ) and the recycling of water^ must be considered.

## Policy 16-3: Consent decision-making for diversions and drainage

When making decisions on resource consent ${ }^{\wedge}$ applications, and setting consent conditions ${ }^{\wedge}$, 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 ${ }^{\wedge}$ on the reliability of supply from properly-constructed, efficient and fullyfunctioning 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$, including wetlands ${ }^{\wedge}$, 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 ${ }^{\wedge}$ 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 <br> Water^ Depletion Effect^ | Magnitude of Surface Water^ Depletion Effect^ | Management Approach |
| :--- | :--- | :--- |
| Riparian | Any groundwater take screened within the geologically recent <br> bed strata of a surface water body^. | The groundwater take is subject to the same restrictions as a <br> surface water take, unless there is clear hydrogeological <br> evidence that demonstrates that the effect^ of pumping will not <br> impact on the surface water body. |
| High | The surface water^ depletion effect^ is calculated as $90 \%$ or <br> greater of the groundwater pumping rate after seven days of <br> pumping, or 50\% or greater of the average groundwater <br> pumping rate after 100 days of pumping. | The groundwater take is subject to the same restrictions as a <br> surface water abstraction. |
| Medium | The surface water^ depletion effect^ is calculated as 20\% or <br> greater and less than 50\% of the groundwater pumping rate <br> after 100 days of pumping. | The calculated loss of surface water^ is included in the surface <br> waten allocation regime, but no specific minimum flow <br> restrictions are imposed on the groundwater take. |
| Low | The surface water^ depletion effect^ is calculated as less than <br> $20 \%$ of the groundwater pumping rate after 100 days of <br> pumping. | The calculated loss of surface water is not included in the <br> surface water allocation regime and no specific minimum flow <br> 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^ 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 ${ }^{\wedge}$ 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^ meter on all water^ takes that are allowed by way of a resource consent^, in order to monitor the amount of water^ taken
(b) the installation of a Regional Council compatible telemetry system on surface water^ takes greater than $750 \mathrm{~m}^{3} / \mathrm{d}$, and on groundwater takes greater than $750 \mathrm{~m}^{3} / \mathrm{d}$ where the groundwater is highly interconnected with surface water^
(c) the installation of a Regional Council compatible telemetry system on other groundwater takes greater than $4,000 \mathrm{~m}^{3} / \mathrm{d}$
(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 ${ }^{\wedge}$

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 ${ }^{\wedge}$,
(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 ${ }^{\wedge}$ 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 <br> Minor takes and uses of surface water ${ }^{\wedge}$ | The take or use of surface water ${ }^{\wedge}$ pursuant to s14(2) and s14(3)(b) RMA. | Permitted | (a) The rate of take must not exceed: <br> (i) $400 \mathrm{I} / \mathrm{ha}$ per day for animal farming up to a maximum of $30 \mathrm{~m}^{3} /$ day per property* <br> (ii) $15 \mathrm{~m}^{3} /$ day per property* where the water is for any other use. The rates of take allowed under (i) and (ii) cannot be added: the maximum allowable rate of take under this rule is $30 \mathrm{~m}^{3} /$ day per property*. <br> (b) The rate of take must not exceed $2.0 \mathrm{l} / \mathrm{s}$. <br> (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 $0.3 \mathrm{~m} / \mathrm{s}$. <br> (d) The take must not be from a rare habitat**, threatened habitat* or atrisk habitat*. <br> (e) The water^ must be used on the property*. <br> (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 ${ }^{\wedge}$. |  |
| 16-2 <br> Minor takes and uses of groundwater | The take or use of groundwater pursuant to s14(2) and s14(3)(b) RMA. | Permitted | (a) The rate of take must not exceed: <br> (i) $400 \mathrm{I} / \mathrm{ha}$ per day for animal farming up to a maximum of $50 \mathrm{~m}^{3} /$ day per property* <br> (ii) $50 \mathrm{~m}^{3} /$ day per property ${ }^{*}$ 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 |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | maximum allowable rate of take under this rule^ is $50 \mathrm{~m}^{3} / \mathrm{day}$ per property*. <br> (b) The take must not be located within 50 m of any other bore* on any other property*. <br> (c) The take must not be located within 100 m of any river^ or lake ${ }^{\wedge}$, or within 200 m of any wetland ${ }^{\wedge}$ that is a rare habitat ${ }^{\star}$ or threatened habitat*. <br> (d) The take must not be from any rare habitat*, threatened habitat* or at-risk habitat*. <br> (e) The take must not lower the water^ level in any wetland ${ }^{\wedge}$ that is a rare habitat* or threatened habitat*. <br> (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. <br> (g) The water^ must be used on the property*. <br> (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 of water^. |  |
| 16-3 <br> Use of heat or energy from surface water^ | The use of heat or energy from surface water^ pursuant to s14(2) RMA. | Permitted |  |  |
| 16-4 <br> 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 ${ }^{\wedge}$ into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA. | Permitted | (a) The Regional Council must be notified in writing at least 5 working days ${ }^{\wedge}$ prior to commencement of the test. <br> (b) The rate of take must not exceed $60 \mathrm{I} / \mathrm{s}$. <br> (c) The duration of any single test must not exceed 7 days. <br> (d) The activity must be carried out in accordance with the NZS 4411:2001 Environmental Standard for Drilling of Soil and Rock. <br> (e) The take must not be from any rare habitat*, threatened habitat* or at-risk habitat*. <br> (f) The take must not lower the water^ level in any wetland ${ }^{\wedge}$ that is a rare habitat* or threatened habitat*. <br> (g) Where the discharge ${ }^{\wedge}$ is into water^ the discharge ${ }^{\wedge}$ must not: |  |

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| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | (i) change the receiving water ${ }^{\wedge}$ temperature by more than $3^{\circ} \mathrm{C}$ after reasonable mixing* <br> (ii) cause erosion of the bed ${ }^{\wedge}$ of the receiving water body^ <br> (iii) alter the natural course of the receiving water body ${ }^{\wedge}$ <br> (iv) cause visibly noticeable iron flocculation in the receiving water body^. <br> (h) Where the discharge ${ }^{\wedge}$ is onto land ${ }^{\wedge}$ the discharge ${ }^{\wedge}$ must not increase land ${ }^{\wedge}$ instability or the risk of erosion. <br> (i) The discharge^ must not cause or contribute to flooding on any other property*. <br> (j) Following completion of the test, the bore* must be covered and secured as soon as practicable. <br> (k) Records of all pumping and recovery tests must be kept by the owner^, including the location of the pumped bore* and any monitoring bores*, the flow rate during pumping, the water^ 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. |  |
| 16-5 <br> Takes and uses of surface water^ complying with core allocations | Except as permitted by Rule 16-1, the take or use of surface water ${ }^{\wedge}$ from a river ${ }^{\wedge}$ pursuant to s14(2) RMA. <br> Advice Note: <br> Information regarding the volume of core allocation that is still available may be found on the Regional Council's website. | Controlled | (a) Water^ must only be taken when the river ${ }^{\wedge}$ is above its minimum flow, as assessed in accordance with Schedule C. <br> (b) The amount of water ${ }^{\wedge}$ taken, when assessed in combination with all other water ${ }^{\wedge}$ takes must not exceed the relevant cumulative core allocation limits set out in Schedule C. <br> (c) The amount of water taken from a river^ must not lower the water^ level in any wetland ${ }^{\wedge}$ that is a rare habitat ${ }^{*}$ or threatened habitat*. <br> (d) The take must not be from any rare habitat*, threatened habitat* or at-risk habitat*. | Control is reserved over: <br> (a) the volume and rate of water ${ }^{\wedge}$ taken, and the timing of the take <br> (b) the location of take <br> (c) intake velocity and screening requirements <br> (d) measures to avoid, remedy or mitigate any adverse effects^ on the Values of the water body^ at and below the point of take <br> (e) effects $^{\wedge}$ 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 <br> (f) the efficiency of water^ use <br> (g) effects ${ }^{\wedge}$ on other water ${ }^{\wedge}$ takes <br> (h) effects^ on rare habitats*, threatened habitats*, at-risk habitats* and Sites of Significance - Aquatic <br> (i) compliance with minimum flow requirements <br> (j) duration of consent <br> (k) review of consent conditions ${ }^{\wedge}$ <br> (I) compliance monitoring. <br> 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 <br> 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: <br> (a) The amount of water taken must not exceed <br> (i) 250 litres per person per day for domestic needs <br> (ii) 70 litres per animal per day for | Discretionary |  |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  | drinking water <br> (iii) 70 litres per animal per day for existing dairy shed washdown <br> (b) The take must not be from any rare habitat*, threatened habitat* or at-risk habitat*. <br> Advice note: the effect of any permitted takes will not be taken into consideration when assessing activities under this rule. |  |  |  |
| 16-7 <br> Replacement consents for takes and uses of surface water^ by existing hydroelectricity schemes | The take, use or diversion of surface water^ pursuant to s14(2) RMA by existing consented hydroelectricity generation schemes for which replacement consents are sought. | Controlled | (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. <br> (b) The take must not be from any rare habitat*, threatened habitat* or at-risk habitat*. | Control is reserved over: <br> (a) the volume and rate of water^ taken and the timing of the take <br> (b) the location of take <br> (c) intake velocity and screening requirements <br> (d) measures to avoid, remedy or mitigate any adverse effects^ on the Values of the water body^ at and below the point of take <br> (e) measures to avoid, remedy or mitigate any adverse effects on the instream geomorphological components of natural character of the water body <br> (f) effects^ on rare habitats*, threatened habitats* and atrisk habitats* and Sites of Significance - Aquatic <br> (g) compliance with minimum flows |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (h) measures to avoid, remedy or mitigate adverse effects^ on tangata whenua^ matters <br> (i) duration of consent <br> (j) review of consent conditions ${ }^{\wedge}$ <br> (k) compliance monitoring. <br> 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. |
| 16-8 <br> 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 $\wedge$ from a river^ pursuant to s14(2) RMA: <br> (a) which, when assessed in combination with all other water^ takes, exceeds the relevant cumulative core allocation limits set out in Schedule C, or <br> (b) which is taken at or below the minimum flow (unless the take is a permitted or essential take complying with Rule 16-6) <br> 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 |  |
| :--- | :--- | :--- | :--- | :--- |
|  | activity under Rule 16-9). <br> Advice Note: <br> Information regarding the volume of <br> cumulative core allocation that is still <br> available may be found on the Regional <br> Council's website. |  |  |  |
| Nontification |  |  |  |  |

## 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 <br> Lawfully established diversions, including existing drainage | The take, diversion or discharge^ of surface water ${ }^{\wedge}$ and any ancillary damming of water^, or discharge^ of sediment or other contaminants ${ }^{\wedge}$ in the water $^{\wedge}$ into water^ or onto or into land ${ }^{\wedge}$ pursuant to s14(2) and ss15(1) or 15(2A) | Permitted | (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 ${ }^{\wedge}$ drainage. <br> (b) Effects ${ }^{\wedge}$ on land ${ }^{\wedge}$ 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^ |  |

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| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  | RMA arising from: <br> (a) a diversion that was lawfully established as at the date of this rule^ becoming operative ${ }^{\wedge}$, or <br> (b) a diversion that has been lawfully established by way of resource consent^ after the operative ${ }^{\wedge}$ date of this rule^ <br> including diversions ancillary to the operation* of existing drainage networks. <br> Advice Note: <br> 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 ${ }^{\wedge}$ of this rule^ are met. |  | became operative^. <br> (c) The diversion must not prevent the passage of fish in water bodies^ containing fish. <br> (d) For diversions lawfully established by way of a resource consent ${ }^{\wedge}$, the diversion must continue to comply with all conditions ${ }^{\wedge}$ of the consent. |  |
| $16-11$ <br> New drainage | The take, diversion or discharge^ of drainage water ${ }^{\wedge}$, and any ancillary damming of water^, or discharge^ of sediment or other contaminants ${ }^{\wedge}$ in the drainage water^ into water^ or onto or into land^ pursuant to s14(2) and ss15(1) or $15(2 \mathrm{~A})$ RMA arising from the establishment and operation* of new land ${ }^{\wedge}$ drainage. | Permitted | (a) The diversion or discharge ${ }^{\wedge}$ must not cause or exacerbate the flooding of any property*, unless the flooding is in accordance with an approved Regional Council drainage scheme design. <br> (b) The diversion or discharge^ must not cause any scouring or erosion of any land ${ }^{\wedge}$ or water body ${ }^{\wedge}$ beyond the point of discharge ${ }^{\wedge}$. <br> (c) The diversion or discharge^ must not alter the natural course of any natural water body^. <br> (d) There must be no diversion or discharge ${ }^{\wedge}$ to or from any natural lake^, rare habitat*, threatened habitat* or at-risk habitat**, or reach of river ${ }^{\wedge}$ or its bed ${ }^{\wedge}$ with a Schedule B Value of Natural State. <br> (e) The activity must not result in the lowering of water^ levels in any wetland $^{\wedge}$ that is a rare habitat ${ }^{*}$ or threatened habitat*. <br> (f) The diversion or discharge^ must be to the same Water |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Management Zone* to which the drainage water ${ }^{\wedge}$ would naturally flow. <br> (g) The diversion or discharge^ ${ }^{\wedge}$ must not cause, after reasonable mixing $^{*}$, any of the following effects^ in the receiving water body^: <br> (i) the production of conspicuous oil* or grease films, scums or foams, or floatable or suspended materials <br> (ii) any conspicuous change in the colour or visual clarity of the receiving water ${ }^{\wedge}$ <br> (iii) any emission of objectionable odour <br> (iv) the rendering of fresh water^ unsuitable for consumption by farm animals <br> (v) the natural temperature of the receiving water ${ }^{\wedge}$ to change by more than $3^{\circ} \mathrm{C}$ <br> (vi) toxicity to aquatic ecosystems. <br> (h) The diversion or discharge^ must not, after reasonable mixing*, cause the dissolved oxygen of the receiving water body $\wedge$ 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. <br> (i) The activity must not be to any historic heritage^ identified in any district plan^ or regional plan^. |  |
| 16-12 <br> 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: <br> (a) the take, diversion or discharge^ of water ${ }^{\wedge}$ and any ancillary damming of water^ pursuant to s14(2) and ss15(1) or 15(2A) RMA <br> (b) any ancillary discharge ${ }^{\wedge}$ of sediment or other contaminants ${ }^{\wedge}$ in the water^ into water^ or onto or into land ${ }^{\wedge}$ | Permitted | (a) The activity must involve: <br> (i) a diversion of groundwater, <br> (ii) a diversion from or within an artificial watercourse*, <br> (iii) a diversion from or within an existing drain that is within the RMA definition of "rive $\Lambda$ ", or <br> (iv) a diversion wholly contained within the bed ${ }^{\wedge}$ of a river ${ }^{\wedge}$ provided the diversion is no more than two times the bed ${ }^{\wedge}$ width of the river ${ }^{\wedge}$ in any 2 km length of river ${ }^{\wedge}$ in any 12 month period and must not exceed a length of 20 metres. <br> (b) The activity must not involve the diversion of water^ associated with new drainage which is regulated under Rule 16-11. |  |

pursuant to ss15(1) or 15(2A) RMA
(c) any ancillary excavation or disturbance of the bed ${ }^{\wedge}$ of a river ${ }^{\wedge}$ pursuant to ss13(1) and 13(2) RMA.
(c) The diversion must not be located within 200 m of any wetland ${ }^{\wedge}$ that is a rare habitat* or threatened habitat* and must not lower the water ${ }^{\wedge}$ level in any wetland ${ }^{\wedge}$ that is a rare habitat* or threatened habitat*.
(d) The diversion must not be to or from any rare habitat ${ }^{*}$, threatened habitat* or at-risk habitat*.
(e) The diversion must not increase land ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 infrastructure^ is located in, on, under or over the bed ${ }^{\wedge}$ within 1 km upstream or downstream of the diversion.
(j) Any realigned bed^ must have at least the same capacity as the original bed ${ }^{\wedge}$ to carry the diverted flow.
(k) For diversions of surface water^ from an artificial watercourse* or drain, the diverted water ${ }^{\wedge}$ must not cause a reduction in the water ${ }^{\wedge}$ quality of any downstream water body^.
(I) Any discharge^ of sediment ancillary to the activity must not, after reasonable mixing ${ }^{*}$, cause a conspicuous change in the colour or visual clarity of the receiving water^.
( m ) The construction of a new diversion located within a river^ must comply with the general conditions ${ }^{\wedge}$ listed in Section 17.3 Table 17.2.

| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| 16-13 <br> Diversions that do not comply with permitted activity^ and controlled activity^ ${ }^{\text {rules }}{ }^{\wedge}$ | Any diversion pursuant to s14(2) RMA that does not comply with one or more conditions^, standards or terms of a permitted activity^ or controlled activity^ rule ${ }^{\wedge}$ in this chapter, but which is not expressly classified as a discretionary activity^, or prohibited activity^. | 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 Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| 16-14 <br> 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 ${ }^{\wedge}$ into water^ or onto land ${ }^{\wedge}$ 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*. | Control is reserved over: <br> (a) compliance with the NZS 4411:2001 Environmental Standard for Drilling of Soil and Rock and any other relevant standard <br> (b) bore* location, size (including diameter of the bore* casing) and depth <br> (c) bore* screening depth and type <br> (d) backflow prevention <br> (e) information requirements including bore* logs, piezometric levels, |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | groundwater tests, and bore* construction details <br> (f) duration of consent <br> (g) review of consent conditions ${ }^{\wedge}$ <br> (h) compliance monitoring <br> (i) the matters in Policy 14-9. <br> 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). |
| $16-15$ <br> Unsealed bores* | Pursuant to ss9(2), 14(2), 15(1) or 15(2A) RMA any bore* that: <br> (a) is no longer used and is unsealed, or <br> (b) is in use and is constructed in a manner that allows contaminants^ to enter the bore* from the land ${ }^{\wedge}$ surface, or allows the wastage of water^ in artesian situations. | Prohibited |  |  |

## Rule Guide:

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.


## Activities in Artificial Watercourses*, Beds of Rivers and Lakes, and Damming

## $17.1 \quad$ Objectives

Objective 17-1: Regulation of structures ${ }^{\wedge}$ and activities in artificial watercourses ${ }^{\star}$ and in the beds^ of rivers ${ }^{\wedge}$ and lakes ${ }^{\wedge}$, and damming

The regulation of structures ${ }^{\wedge}$ and activities in artificial watercourses ${ }^{\star}$ and in the beds ${ }^{\wedge}$ of rivers $^{\wedge}$ and lakes ${ }^{\wedge}$, 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 ${ }^{\wedge}$ and activities in artificial watercourses* and in the beds^ of rivers ${ }^{\wedge}$ and lakes ${ }^{\wedge}$, and damming.

## Policies

Policy 17-1: Consent decision-making for activities in, on, under or over the beds ${ }^{\wedge}$ of rivers^ and lakes ${ }^{\wedge}$ (including modified watercourses but excluding artificial watercourses*)
When making decisions on resource consent ${ }^{\wedge}$ applications, and setting consent conditions ${ }^{\wedge}$, for activities in, on, under or over the bed ${ }^{\wedge}$ of a river $^{\wedge}$ 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 ${ }^{\wedge}$ on any other lawful activity in, on, under or over the bed ${ }^{\wedge}$ of the river ${ }^{\wedge}$ or lake^, including existing structures ${ }^{\wedge}$,
(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 ${ }^{\wedge}$, for activities on land ${ }^{\wedge}$ 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 ${ }^{\wedge}$ of rivers ${ }^{\wedge}$ 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 ${ }^{\wedge}$ of rivers $^{\wedge}$ and lakes ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$, 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 $\wedge$, 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 ${ }^{\wedge}$, of the gravel extraction,
(iii) demonstrable river^ management needs, and
(iv) the need to decrease the risk of flooding or damage to structures ${ }^{\wedge}$.
(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 ( $\mathrm{m}^{3}$ ) |
| :---: | :---: |
| 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 $\left(\mathbf{m}^{3}\right)$ |
| :--- | ---: |
| - 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 |

## 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 ${ }^{\wedge}$ for permitted activities^ and controlled activities ${ }^{\wedge}$ involving the beds^ of rivers ${ }^{\wedge}$ and lakes ${ }^{\wedge}$

| Value | Condition |
| :---: | :---: |
| Life-supporting Capacity conditions ${ }^{\wedge}$ which apply to all water bodies ${ }^{\wedge}$ and their beds^ | (a) The activity must not adversely reduce the ability of the water body^ or its bed ${ }^{\wedge}$ to convey flood flows, floating debris or sediment, except for a period of not more than 12 consecutive hours during construction. <br> (b) There must be no discharge ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$, other than sediment and other contaminants ${ }^{\wedge}$ inherent to the water^ or bed ${ }^{\wedge}$, into the river^ or lake^ except where the discharge ${ }^{\wedge}$ is explicitly allowed by the activity description of a rule^ in this chapter. <br> (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 ${ }^{\wedge}$ per property* in any 12 month period. <br> (d) Any discharge ${ }^{\wedge}$ 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. <br> (e) Any materials used must be necessary for the activity and must not be toxic to aquatic ecosystems. <br> (f) Any materials no longer required as part of the activity, including any temporary structures ${ }^{\wedge}$, must not be stored in or on the bed^ of any river^ or lake ${ }^{\wedge}$ and must be removed after completion of the activity. <br> (g) Refuelling of machinery must not take place in any area where spills may enter surface water^. <br> (h) The activity must be undertaken in a manner that provides for the safe passage of fish both upstream and downstream, including past any structure^. <br> (i) Any diversion of water ${ }^{\wedge}$ required for works ancillary to a structure ${ }^{\wedge}$ must be temporary, must be within the bed^ of the river ${ }^{\wedge}$, must not exceed 100 m in length, must not be between catchments, must not involve a lake ${ }^{\wedge}$, and the diversion channel must have sufficient capacity to carry the same flow as the original channel. <br> (j) Upon completion of any channel bank works, the banks must be reinstated to a natural contour and revegetated. <br> (k) Any straightening or channelling of a river^ must not exceed a length equal to two times the bed ${ }^{\wedge}$ width of the river^ in any 2 km length of river ${ }^{\wedge}$ in any 12 month period. <br> (I) There must be no removal of instream woody debris less than $2 \mathrm{~m}^{3}$ in size unless this is required to reduce the risk of flooding or erosion. |
| Riparian <br> (applies to all reaches in water bodies^ and their beds^ with a Schedule B Value of Sites of Significance - Riparian) | (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: <br> (i) within 7 days following a flood of the area of beach that is the subject of the activity, or <br> (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 <br> (applies to all reaches in water bodies^ and their beds ${ }^{\wedge}$ with a Schedule B Value of Inanga Spawning) | ( $n$ ) The use of mobile machinery in or on the bed^ of a river ${ }^{\wedge}$ or lake ${ }^{\wedge}$ in a manner that disturbs the bed ${ }^{\wedge}$ must not take place 1 February to 1 May (inclusive). |
| Whitebait ${ }^{*}$ Migration <br> (applies to all reaches in water bodies^ and their beds^ with a Schedule B Value of Whitebait* Migration) | (0) The use of mobile machinery in or on the bed ${ }^{\wedge}$ of a river ${ }^{\wedge}$ or lake ${ }^{\wedge}$ in a manner that disturbs the bed ${ }^{\wedge}$ of the active flowing channel must not take place <br> 15 August to 30 November (inclusive). |
| 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 ${ }^{\wedge}$ of a river ${ }^{\wedge}$ or lake ${ }^{\wedge}$ in a manner that disturbs the bed ${ }^{\wedge}$ of the active flowing channel must not take place 1 May to 30 September (inclusive). |
| Trout Fishery <br> (applies to all reaches in water bodies ${ }^{\wedge}$ 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 <br> (applies to all reaches in water bodies^ and their beds ${ }^{\wedge}$ with a Schedule B Value of Contact Recreation) | (r) Existing public access to or along a river^ or lake^ must not be rendered unsafe by the activity. <br> (s) Existing public access to or along a river^ or lake^ 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. <br> ( 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^ | (u) Excavation, drilling, tunnelling or other disturbance of the bed ${ }^{\wedge}$ of a river ${ }^{\wedge}$ must not take place within 500 m upstream or downstream of any flow-recording site. ${ }^{1}$ <br> (v) Excavation, drilling, tunnelling or other disturbance of the bed^ of a river^ must not take place within 20 m upstream or downstream of a high pressure gas transmission pipeline identified by a district plan^ or regional plan^ or by a marker² on the bank of the river^. |

[^20]17.4 Rules - Special Rivers and Lakes

| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| 17-1 <br> Damming of protected rivers^ ${ }^{\wedge}$ | The erection or placement of a dam structure^ pursuant to s13(1) RMA in or on the bed ${ }^{\wedge}$ of the following rivers ${ }^{\wedge}$, and any ancillary damming of water^ pursuant to s14(2) RMA: <br> (a) the Manganui o te Ao River and its tributaries, the Makatote River, the Mangaturuturu River, the Waimarino Stream and the Orautoha Stream <br> (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 <br> (c) the Hautapu River above its confluence with the Oraukura Stream and its tributaries, the Irirangi Stream and the Waiouru Stream <br> (d) the main stem of the Makuri River and the Makuri-iti Stream <br> (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 <br> (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 | Prohibited |  |  |


| 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 <br> (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 <br> (h) the main stem of the Pohangina River from its source to its confluence with the Manawatu River near the Manawatu Gorge <br> (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 <br> Reclamation and drainage of regionally significant lakes^ | Any reclamation or drainage of the bed ${ }^{\wedge}$ of the following lakes^ pursuant to s13(1) RMA, excluding any existing (as at 31 May 2007) reclamations and drainage: <br> (a) Lake Horowhenua <br> (b) Lake Papaitonga <br> (c) Pukepuke Lagoon <br> and any ancillary: <br> (i) excavation, drilling, tunnelling or other disturbance of the bed ${ }^{\wedge}$ pursuant to s13(1) RMA <br> (ii) damming or diversion of water^ pursuant to s14(2) RMA <br> (iii) discharge^ of water^ or sediment into water^ or onto or into land ${ }^{\wedge}$ pursuant to ss15(1) or $15(2 \mathrm{~A})$ RMA <br> (iv) deposition of substances in or on the bed^ ${ }^{\wedge}$ pursuant to s13(1). | Noncomplying |  |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| 17-3 <br> Structures^ and disturbances involving a reach of river^ or its bed^ ${ }^{\wedge}$ 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: <br> (a) a reach of river^ or its bed^ with a Schedule B Value of Natural State <br> (i) The erection, placement or extension of any structure ${ }^{\wedge}$ in, on, under or over the bed $^{\wedge}$ except for lines, cables and ropeways that are suspended above the water ${ }^{\wedge}$ and do not require a support structure ${ }^{\wedge}$ in, on, over or under the bed ${ }^{\wedge}$ of the river ${ }^{\wedge}$ <br> (ii) Any excavation, drilling, tunnelling or other disturbance of the bed^ including gravel extraction <br> and any ancillary: <br> (i) damming or diversion of water^ pursuant to s14(2) RMA <br> (ii) discharge^ of water^ or sediment into water^ or onto or into land ${ }^{\wedge}$ pursuant to ss15(1) or 15(2A) RMA <br> (iii) deposition of substances in or on the bed^ ${ }^{\wedge}$ pursuant to s13(1). <br> (b) Sites of Significance - Aquatic and Sites of Significance - Cultural <br> (i) The erection, placement or extension of any structure ${ }^{\wedge}$ in, on, under or over the bedㅅ, except for lines, cables and ropeways that are suspended above the water ${ }^{\wedge}$ and do not require a support structure ${ }^{\wedge}$ in, on, over or under the bed^ and except for those activities regulated by Rule 17-14 <br> (ii) Any excavation, drilling, tunnelling or | Discretionary |  |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  | other disturbance of the bed ${ }^{\wedge}$, except for those activities regulated by Rules 17-5 and 17-14 <br> and any ancillary: <br> (i) damming or diversion of water^ pursuant to s14(2) RMA <br> (ii) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA <br> (iii) deposition of substances in or on the bed^ ${ }^{\wedge}$ pursuant to $\mathrm{s} 13(1)$. |  |  |  |

17.5 Rules - Use, Maintenance*, Upgrade*, Removal and Demolition of Structures

| Rule | Activity | Classification | Conditions /Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| 17-4 <br> Use of structures^ | The use of a structure^ located in, on, under or over the bed^ of a river^ or lake ${ }^{\wedge}$ pursuant to s13(1) RMA, and any ancillary: <br> (a) damming or diversion of water ${ }^{\wedge}$ pursuant to s14(2) RMA, excluding the damming of water^ associated with dam structures^ (which is regulated by the rules^ in Section 17.6) <br> (b) discharge ${ }^{\wedge}$ of water^ or sediment into wate $\wedge^{\wedge}$ or onto or into land ${ }^{\wedge}$ pursuant to ss15(1) or 15(2A) RMA. <br> Advice Note: <br> 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 s14(2) RMA). | Permitted |  |  |
| 17-5 <br> Maintenance* and upgrade* of structures^, and ancillary removal of bed^$^{\wedge}$ material and plants | (a) Structures ${ }^{\wedge}$ - The maintenance* or upgrade* of a structure^ located in, on, under or over the bed^ of a river^ or lake ${ }^{\wedge}$ pursuant to s13(1) RMA, and any ancillary: <br> (i) excavation, drilling, tunnelling or other disturbance of the river^ or lake^ bed ${ }^{\wedge}$ pursuant to s13(1) RMA <br> (ii) damming or diversion of water ${ }^{\wedge}$ pursuant to s14(2) RMA <br> (iii) discharge ${ }^{\wedge}$ of water^ or sediment into water^ or onto or into land ${ }^{\wedge}$ pursuant to ss15(1) or 15(2A) RMA <br> (iv) deposition of substances in or on the bed^ of the river^^ or lake ${ }^{\wedge}$ pursuant to | Permitted | (a) The activity must comply with the general conditions^ listed in Section 17.3. <br> (b) Any discharge ${ }^{\wedge}$ of removed bed ${ }^{\wedge}$ material or plants onto or into land ${ }^{\wedge}$ must comply with the conditions^ of Rule 14-27, except for condition 14-27(c)(ii) and condition 14-27(b) with regard to cleanfill materia/*. |  |


| Rule | Activity | Classification | Conditions /Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  | s13(1). <br> (b) Ancillary removal of bed ${ }^{\wedge}$ material and plants - The removal or other disturbance of bed ${ }^{\wedge}$ 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 ${ }^{\wedge}$ of a river^ or lake^, including flushing accumulated bed ${ }^{\wedge}$ material, and any ancillary: <br> (i) damming or diversion of water^ pursuant to s14(2) RMA <br> (ii) discharge^ of water^ or sediment into water ${ }^{\wedge}$ or onto or into land ${ }^{\wedge}$ pursuant to ss15(1) or 15(2A) RMA <br> (iii) deposition of removed bed ${ }^{\wedge}$ material or plants in or on the bed ${ }^{\wedge}$ pursuant to s13(1) RMA <br> (iv) discharge ${ }^{\wedge}$ of removed bed $^{\wedge}$ material or plants into water ${ }^{\wedge}$ or onto or into land ${ }^{\wedge}$ pursuant to ss15(1) or 15(2A) RMA <br> (v) deposition of substances in or on the bed $^{\wedge}$ of the river $\wedge$ or lake ${ }^{\wedge}$ pursuant to s13(1). |  |  |  |


| Rule | Activity | Classification | Conditions /Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| 17-6 <br> 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 ${ }^{\wedge}$ of a river ${ }^{\wedge}$ or lake ${ }^{\wedge}$ pursuant to s13(1) RMA, and any ancillary: <br> (a) excavation, drilling, tunnelling or other disturbance of the river^ or lake^ bed ${ }^{\wedge}$ pursuant to s13(1) RMA <br> (b) damming or diversion of water^ pursuant to s14(2) RMA <br> (c) discharge ${ }^{\wedge}$ of water^ or sediment into water $\wedge^{\wedge}$ or onto or into land ${ }^{\wedge}$ pursuant to ss15(1) or 15(2A) RMA <br> (d) deposition of substances in or on the bed ${ }^{\wedge}$ of the river^ or lake^ pursuant to s13(1). | Permitted | (a) The activity must comply with the general conditions^ listed in Section 17.3. <br> (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 ${ }^{\wedge}$ prior to the commencement of the removal or demolition: <br> (i) access structures ${ }^{\wedge}$ in or on the bed ${ }^{\wedge}$ of a river ${ }^{\wedge}$ 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 <br> (ii) structures ${ }^{\wedge}$ occupying more than $5 \mathrm{~m}^{2}$ of the bed^ of a river^ or lake ${ }^{\wedge}$ <br> (iii) any device for the purpose of monitoring or recording river^ levels or quality. <br> (c) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*. |  |

## Rule Guide:

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 |
| :--- | :--- | :--- | :--- | :--- |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| 17-8 <br> Replacement consents for existing damming of water^ | Any lawfully established damming of water ${ }^{\wedge}$ within a river^, within an artificial watercourse* or on land ${ }^{\wedge}$ for which replacement consents are sought and any ancillary: <br> (a) take, diversion or discharge ${ }^{\wedge}$ of water^ 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 <br> (b) discharge^ of water^ or sediment into water^ or onto or into land ${ }^{\wedge}$ pursuant to $\operatorname{ss15(1)~or~}$ 15(2A) RMA <br> (c) deposition of substances in or on the bed ${ }^{\wedge}$ of the river ${ }^{\wedge}$ or lake ${ }^{\wedge}$ pursuant to $s 13(1)$. <br> Advice Note: <br> For the avoidance of doubt, any proposal to take water ${ }^{\wedge}$ that is impounded behind a dam structure^ must comply with the rules^ set out in Chapter 16. | Controlled |  | Control is reserved over: <br> (a) fish passage <br> (b) water^ levels, flow regimes and minimum flows <br> (c) measures to manage land ${ }^{\wedge}$ stability and erosion <br> (d) measures to assist with maintaining or achieving the Schedule E water^ quality targets for the Water Management Subzones* <br> (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 <br> (f) measures to avoid, remedy or mitigate any adverse effects on the instream geomorphological components of natural character of the water body^ <br> (g) management of dam failure <br> (h) effects^ on rare habitats*, threatened habitats* and at-risk habitats* and Sites of Significance - Aquatic <br> (i) measures to avoid, remedy, or mitigate adverse effects^ ${ }^{\wedge}$ on tangata whenua^ values <br> (j) duration of consent <br> (k) review of consent conditions ${ }^{\wedge}$ <br> (I) compliance monitoring |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (m) the matters in Policy 14-9. <br> 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. |

## Rule Guide:

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 <br> Lines, cables, pipelines and ropeways | The erection, placement, or extension of a line, cable, pipeline or ropeway in, on, under or over the bed ${ }^{\wedge}$ of a river ${ }^{\wedge}$ or lake ${ }^{\wedge}$ pursuant to $\mathrm{s} 13(1)$ RMA, and any ancillary: <br> (a) excavation, drilling, tunnelling or other disturbance of the bed ${ }^{\wedge}$ of a river ${ }^{\wedge}$ or lake ${ }^{\wedge}$ pursuant to s13(1) RMA <br> (b) damming or diversion of water^ pursuant to s14(2) RMA <br> (c) discharge ${ }^{\wedge}$ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA <br> (d) deposition of substances in or on the bed ${ }^{\wedge}$ of the river^ or lake^ pursuant to s13(1). | Permitted | (a) The activity and any ancillary support structures ${ }^{\wedge}$ must either: <br> (i) be wholly located over or under the bed ${ }^{\wedge}$, or <br> (ii) occupy no more than $20 \mathrm{~m}^{2}$ of the bed ${ }^{\wedge}$. <br> (b) The activity must not take place in, on, under or over a reach of a river ${ }^{\wedge}$ 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^. <br> (c) The activity must comply with the general conditions ${ }^{\wedge}$ listed in Section 17.3. <br> (d) The activity must not take place in any rare habitat* or threatened habitat*. |  |
| $\begin{aligned} & \hline 17-10 \\ & \text { Culverts } \end{aligned}$ | 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: <br> (a) excavation, drilling, tunnelling or other disturbance of the river ${ }^{\wedge}$ or lake ${ }^{\wedge}$ bed ${ }^{\wedge}$ pursuant to s13(1) RMA <br> (b) damming or diversion of water^ pursuant to s14(2) RMA <br> (c) discharge ${ }^{\wedge}$ of water^ or sediment into water^ or onto or into land ${ }^{\wedge}$ pursuant to ss15(1) or 15(2A) RMA <br> (d) deposition of substances in or on the bed ${ }^{\wedge}$ of the river^ or lake^ pursuant to s13(1). | Permitted | (a) A new culvert must not be erected or placed in: <br> (i) a river^ or lake^ regulated under Rule 17-3 <br> (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. <br> (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^. <br> (c) The culvert, associated fill and culvert placement must comply with the following dimensions: <br> (i) a maximum culvert length of 20 m <br> (ii) for circular culverts a culvert diameter of 0.3 m to 1.2 m (inclusive) <br> (iii) for non-circular culverts a width and height of 0.3 m to |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1.2 m each (inclusive) <br> (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 <br> (v) a minimum culvert installation depth below the bed^ of $20 \%$ of the width of the culvert. <br> (d) The culvert must be positioned so that its alignment and gradient are the same as the river ${ }^{\wedge}$. <br> (e) The culvert must be constructed to allow: <br> (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 <br> (ii) the flow from a 2 year return period flood event without any flow impediment. <br> (f) The culvert inlet and outlet must be protected against erosion. <br> (g) All practicable steps must be used to minimise the release of sediment during construction. <br> (h) The culvert must be constructed and maintained to avoid any aggradation or erosion of the bed ${ }^{\wedge}$. <br> (i) The culvert must be kept clear of accumulated debris. <br> (j) The activity must comply with the general conditions^ listed in Section 17.3. <br> (k) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*. |  |
| 17-11 <br> Other structures^ including bridges, fords and other access structures^ | The erection, placement, or extension of any structure ${ }^{\wedge}$ that is not regulated by any other rule^ in this chapter in, on, under or over the bed^ of a river^ or lake^ pursuant to s13(1) RMA and any ancillary: | Permitted | (a) A new structure^ must not be erected or placed in: <br> (i) a river^ or lake^ regulated under Rule 17-3 <br> (ii) a reach of a river ${ }^{\wedge}$ 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 |
| :---: | :---: | :---: | :---: | :---: |
|  | (a) excavation, drilling, tunnelling or other disturbance of the river^ or lake^ bed pursuant to s13(1) RMA <br> (b) damming or diversion of water^ pursuant to s14(2) RMA <br> (c) discharge^ of water^ or sediment into water^ or onto or into land ${ }^{\wedge}$ pursuant to ss15(1) or 15(2A) RMA <br> (d) deposition of substances in or on the bed ${ }^{\wedge}$ of the river ${ }^{\wedge}$ or lake ${ }^{\wedge}$ pursuant to s13(1). <br> Advice Note: <br> For the avoidance of doubt, this rule^ excludes the erection, reconstruction, placement, alteration, or extension of any dam in, on, under or over the bed^ , of any river ${ }^{\wedge}$ or lake^, within an artificial watercourse* or on land^${ }^{\wedge}$. Dams are regulated by Rules 17-1, 17-3, 17-4, 17-5, 17-7 and 17-23. |  | (b) For bridges and other access structures ${ }^{\wedge}$, 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. <br> (c) For all structures ${ }^{\wedge}$ located in, on, under or over the bed^ of a river ${ }^{\wedge}$ or lake ${ }^{\wedge}$, the structure ${ }^{\wedge}$ must occupy a bed ${ }^{\wedge}$ area no greater than $20 \mathrm{~m}^{2}$ except for: <br> (i) whitebait* and maimai structures^ which must not exceed $5 \mathrm{~m}^{2}$ <br> (ii) fords which must occupy a bed ${ }^{\wedge}$ area no greater than $40 \mathrm{~m}^{2}$ <br> (iii) temporary bridges for military training purposes that are removed within 2 weeks of their erection. <br> (d) The structure^ must be constructed and maintained to avoid any aggradation or scouring of the bed ${ }^{\wedge}$ that may inhibit fish passage. <br> (e) The activity must comply with the general conditions^ listed in Section 17.3. <br> (f) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*. |  |
| 17-12 <br> Recording sites* | The erection, placement or extension of a device for the purposes of monitoring or recording river ${ }^{\wedge}$ levels or quality in, on, under or over the bed^ of a river^ or lake^ pursuant to s13(1) RMA and any ancillary: <br> (a) excavation, drilling, tunnelling or other disturbance of the river ${ }^{\wedge}$ or lake ${ }^{\wedge}$ bed ${ }^{\wedge}$ pursuant to s13(1) RMA <br> (b) damming or diversion of water^ pursuant to s14(2) RMA <br> (c) discharge ${ }^{\wedge}$ of water^ or sediment into wate $\wedge^{\wedge}$ or onto or into land ${ }^{\wedge}$ pursuant to ss15(1) or | Permitted | (a) The device must occupy a bed^ area no greater than $20 \mathrm{~m}^{2}$. <br> (b) The device must be constructed and maintained ${ }^{\star}$ to avoid any aggradation or scouring of the bed ${ }^{\wedge}$ that may inhibit fish passage. <br> (c) The device may divert up to $30 \mathrm{~m}^{3}$ of water^ per day for the purpose of measuring water^ quality or quantity, provided the water ${ }^{\wedge}$ is returned to the water body ${ }^{\wedge}$ within 50 m of the diversion point. <br> (d) The activity must comply with the general conditions^ listed in Section 17.3. <br> (e) The Regional Council must be informed in writing at least 10 working days $\wedge$ prior to the commencement of the activity |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  | 15(2A) RMA <br> (d) deposition of substances in or on the bed ${ }^{\wedge}$ of the river^ or lake^ pursuant to s13(1). |  | taking place. <br> (f) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*. |  |
| 17-13 <br> Bridges and culverts constructed to comply with Rules 14-1 to 14-4 | The erection, placement or extension of a culvert or bridge in, on, under or over the bed^ of a river ${ }^{\wedge}$ or lake^ pursuant to s13 RMA in order to comply with Rules 14-1 to 14-4 and any ancillary: <br> (a) excavation, drilling, tunnelling or other disturbance of the river^ or lake ${ }^{\wedge}$ bed ${ }^{\wedge}$ pursuant to s13(1) RMA <br> (b) damming or diversion of water^ pursuant to s14(2) RMA <br> (c) discharge ${ }^{\wedge}$ of water^ or sediment into water^ or onto or into land ${ }^{\wedge}$ pursuant to ss15(1) or 15(2A) RMA <br> (d) deposition of substances in or on the bed ${ }^{\wedge}$ of the river^ or lake^ pursuant to s13(1). | Controlled | (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^ of Rules 17-5, 17-10 or 17-11. <br> (b) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*. | Control is reserved over: <br> (a) measures to avoid, remedy or mitigate the effects^ of any noncompliance with the conditions ${ }^{\wedge}$ of Rules 17-5, 17-10 or 17-11 <br> (b) duration of consent <br> (c) review of consent conditions ${ }^{\wedge}$ <br> (d) compliance monitoring <br> (e) the matters in Policy 14-9. |

## Rule Guide:

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 <br> Activities undertaken by or on behalf of the Regional Council in rivers^ ${ }^{\wedge}$ with a Schedule B Value of Flood Control and Drainage | The following activities within a reach of a river^ with a Schedule B Value of Flood Control and Drainage, where they are undertaken by or on behalf of the Regional Council: <br> (a) the erection, placement, or extension of any structure^ in, on, under or over the bed ${ }^{\wedge}$ of a river^ pursuant to 13(1) RMA <br> (b) the excavation, drilling, tunnelling or other disturbance (including gravel extraction) of the bed^ of a river^ pursuant to s13(1) RMA <br> (c) any damming or diversion of water^ pursuant to s14(2) RMA <br> (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 ${ }^{\wedge}$ pursuant to ss13(1), 15(1) or 15(2A) RMA <br> (e) the damage, destruction, disturbance or removal of plants or parts of plants pursuant to s13(2) RMA. | Permitted | (a) The activity must be undertaken in accordance with the Environmental Code of Practice for River Works (Horizons Regional Council, June 2010). <br> (b) The activity must not involve: <br> (i) an activity prohibited under Rule 17-1 <br> (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). |  |
| 17-15 <br> 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 ${ }^{\wedge}$ as defined in (j) to ( m ): <br> (a) the planting of a tree or shrub <br> (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 river^ or artificial watercourse* <br> (d) the erection, placement or extension of a fence greater than 1.2 m high parallel to a river^ or artificial watercourse* <br> (e) the deposition of any rock, shingle, earth, debris or other cleanfill material* ${ }^{*}$ <br> (f) any excavation, drilling, tunnelling or other disturbance likely to undermine the functional integrity of a stopbank or river^ control structure ${ }^{\wedge}$ <br> (g) any land disturbance* that impedes access required for maintenance* of a river^ or drainage scheme <br> (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 <br> and any ancillary: <br> (i) excavation, drilling, tunnelling or other disturbance of the river^^ or lake^ bed^ pursuant to s13(1) RMA <br> (ii) damming or diversion of water^ pursuant to s14(2) RMA <br> (iii) discharge^ of water^ or sediment into water^ or onto or into land ${ }^{\wedge}$ pursuant to ss15(1) or $15(2 \mathrm{~A})$ RMA <br> (iv) deposition of substances in or on the bed^ ^of the river ${ }^{\wedge}$ or lake ${ }^{\wedge}$ pursuant to s13(1) <br> (v) land disturbance* pursuant to s9(2) RMA |  |  |  |

[^21]| 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: <br> (i) within the bed^ of a river^ or within an artificial watercourse* <br> (j) on a stopbank <br> (k) on any strip of land ${ }^{\wedge}$ between an artificial watercourse* or bed ${ }^{\wedge}$ of a river ${ }^{\wedge}$ and 8 m inland of the landward toe of a stopbank <br> (I) for areas without stopbanks, anywhere within 10 m of an artificial watercourse* or the bed ${ }^{\wedge}$ of a river ${ }^{\wedge}$ <br> ( m ) Only land ${ }^{\wedge}$ use activities described under (f) and $(\mathrm{g})$ are controlled under this rule^ on land ${ }^{\wedge}$ 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. <br> This rule^ does not apply to activities undertaken by or on behalf of the Regional Council. |  |  |  |

## Rule Guide:

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 <br> 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: <br> (a) damming or diversion of water^ pursuant to s14(2) RMA <br> (b) discharge ${ }^{\wedge}$ of water^ or sediment into wate $\wedge^{\wedge}$ or onto or into land ${ }^{\wedge}$ pursuant to $\operatorname{ss} 15(1)$ or $15(2 \mathrm{~A})$ RMA <br> (c) deposition of substances in or on the bed ${ }^{\wedge}$ of the river^ or lake^ pursuant to $\mathrm{s} 13(1)$. | Permitted | (a) The activity must not take place in a river^ or lake^ regulated under Rule 17-3. <br> (b) The amount of gravel and bed ${ }^{\wedge}$ material extracted must not exceed $50 \mathrm{~m}^{3}$ in any 12 month period. <br> (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. <br> (d) The activity must comply with the general conditions^ listed in Section 17.3. <br> (e) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*. |  |
| $\begin{array}{\|l\|l\|} \hline 17-17 \end{array}$ <br> Other gravel extraction | Except as regulated by Rules 17-3 and 17-16, the excavation or other disturbance of the bed ${ }^{\wedge}$ of a river^ or lake^ for the purpose of extracting gravel and other bed ${ }^{\wedge}$ material, pursuant to s13(1) RMA and including any ancillary: <br> (a) damming or diversion of water^ pursuant to s14(2) RMA <br> (b) discharge ${ }^{\wedge}$ of water^ or sediment into water^ or onto or into land ${ }^{\wedge}$ pursuant to ss15(1) or $15(2 \mathrm{~A})$ RMA <br> (c) deposition of substances in or on the bed ${ }^{\wedge}$ of the river^ or lake^ pursuant to s13(1) <br> (d) discharges ${ }^{\wedge}$ 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 <br> Other minor bed^ ${ }^{\wedge}$ disturbances | Except as regulated by other rules^ in this chapter, the excavation, drilling, tunnelling or other disturbance of the bed ${ }^{\wedge}$ of a river ${ }^{\wedge}$ pursuant to s13(1) RMA and any ancillary: <br> (a) damming or diversion of water^${ }^{\wedge}$ pursuant to | Permitted | (a) The activity must not take place in a river ${ }^{\wedge}$ regulated under Rule 17-3. <br> (b) The activity must comply with the general conditions^ listed in Section 17.3. <br> (c) The activity must not take place in any rare habitat*, |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  | s14(2) RMA <br> (b) discharge $\wedge$ of water^ or sediment into water^^ or onto or into land ${ }^{\wedge}$ pursuant to ss15(1) or $15(2 \mathrm{~A})$ RMA <br> (c) deposition of substances in or on the bed ${ }^{\wedge}$ of the river^ or lake^ pursuant to s13(1). <br> Advice Note: <br> For the avoidance of doubt, this rule^ does not include gravel extraction. |  | threatened habitat* or at-risk habitat*. |  |
| $\begin{aligned} & \hline \text { 17-19 } \\ & \text { Plants } \end{aligned}$ | Except as regulated by other rules ${ }^{\wedge}$ in this chapter, the introduction, planting, removal or destruction of a plant in or on the bed ${ }^{\wedge}$ of a river^^ or lake ${ }^{\wedge}$ pursuant to s13(1) or s13(2) RMA, and any ancillary: <br> (a) excavation, drilling, tunnelling or other disturbance of the bed ${ }^{\wedge}$ of a river ${ }^{\wedge}$ or lake ${ }^{\wedge}$ pursuant to s13(1) RMA <br> (b) damming or diversion of water^ pursuant to s14(2) RMA <br> (c) discharge $\wedge$ of water^ or sediment into water^ or onto or into land ${ }^{\wedge}$ pursuant to $\operatorname{ss} 15(1)$ or $15(2 \mathrm{~A})$ RMA <br> (d) deposition of substances in or on the bed ${ }^{\wedge}$ of the river^ or lake ${ }^{\wedge}$ pursuant to $\mathrm{s} 13(1)$. | Permitted | (a) A pest plant, as listed in the Regional Pest Plant Management Strategy, must not be introduced or planted. <br> (b) The activity must not involve the planting of a tree or shrub in a reach of a river ${ }^{\wedge}$ with a Schedule B Value of Flood Control and Drainage, as regulated by Rule 17-15. <br> (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 rule^). <br> (d) The activity must comply with the general conditions ${ }^{\wedge}$ listed in Section 17.3. <br> (e) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*. |  |

## Rule Guide:

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 |
| :---: | :---: | :---: | :---: | :---: |
| 17-20 <br> Minor activities involving artificial watercourses* | Any: <br> (a) damming or diversion of water^ pursuant to s14(2) RMA <br> (b) discharge ${ }^{\wedge}$ of water^ , sediment, artificial watercourse* material or plants into water ${ }^{\wedge}$ or onto or into land ${ }^{\wedge}$ pursuant to ss15(1) or 15(2A) RMA <br> associated with any of the following activities within an artificial watercourse*: <br> (c) the maintenance*, upgrade*, or extension of a structure ${ }^{\wedge}$ or part of a structure ${ }^{\wedge}$ in, on, under or over land ${ }^{\wedge}$ within an artificial watercourse* <br> (d) the removal of artificial watercourse* material or plants for the purpose of maintaining the functional integrity of a structure^, including flushing accumulated material <br> (e) the discharge^ ${ }^{\wedge}$ of removed artificial watercourse* material or plants onto or into land^ <br> (f) the excavation, drilling, tunneling, or other disturbance of the land ${ }^{\wedge}$ within an artificial watercourse* <br> (g) the introduction, planting, removal or destruction of a plant in or on land ${ }^{\wedge}$ within an artificial watercourse* <br> (h) the deposition of any substance in or on land^ ${ }^{\wedge}$ within an artificial watercourse*. <br> This rule^ does not include the damming of an | Permitted | (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*. <br> (b) The activity must not involve an activity restricted by Rule 17-15. <br> (c) Any discharge^ of removed material or plants onto or into land $^{\wedge}$ (being land ${ }^{\wedge}$ that is not within an artificial watercourse ${ }^{*}$ ) must comply with the conditions ${ }^{\wedge}$ of Rule 14-27, except for conditions 14-27(a) and 14-27(c)(ii). <br> (d) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*. <br> (e) All reasonable steps shall be taken to return any stranded fish back into the artificial watercourse*. |  |


| 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 <br> $\mathrm{Bed}^{\wedge}$ disturbance of non-natural lakes ${ }^{\wedge}$ to maintain their function | Except as permitted by other rules^ in this chapter, the disturbance or removal of bed ${ }^{\wedge}$ material or plants for the purpose of maintaining the functional integrity of a non-natural lake^, pursuant to ss13(1) or 13(2) RMA and any ancillary: <br> (a) excavation, drilling, tunnelling or other disturbance of the bed ${ }^{\wedge}$ pursuant to $\mathrm{s} 13(1)$ RMA <br> (b) damming or diversion of water^ pursuant to s14(2) RMA <br> (c) discharge ${ }^{\wedge}$ of water^ or sediment into water ${ }^{\wedge}$ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA <br> (d) deposition of removed bed $^{\wedge}$ material or plants in or on the bed ${ }^{\wedge}$ pursuant to s13(1) RMA <br> (e) discharge ${ }^{\wedge}$ of removed bed^$d^{\wedge}$ material or plants onto or into land ${ }^{\wedge}$ or into water ${ }^{\wedge}$ pursuant to ss15(1) or 15(2A) RMA. | Controlled | (a) The activity must comply with the general conditions (a) to (k) and (u), (v) and (q) in Section 17.3. <br> (b) Any discharge^ of removed bed^ material or plants onto or into land ${ }^{\wedge}$ must comply with the conditions ${ }^{\wedge}$ of Rule 14-27 except condition 14-27(c)(ii). <br> (c) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*. | Control is reserved over: <br> (a) effects^ on water^ quality <br> (b) effects ${ }^{\wedge}$ on inflow rates of sediment <br> (c) effects^ on aquatic habitats <br> (d) the nature, scale, timing and duration of the activity undertaken <br> (e) duration of consent <br> (f) review of consent conditions ${ }^{\wedge}$ <br> (g) compliance monitoring <br> (h) the matters in Policy 14-9. |

## Rule Guide:

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 <br> Activities that do not comply with permitted activity^ ${ }^{\wedge}$ rule^ general conditions ${ }^{\wedge}$ | 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: <br> (a) excavation, drilling tunnelling or other disturbance of the bed ${ }^{\wedge}$ pursuant to $\mathrm{s} 13(1)$ RMA <br> (b) damming or diversion of water^ pursuant to s14(2) RMA <br> (c) discharge $\wedge$ of water^ or sediment into water^ or onto or into land ${ }^{\wedge}$ pursuant to ss15(1) or 15(2A) RMA <br> (d) deposition of substances in or on the bed ${ }^{\wedge}$ 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: <br> (a) measures to avoid, remedy or mitigate the effects^ of the activity in relation to any noncompliance with the matters listed in Section 17.3 <br> (b) duration of consent <br> (c) review of consent conditions ${ }^{\wedge}$ <br> (d) compliance monitoring <br> (e) the matters in Policy 14-9. |
| 17-23 <br> Activities that do not comply with permitted activity ${ }^{\wedge}$, controlled activity^ or restricted discretionary activity ${ }^{\wedge}$ rules^ and all other s13(1) RMA activities not covered by this chapter | Any activity that does not comply with one or more conditions ${ }^{\wedge}$, 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 ${ }^{\wedge}$ or is a s13(1) RMA activity not covered by this chapter, including any ancillary: <br> (a) excavation, drilling, tunnelling or other disturbance of the bed ${ }^{\wedge}$ pursuant to $\mathrm{s} 13(1)$ RMA | Discretionary |  |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  | (b) damming or diversion of water^ pursuant to s14(2) RMA <br> (c) discharge^ of water^ or sediment into water^ or onto or into land ${ }^{\wedge}$ pursuant to ss15(1) or 15(2A) RMA <br> (d) deposition of substances in or on the bed ${ }^{\wedge}$ of the river^ or lake^ pursuant to s13(1). |  |  |  |

## Rule Guide:

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 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^ (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^ 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^ quality targets set out in Schedule I: Part C.

## Policy 18-1: $\quad$ Regional rules^ for the CMA

The Regional Council must regulate activities in the CMA through regional rules ${ }^{\wedge}$ in accordance with Objectives 12-1, 12-2, 18-1 and 18-2 and Policies 12-1 to 12-8.

## 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.

Table 18.1: $\quad$ General conditions ${ }^{\wedge}$ for permitted activities ${ }^{\wedge}$ and controlled activities ${ }^{\wedge}$ in the CMA

| Value | Condition |
| :---: | :---: |
| Life-supporting Capacity (applies to the entire CMA) | (a) The activity must not reduce the ability of the river^ or estuarine area to convey flood flows or floating debris. <br> (b) There must be no discharge ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$, other than sediment and other contaminants ${ }^{\wedge}$ inherent to the water^ or bed^ , into the CMA except where the discharge^ is explicitly allowed by the activity description of a rule^ in this chapter. <br> (c) Any discharge^ of sediment into water^ directly caused by the activity must not be undertaken for more than 5 consecutive days and for more than 12 hours on any one of those 5 days. There must be no more than one activity in any 12 month period. <br> (d) Any discharge ${ }^{\wedge}$ of sediment into water^ under (c) must not, after reasonable mixing, cause any conspicuous change in the colour of water^ in the receiving water ${ }^{\wedge}$, 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. <br> (e) Any materials used must be necessary for the activity and must not be toxic to marine ecosystems. <br> (f) Any materials no longer required as part of the activity, including any temporary structures, must not be stored in or on any foreshore^ area and must be removed from the CMA upon completion of the activity. <br> (g) Refueling of machinery (other than boats) must not take place in any area where spills may enter the CMA. <br> (h) Upon completion of any channel bank works, the banks must be reinstated to a natural contour and revegetated. |
| Historic Heritage^ <br> (additional value to those in Schedule I-applies to the entire CMA) | (i) The activity must not disturb any historic heritage^ identified in the Regional Coastal Plan. <br> (j) In the event of an archaeological artefact or kōiwi* 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) | (k) The use of mobile machinery in or on the foreshore^ in a manner that disturbs the foreshore ${ }^{\wedge}$ or a whitebait ${ }^{\star}$ fishery must not take place in estuarine areas 15 August to 30 November (inclusive), unless the use of the machinery is solely for the maintenance* of infrastructure ${ }^{\wedge}$ and other physical resources of regional or national importance as outlined in Policy 3-1. |
| Inanga Spawning (applies as shown in Schedule I) | (I) The use of mobile machinery in or on the foreshore^ in a manner that disturbs the foreshore ${ }^{\wedge}$ or inanga spawning grounds must not take place in estuarine areas 1 February to 1 May (inclusive), unless the use of the machinery is solely for the maintenance* of infrastructure ${ }^{\wedge}$ and other physical resources of regional or national importance as outlined in Policy 3-1. |
| Amenity <br> (applies to the entire CMA) | (m) Existing public access to or along the foreshore^ must not be rendered unsafe by the activity. <br> (n) Existing public access to or along the foreshore^ 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. |

### 18.2 Occupation

## Policies

## Policy 18-2: Occupation^ of space $^{\wedge}$ by aquaculture

The allocation of space^ for aquaculture must be established through a plan change^, and regard must be had to the following matters when evaluating a proposed change^:
(a) 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 ${ }^{\wedge}$ use facilities that would be required;
(d) the effects ${ }^{\wedge}$ 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^ of space^ by activities other than aquaculture

When making decisions on resource consent^ applications and setting consent conditions^ for the allocation of space^ for activities (excluding aquaculture), the Regional Council must have regard to:
(a) 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;
(c) 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 ${ }^{\wedge}$ on public access to the space ${ }^{\wedge}$;
(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.

## Policy 18-4: Decision-making for occupation^ 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 <br> Rules

| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| 18-1 <br> Occupation^ by existing structures^ ${ }^{\wedge}$ | The occupation^ of space^ in the CMA pursuant to s12(2) RMA by any existing structure^ and any ancillary damming or diversion of water^ in the CMA pursuant to s14(1) or s14(2) RMA. | Permitted |  |  |
| 18-2 <br> Temporary occupation^ | The temporary and exclusive occupation^ of space ${ }^{\wedge}$ 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^: <br> (a) "temporary" means not more than 3 days. <br> (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 | (a) Where public access is restricted, a public notice ${ }^{\wedge}$ 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. <br> (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. |  |
| 18-3 <br> 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: <br> (a) effects^ on navigation safety. <br> (b) effects^ on public access. <br> (c) effects $\wedge$ on natural character. <br> (d) effects^ on historic heritage^. <br> (e) efficient use of the CMA. <br> (f) duration of consent. |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (g) review of consent conditions^. <br> (h) compliance monitoring. |
| 18-4 <br> Exclusive occupation^ | Any activity involving occupation^ of space^ in the CMA pursuant to s12(2) RMA which: <br> (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). <br> (b) would effectively exclude the public from more than 316 m along the length of the foreshore^. <br> (c) would involve occupation^ or use of an area greater than 50 ha of the CMA and such occupation ${ }^{\wedge}$ or use would restrict public access to or through such an area. | Discretionary |  |  |
| 18-5 <br> Occupation^ of space^ in Protection Activity Management Areas | The occupation^ of space^ 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. | Noncomplying |  |  |

## Rule Guide:

(a) 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

## Policies

## Policy 18-5: Consent decision-making for new structures^

When making decisions on resource consent^ applications and setting consent conditions ${ }^{\wedge}$ for structures^ in the CMA, the Regional Council must have regard to:
(a) 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 ${ }^{\wedge}$ in the CMA;
(c) the provisions for public access and safety, including navigation safety;
(d) 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^ ${ }^{\wedge}$ 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^ on other parts of the coast including whether the structure^ may affect sediment transport or exacerbate erosion or the risk of inundation; and
(h) whether the structure ${ }^{\wedge}$ contributes to any cumulative adverse effects ${ }^{\wedge}$ in the vicinity of the proposed structure^.

## Policy 18-6: Consent decision-making for new structures^ 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 ${ }^{\wedge}$ for new structures $^{\wedge}$ 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^ applications and setting consent conditions ${ }^{\wedge}$ for activities involving existing structures ${ }^{\wedge}$ in the CMA, the Regional Council must have regard to:
(a) 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 ${ }^{\wedge}$ have adverse effects^ on natural character, amenity values^ and public access;
(c) 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 ${ }^{\wedge}$; 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 ${ }^{\wedge}$ or material in place.
18.3.2 Rules

| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| 18-6 <br> Maintenance* of structures^ | (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: <br> (i) disturbance of the foreshore^ or seabed pursuant to s12(1) RMA. <br> (ii) deposition of natural marine substances on the foreshore^ or seabed pursuant to s12(1) RMA. <br> (iii) discharge ${ }^{\wedge}$ of water^ or contaminants ${ }^{\wedge}$ into the CMA pursuant to s15(1) RMA. <br> (iv) damming or diversion of water^ in the CMA pursuant to s14(1) or s14(2) RMA. | Permitted | (a) The activity must not increase the area of the foreshore ${ }^{\wedge}$ or seabed, or the volume of the wate $\wedge^{\wedge}$ column, occupied by the existing structure^. <br> (b) The activity must comply with the conditions ${ }^{\wedge}$ listed in Table 18.1 for the relevant Value, other than condition 18-1(h). |  |


| 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: <br> (i) damming or diversion of water^ in the CMA pursuant to s14(1) or s14(2) RMA. <br> (ii) discharge^ of water^ or sediment into the CMA pursuant to s15(1) RMA. <br> (iii) deposition of removed material or plants in or on the bed ${ }^{\wedge}$ pursuant to s12(1) RMA. <br> (iv) discharge $\wedge$ of removed foreshore ${ }^{\wedge}$ or seabed material or plants onto or into land $^{\wedge}$ in the CMA pursuant to s15(1) RMA. |  |  |  |

[^22]| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| 18-7 <br> 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^ ${ }^{\wedge}$ or seabed pursuant to $s 12(1)$ RMA and any ancillary: <br> (a) disturbance of the foreshore^ or seabed pursuant to s12(1) RMA. <br> (b) deposition of natural marine substances on the foreshore^ or seabed pursuant to s12(1) RMA. <br> (c) discharge ${ }^{\wedge}$ of water ${ }^{\wedge}$ or contaminants ${ }^{\wedge}$ into the CMA pursuant to s15(1) RMA. <br> (d) damming or diversion of water^ in the CMA pursuant to s14(1) or s14(2) RMA. | Permitted | (a) The activity must comply with the conditions^ listed in Table 18.1 for the relevant Value. <br> (b) The Regional Council must be informed in writing of the removal or demolition of any of the following structures ${ }^{\wedge}$, at least 10 working days prior to the commencement of the removal or demolition: <br> (i) access structures ${ }^{\wedge}$ in or on the foreshore ${ }^{\wedge}$ or seabed, including bridges, culverts and fords; <br> (ii) structures ${ }^{\wedge}$ occupying more than $5 \mathrm{~m}^{2}$ of the foreshore^ or seabed. |  |
| 18-8 <br> 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: <br> (a) occupation^ of the foreshore ${ }^{\wedge}$ or seabed, pursuant to s12(2) RMA. <br> (b) disturbance of the foreshore ${ }^{\wedge}$ or seabed pursuant to s12(1) RMA. <br> (c) deposition of natural marine substances on the foreshore^ or seabed pursuant to s12(1) RMA. <br> (d) discharge^ of water^ or contaminants ${ }^{\wedge}$ into the CMA pursuant to s15(1) RMA. <br> (e) damming or diversion of water^ in the CMA pursuant to s14(1) or s14(2) RMA. | Permitted | (a) Any whitebait* ${ }^{*}$ stand or maimai must not be located within the Port Activity Management Area. <br> (b) Any navigation aid must meet the requirements set out by Maritime NZ in New Zealand's System of Buoys and Beacons (2005). <br> (c) The floor area of any whitebait* or maimai structure ${ }^{\wedge}$ must not exceed $5 \mathrm{~m}^{2}$. <br> (d) The activity must comply with conditions (a), (e), (g), (i), (j), (I) and ( m ) listed in Table 18.1 for the relevant Value. |  |
| 18-9 <br> Structures^ in the Port Activity | The erection, reconstruction, placement, or alteration of any boat ramp, jetty, pontoon, or boat mooring structure^ 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: <br> (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: <br> (a) occupation^ of the foreshore ${ }^{\wedge}$ or seabed, pursuant to s12(2) RMA. <br> (b) disturbance of the foreshore ${ }^{\wedge}$ or seabed pursuant to s12(1) RMA. <br> (c) deposition of natural marine substances on the foreshore^ or seabed pursuant to s12(1) RMA. <br> (d) discharge $\wedge$ of water ${ }^{\wedge}$ or contaminants ${ }^{\wedge}$ into the CMA pursuant to s15(1) RMA. <br> (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. <br> (b) Any activity related to the marina must not extend beyond the existing area occupied as at 31 May 2007. <br> (c) The activity must comply with the conditions ${ }^{\wedge}$ listed in Table 18.1 for the relevant Value. | (b) effects^ on water^ quality. <br> (c) extent of disturbance to the foreshore^ or seabed. <br> (d) the material to be used for the structure^. <br> (e) duration of consent. <br> (f) review of consent conditions ${ }^{\wedge}$. <br> (g) compliance monitoring. |
| 18-10 <br> 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: <br> (a) occupation^ of the foreshore ${ }^{\wedge}$ or seabed pursuant to s12(2) RMA. <br> (b) disturbance of the foreshore ${ }^{\wedge}$ or seabed pursuant to s12(1) RMA. <br> (c) deposition of natural marine substances on the foreshore^ or seabed pursuant to $\mathrm{s} 12(1)$ RMA. <br> (d) discharge ${ }^{\wedge}$ of water^ or contaminants ${ }^{\wedge}$ into the CMA pursuant to s15(1) RMA. <br> (e) damming or diversion of water^ in the CMA pursuant to $\operatorname{s14}(1)$ or 14(2) RMA. | Permitted | (a) The activity must comply with the conditions ${ }^{\wedge}$ listed in Table 18.1 for the relevant Value other than conditions $18.1(\mathrm{~h})$ and (k). <br> (b) Any extension in length to the wharf must not be greater than $10 \%$ of the existing length of 570 m . <br> (c) There must be no extension in width to the existing wharf. <br> (d) The width of any extension referred to in (b) must be the same or a lesser width as the existing wharf. <br> (e) The design and materials used must be similar in nature and scale of effects $\wedge$ to those used for the existing wharf structure^. <br> (f) The structure^ must be designed to withstand the effects^ of climate change^ and sea level rise*. <br> (g) The Regional Council must be notified at least 10 working days^ prior to commencement of any work. |  |
| 18-11 <br> Structures^ ${ }^{\wedge}$ 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: <br> (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: <br> (a) occupation ${ }^{\wedge}$ of space^ in the CMA pursuant to s12(2) RMA. <br> (b) disturbance of the foreshore ${ }^{\wedge}$ or seabed pursuant to s12(1) RMA. <br> (c) deposition of natural marine substances on the foreshore^ or seabed pursuant to s12(1) RMA. <br> (d) discharge ${ }^{\wedge}$ of water^ or contaminants ${ }^{\wedge}$ into the CMA pursuant to s15(1) RMA. <br> (e) damming or diversion of water ${ }^{\wedge}$ in the CMA pursuant to s14(1) or s14(2) RMA. |  |  | (b) effects on aesthetic values, amenity values ${ }^{\wedge}$, natural character, indigenous flora and fauna and historic heritage^. <br> (c) the method of undertaking the activity. <br> (d) the timing and staging of the activity. <br> (e) duration of consent. <br> (f) review of consent conditions^. <br> (g) compliance monitoring. |
| 18-12 <br> 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: <br> (a) occupation ${ }^{\wedge}$ of space^ in the CMA pursuant to s12(2) RMA. <br> (b) disturbance of the foreshore ${ }^{\wedge}$ or seabed pursuant to s12(1) RMA. <br> (c) deposition of natural marine substances on the foreshore^ or seabed pursuant to s12(1) RMA. <br> (d) damming or diversion of water ${ }^{\wedge}$ in the CMA pursuant to s14(1) or s14(2) RMA. <br> (e) discharge ${ }^{\wedge}$ of water^ or contaminants ${ }^{\wedge}$ into the CMA pursuant to s15(1) RMA. | Controlled | (a) The activity must occur only within an operative Aquaculture Management Area established in accordance with Policy 18-2. <br> (b) The activity must comply with the conditions^ ${ }^{\wedge}$ listed in Table 18.1 for the relevant Value. | Control is reserved over: <br> (a) the type, quantity and frequency of any discharges ${ }^{\wedge}$. <br> (b) any effects^ on navigation safety. <br> (c) the method of undertaking the activity. <br> (d) the timing and staging of the activity. <br> (e) duration of consent. <br> (f) review of consent conditions ${ }^{\wedge}$. <br> (g) compliance monitoring. |
| 18-13 <br> Large structures^ which impound the CMA, are parallel to shore, or are oblique | Except as prohibited by Rule 18-16, the erection of any structure^ pursuant to s12(1) RMA which: <br> (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 | (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 ${ }^{\wedge}$ which total 300 m or more contiguously; or <br> (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. <br> For the avoidance of doubt this rule^ does not include submarine or sub-aqueous cables. |  |  |  |
| $18-14$ <br> Petroleum and chemical storage | Except as prohibited by Rule 18-16, any activity involving the erection of a structure^ pursuant to s12(1) RMA for the storage or containment of any petroleum, petroleum products, or contaminants ${ }^{\wedge}$, in quantities greater than 50,000 litres. | Discretionary |  |  |
| 18-15 <br> 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 ${ }^{\wedge}$ pursuant to s12(1) RMA. | Noncomplying |  |  |
| 18-16 <br> 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 ${ }^{\wedge}$ pursuant to s12(1) RMA: <br> (a) a structure ${ }^{\wedge}$ for the storage or containment of petroleum products or contaminants ${ }^{\wedge}$. | Prohibited |  |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion <br> Non-Notification |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | (b) a structure^ which will impound or <br> effectively contain 4 ha or more of the <br> CMA. |  |  |  |
| (c) a wharf, marina, boat shed, aquaculture |  |  |  |  |
| structure^. |  |  |  |  |$\quad$|  |
| :--- | :--- |

## 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 ${ }^{\wedge}$ for activities involving reclamation or drainage of the foreshore ${ }^{\wedge}$ or seabed, the Regional Council must have regard to:
(a) 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^ on tikanga Māori^ or historic heritage^, and avoiding, remedying or mitigating any adverse effects^ 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.

| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| $18-17$ <br> Drainage | Any drainage of the foreshore ${ }^{\wedge}$ or seabed pursuant to s12(1) RMA. | Discretionary |  |  |
| 18-18 <br> Small reclamations except in Protection Activity Management Areas | The reclamation of any area of the foreshore^ 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 | (a) Either: <br> (i) the reclamation must be less than 1 ha; or <br> (ii) the reclamation must extend less than 100 m in all directions. <br> (b) In the case of an incremental reclamation connected to or part of another reclamation which was commenced or which received a resource consent ${ }^{\wedge}$ after 5 May 1994, the sum of the existing and proposed reclamations must not exceed the dimensions specified in condition (a). |  |
| 18-19 <br> Small reclamation within the Port Activity Management Area | The reclamation of any area of the foreshore^ or seabed pursuant to s12(1) RMA, in the Port Activity Management Area as shown on Figure I.10, and any ancillary: <br> (a) occupation ${ }^{\wedge}$ of space^ in the CMA pursuant to s12(2) RMA. <br> (b) structure ${ }^{\wedge}$ pursuant to $\mathrm{s} 12(1)$. <br> (c) disturbance of the foreshore ${ }^{\wedge}$ or seabed pursuant to s12(1) RMA. <br> (d) discharge^ of water^ or contaminants ${ }^{\wedge}$ into the CMA pursuant to s15(1) RMA. | Restricted Discretionary | (a) Either: <br> (i) the reclamation must be less than 1 ha; or <br> (ii) the reclamation must extend less than 100 m in all directions. <br> (b) In the case of an incremental reclamation connected to or part of another reclamation which was commenced or which received a resource consent ${ }^{\wedge}$ after 5 May 1994, the sum of the existing and proposed reclamations must not exceed the size dimensions specified in condition (a). | Discretion is restricted to: <br> (a) the functional necessity for the reclamation. <br> (b) the material used as fill for the reclamation. <br> (c) the visual amenity of the activity. <br> (d) any hydrodynamic impacts on the neighbouring shoreline, including existing significant areas of indigenous flora or fauna breeding or nesting areas. <br> (e) effects^ on historic heritage^. <br> (f) the timing of the activity. <br> (g) the design parameters of the activity to address the effects^ of sea level rise* and storm surge. <br> (h) review of consent conditions^. |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| 18-20 <br> Large reclamations except in Protection Activity Management Areas | The reclamation of any area of the foreshore^ 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 <br> Small reclamations in Protection Activity Management Areas | The reclamation of any area of the foreshore^ or seabed pursuant to s12(1) RMA within any Protection Activity Management Area shown in Schedule I. | Noncomplying | (a) Either: <br> (i) the reclamation must be less than 1 ha; or <br> (ii) the reclamation must extend less than 100 m in all directions. <br> (b) In the case of an incremental reclamation connected to or part of another reclamation which was commenced or which received a resource consent ${ }^{\wedge}$ after 5 May 1994, the sum of the existing and proposed reclamations must not exceed the dimensions specified in condition (a). |  |
| 18-22 <br> Large reclamations in Protection Activity Management Areas | The reclamation of any area of the foreshore^ 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. | Noncomplying |  |  |

Rule Guide:
(a) Any reclamation relating to or impacting on safe navigation must also have approval from Maritime New Zealand.

## 18.5 <br> Disturbances, Removal and Deposition

## Policies

## Policy 18-9: Consent decision-making for activities involving disturbance, removal or deposition

When making decisions on resource consent ${ }^{\wedge}$ applications and setting consent conditions ${ }^{\wedge}$ for activities involving the disturbance of the foreshore^ or seabed, the deposition of substances in, on or under the foreshore ${ }^{\wedge}$ or seabed, or the removal of any sand, shell, shingle or other natural materials from the CMA, the Regional Council must have regard to:
a) 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 ${ }^{\wedge}$, and any adverse effects ${ }^{\wedge}$ on natural character and any known and publicly used shellfish beds;
(d) any effects^ 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 ${ }^{\wedge}$, or flood control structures ${ }^{\wedge}$;
(f) avoiding any adverse effects^ on tikanga Māori^ or on historic heritage^, and avoiding, remedying or mitigating any adverse effects^ 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 ${ }^{\wedge}$;
(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.

| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| 18-23 <br> Removal of minor quantities of material | The removal of sand, shingle, shell, driftwood or dead seaweed pursuant to s12(2) RMA and any ancillary: <br> (a) disturbance of the foreshore ${ }^{\wedge}$ or seabed pursuant to s12(1) RMA. <br> (b) deposition of natural marine substances on the foreshore^ or seabed pursuant to s12(1) RMA. <br> (c) discharge $\wedge$ of water^ or contaminants ${ }^{\wedge}$ into the CMA pursuant to s15(1) RMA. <br> (d) damming or diversion of water ${ }^{\wedge}$ in the CMA pursuant to s14(1) or s14(2) RMA. | Permitted | (a) The sand, shingle, shell, driftwood or dead seaweed must be for private use only and not for sale or exchange. <br> (b) The sand, shingle, shell, driftwood or dead seaweed must only be removed by hand or by using a handheld non-mechanical device. <br> (c) Any sand or shingle must not be removed from within 20 m of any seawall, groyne (or similar structure ${ }^{\wedge}$ ) or the seaward toe of any sand dune. <br> (d) The activity must comply with conditions (i) and (j) in Table 18.1. |  |
| 18-24 <br> Minor disturbances, removal and deposition | Except as otherwise regulated by the rules^ in Section 18.3.2, any disturbance, removal or deposition of material on the foreshore^ or seabed pursuant to s12(1) or s12(2) RMA ancillary to the following activities: <br> (a) installation of permanent anchors; <br> (b) burial of stock and marine fauna found dead in the CMA; <br> (c) clearing sediment from blocked river^ mouths, outfall structures ${ }^{\wedge}$, intake structures^ and culverts; <br> (d) public recreational activities; <br> (e) beach grooming; <br> and any ancillary: <br> (i) occupation^ of space^ in the CMA pursuant to s12(2) RMA. <br> (ii) discharge ${ }^{\wedge}$ of water^ ${ }^{\wedge}$ or sediments into | Permitted | (a) The clearing of sediment from blocked river^ mouths must only be undertaken by a local authority or its authorised contractors. <br> (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 (I)-(n) listed in Table 18.1 for the relevant Value. <br> (c) The installation of permanent anchors must comply with conditions (a)-(g) and (i)-(n) listed in Table 18.1 for the relevant Value. <br> (d) Clearing sediment from outfall structures^, intake structures ${ }^{\wedge}$ and culverts must comply with conditions (a)-(g) and (i)-(n) listed in Table 18.1 for the relevant Value. <br> (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. |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  | the CMA pursuant to s15(1) RMA. <br> (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 foreshore^ 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: <br> (i) occupation^ of space^ in the CMA pursuant to s12(2) RMA <br> (ii) discharge^ of water^ into the CMA pursuant to s15(1) RMA <br> (iii) discharge ${ }^{\wedge}$ of drilling muds, cuttings, and inert drilling fluids into the CMA pursuant to s15(1) RMA <br> (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 | (a) The bore* or drilling must be for the purposes of investigating water^, oil*, gas or seabed resources. <br> (b) The diameter of any bore* or drill hole must be 1.5 metres or less. <br> (c) The bore* must be cased and sealed to prevent leakage from: <br> (i) groundwater to coastal water^; and <br> (ii) coastal water ${ }^{\wedge}$ to groundwater. <br> (d) Any drilling must not involve the use of explosives, except for down-hole activities. <br> (e) Any flare point must occur more than 1 km seaward from MHWS on the open coast. <br> (f) No non-petroleum wellstream product can be combusted. |  |
| 18-26 <br> Shellfish enhancement | Any disturbance of the foreshore^ ${ }^{\wedge}$ or seabed, pursuant to s12(1) RMA for the purposes of noncommercial shellfish enhancement, and any ancillary: <br> (a) occupation^ of space^ in the CMA pursuant to s12(2) RMA. | Permitted | (a) The shellfish enhancement must occur only in the same location as existing shellfish beds. <br> (b) Any shellfish spat used must be from the same species as naturally resides in the same area. <br> (c) The activity must comply with conditions (b), (e)-(g) and (i)-(k) listed in Table 18.1 for the relevant Value. |  |
| 18-27 <br> Beach nourishment | Any disturbance, removal or deposition of natural marine substances on the foreshore ${ }^{\wedge}$ or seabed pursuant to s12(1) or s12(2) RMA for the purposes of beach nourishment, and any ancillary: <br> (a) occupation ${ }^{\wedge}$ of space^ in the CMA pursuant to s12(2) RMA. | Controlled | (a) Any material to be deposited must not contain any contaminants^^ that are not already present in natural materials at the site*. <br> (b) Any material to be removed must not result in accelerated erosion* of the foreshore^. <br> (c) The activity must comply with conditions (b), (e)-(g) | Control is reserved over: <br> (a) the particle size and composition. <br> (b) the timing of the activity. <br> (c) duration, fees and charges, reviews and monitoring. |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  | (b) discharge^ of water^ or contaminants ${ }^{\wedge}$ into the CMA pursuant to s15(1) RMA. |  | and (i)-(k) listed in Table 18.1 for the relevant Value. |  |
| 18-28 <br> Port Activity Management Area and Whanganui River maintenance dredging | Any disturbance or removal of the foreshore^ 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 l: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 | (a) The dredging must be for the purpose of maintaining water ${ }^{\wedge}$ depths and access to and within the Port Activity Management Area. <br> (b) In any 12-month period, the quantity of material dredged or deposited within the CMA must not exceed $\quad 240,000 \mathrm{~m}^{3}$. <br> (c) The dredging must occur within the Dredging Areas identified in Schedule I Figure I: 10. <br> (d) The disposal of any dredged material must occur within the Discharge Areas identified in Schedule I Figure I: 10. <br> (e) The disposal of any dredged material must only occur on the outgoing tide. <br> (f) The location of the dredged material must be monitored in accordance with conditions^ set by the Regional Council. <br> (g) Any application must include information specified in Part I of Schedule 3 of the Resource Management (Marine Pollution) Regulations 1998. |  |
| 18-29 <br> 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: <br> (a) the quantity of material involved is greater than $50,000 \mathrm{~m}^{3}$; or <br> (b) the area involved is equal to or greater than 4 ha; or <br> (c) the length of foreshore^ 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 <br> 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 rules^ in Section 18.3.2, Rules 18-23, 18-24, 18-26, 18-27 or 18-31. | Noncomplying |  |  |
| 18-31 <br> Protection Activity Management Areas: <br> 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: <br> (a) the quantity of material involved is greater than $50,000 \mathrm{~m}^{3}$; or <br> (b) the area involved is equal to or greater than 4 ha; or <br> (c) the length of foreshore^ or seabed involved is equal to or greater than $1,000 \mathrm{~m}$. | Noncomplying |  |  |

## Rule Guide:

(a) 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.
(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^ in the CMA

When making decisions on resource consent^ applications and setting consent conditions^ for the take or use of water^ from the CMA, the Regional Council must have regard to:
(a) 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 ${ }^{\wedge}$ or seabed is avoided

## Policy 18-11: Consent decision-making for damming and diversions in the CMA

When making decisions on resource consent ${ }^{\wedge}$ applications and setting consent conditions ${ }^{\wedge}$ for any activity in the CMA involving the damming or diversion of water^, the Regional Council must have regard to:
(a) 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^ ${ }^{\wedge}$ 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 ${ }^{\wedge}$; and
(g) ensuring that public access is not unreasonably restricted.

| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| 18-32 <br> Take and use of water^ | Any take or use of water^ from the CMA. | Permitted | (a) The activity must comply with conditions (i) and (j) in Table 18.1. <br> (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 $0.3 \mathrm{~m} / \mathrm{s}$. |  |
| 18-33 <br> 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 water^ 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:

(a) Water takes and uses in the CMA that do not comply with a permitted activity rule are a discretionary activity under Rule 18-44.
(b) 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 <br> Policies

## Policy 18-12: Consent decision-making for discharges^ into the CMA

When making decisions on resource consent^ applications and setting consent conditions ${ }^{\wedge}$ for discharges^ into the CMA, the Regional Council must have regard to:
(a) 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) 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 ${ }^{\wedge}$

When making decisions on resource consent ${ }^{\wedge}$ applications and setting consent conditions ${ }^{\wedge}$ for sewage discharges^ into the CMA, the Regional Council must have regard to:
(a) 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 <br> Discharges^ into water^ from ships^, boats, fire-fighting and oil* spills | Any discharge^ (excluding sewage) into the CMA pursuant to s15 RMA: <br> (a) ancillary to the normal operation ${ }^{1}$ of a ship ${ }^{\wedge}$ or boat; or <br> (b) for the purposes of fire-fighting or training for fire-fighting; or <br> (c) for the purposes of managing an oil* spill. | Permitted | (a) There must be no discharge^ of non-biodegradable matter. <br> (b) Any substance used as an oil* dispersant must be approved in accordance with the Marine Protection Rules Part 132: Dispersants and Demulsifiers (1998). |  |
| 18-35 <br> Discharges^ of stormwater | The discharge^ of stormwater into the CMA, pursuant to s15 RMA. | Permitted | (a) The discharge^ must not contain any sewage. <br> (b) The discharge ${ }^{\wedge}$ must not include stormwater from any: <br> (i) industrial or trade premises^ ${ }^{\wedge}$ where hazardous substances* are stored or used, <br> (ii) contaminated land ${ }^{\wedge}$, <br> (iii) operating quarry or mineral extraction site*, unless there is an interceptor system* in place. <br> (c) For discharges ${ }^{\wedge}$ that include stormwater from any industrial or trade premises ${ }^{\wedge}$, or from land ${ }^{\wedge}$ zoned as industrial, commercial or residential, the catchment area of the discharge^ must not exceed 2 ha. <br> (d) The activity must not cause erosion of any bank or foreshore ${ }^{\wedge}$ beyond the point of discharge^, unless this is not practicably avoidable, in which case any erosion that occurs as a result of the discharge^ |  |

[^23]| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | must be remedied as soon as practicable. <br> (e) For discharges^ of stormwater into the CMA the discharge^ must not cause, after reasonable mixing, any of the following effects ${ }^{\wedge}$ in the receiving water ${ }^{\wedge}$ : <br> (i) the production of conspicuous oil* or grease films, scums or foams, or floatable or suspended materials; <br> (ii) any conspicuous change in the colour or visual clarity of the receiving water ${ }^{\wedge}$; <br> (iii) any emission of objectionable odour; <br> (iv) toxicity to marine ecosystems. <br> (f) The discharge^ must not be to any historic heritage^ identified in the Regional Coastal Plan. |  |
| 18-36 <br> Discharges ${ }^{\wedge}$ of stormwater not complying with Rule 18-35 | The discharge^ of stormwater into the CMA, pursuant to s15 RMA, that: <br> (i) does not comply with Rule 18-35; or <br> (ii) is lawfully in existence at the time this rule ${ }^{\wedge}$ comes into effect, but does not comply with Rule 18-35. | Controlled | (a) The discharge^ ${ }^{\wedge}$ must not include sewage. <br> (b) The discharge^ must not include stormwater from any: <br> (i) industrial or trade premises ${ }^{\wedge}$ where hazardous substances* are stored or used, <br> (ii) contaminated land ${ }^{\wedge}$, <br> (iii) operating quarry or mineral extraction site*, unless there is an interceptor system* in place. <br> (c) The discharge^ must not be toxic to marine ecosystems after reasonable mixing. | Control is reserved over: <br> (a) measures to control flooding and erosion. <br> (b) contaminant ${ }^{\wedge}$ concentrations and loading rates. <br> (c) measures required to comply with s107(1) RMA. <br> (d) measures required to comply with the water^ quality targets for the relevant Water Management Zone* or Subzone*. <br> (e) odour management. <br> (f) stormwater system maintenance requirements . <br> (g) contingency requirements. <br> (h) monitoring and information requirements. <br> (i) duration of consent. <br> (j) review of consent conditions^. |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
| $18-37$ <br> Discharges ${ }^{\wedge}$ of dye and salt tracers | The discharge^ of dye and salt tracer material into the CMA, pursuant to s15 RMA, excluding radioisotope tracers. | Permitted | (a) The dye or salt tracer material discharged must not exceed 20 I of dye in solution, 10 kg of salt, or 100 I of salt solution. <br> (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: <br> (i) the name and contact details of the person responsible for the discharge^. <br> (ii) the purpose and nature of the discharge ${ }^{\wedge}$. <br> (iii) the nature of the tracer including its type, colour, and product name and description. <br> (iv) the location, timing and duration of the discharge^. <br> (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 <br> Application of agrichemicals* | The discharge^ of agrichemicals* into air, onto land ${ }^{\wedge}$, 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. <br> (b) The discharge^ must not contravene any requirement specified in the agrichemical* manufacturer's instructions. <br> (c) The discharge^ must be undertaken in accordance with all mandatory requirements set out in NZS 8409:2004 Management of Agrichemicals. <br> (d) There must be no measurable adverse effect^ on non-target species. <br> (e) Where the discharge^ is into water^ for the purpose of eradicating, modifying or controlling unwanted marine plants: <br> (i) only agrichemicals* approved for aquatic use can be used. |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | (ii) the application must not exceed the quantity or concentration required for that purpose. <br> (f) The discharge^ must not include dumping^ of agrichemical* waste* or surplus product to water^. <br> (g) The discharger must notify the Regional Council five working days prior to application. |  |
| 18-39 <br> Application of agrichemicals* not complying with Rule 18-38 | The discharge^ of agrichemicals* into air, onto land ${ }^{\wedge}$, or into water^, in the CMA, pursuant to s15 RMA, that does not comply with Rule 18-38. | Controlled | (a) The discharge^ must not contravene any requirement specified in the agrichemical* manufacturer's instructions. <br> (b) The discharge^ must be undertaken in accordance with all mandatory requirements set out in NZS 8409:2004 Management of Agrichemicals. <br> (c) There must be no measurable adverse effect ${ }^{\wedge}$ on non-target species. <br> (d) Where the discharge ${ }^{\wedge}$ is into water^${ }^{\wedge}$ for the purpose of eradicating, modifying or controlling unwanted marine plants: <br> (i) only agrichemicals* approved for aquatic use can be used. <br> (ii) the application must not exceed the quantity or concentration required for that purpose. <br> (iii) the discharge ${ }^{\wedge}$ must not include dumping^ of agrichemical* waste* or surplus product to water^. | Control is reserved over: <br> (a) qualification required of persons carrying out the activity. <br> (b) method, rate and timing of application. <br> (c) the provision of information to the public. <br> (d) duration, fees and charges, reviews, monitoring. |
| 18-40 <br> Sewage and s107(2) RMA discharges^ | Pursuant to Schedule 1 NZCPS 1994: <br> (a) any discharge^ of human sewage which has not passed through soil or wetland ${ }^{\wedge}$, and which is not otherwise provided for by the Resource Management (Marine Pollution) Regulations 1998 and Amendment Regulations 2002; or | Discretionary |  |  |


| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion <br> Non-Notification |
| :--- | :--- | :--- | :--- | :--- |
|  | (b)any discharge^ for which the discharger <br> wishes to rely on exceptional circumstances <br> to <br> justify the granting of consent <br> under s107(2)(a) RMA; and <br> which is not otherwise prohibited by <br> Rule 18-41 of this chapter. |  |  |  |
| $\mathbf{1 8 - 4 1}$ <br> Dumping^ of <br> hazardous <br> substances* | The dumping^ or disposal of any hazardous <br> substances* in the CMA, not otherwise <br> controlled by the Resource Management <br> (Marine Pollution) Regulations 1998 and <br> Amendment Regulations 2002, or otherwise <br> 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:
(i) 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 |  |  |  |
|  | When making decisions on resource consent^ applications and setting consent conditions ${ }^{\wedge}$ for activities involving noise ${ }^{\wedge}$ or discharges^ into air in the CMA, the Regional Council must have regard to: |  |  |  |
|  | (a) the Regional Policy Statement, particularly all 3-6 and 3-7, Objective 7-1 and Policy 7-1 and |  | objectives and policies of Chapters 2 and 8, relevant policies in the NZCPS; and <br> at emissions of noise ${ }^{\wedge}$ do not exceed a reasona values ${ }^{\wedge}$ for people. | ective 3-1 and Policies 3-1, 3-2, 3-3, <br> level for all other activities, including |
| 18.8.2 | Rules |  |  |  |
| Rule | Activity | Classification | Conditions/Standards/Terms | Control/Discretion Non-Notification |
| 18-42 <br> Noise^ emissions | Any noise ${ }^{\wedge}$ in the CMA, pursuant to s12(3) RMA relating to the normal operation of boats, ships ${ }^{\wedge}$ or offshore installations ${ }^{\wedge}$, or from seismic exploration. | Permitted | (a) Any seismic exploration must be located at least 1 km away from any Protection Activity Management Area as shown in Schedule I. <br> (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). |  |

## 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

## Policies

## Policy 18-15: Consent decision-making for the introduction of exotic and introduced plants

When making decisions on resource consent ${ }^{\wedge}$ applications and setting consent conditions ${ }^{\wedge}$ for activities involving the introduction of exotic and introduced plants in the CMA, the Regional Council must have regard to:
(a) 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^ to avoid any risk of adverse effects^ on indigenous flora in any Protection Activity Management Area or on fish or bird feeding grounds.

| 18.9.2 Rules |  | Control/Discretion <br> Non-Notification |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Rule | Activity | Classification | Conditions/Standards/Terms |  |
| 18-43 <br> Exotic and <br> introduced plants | Pursuant to s12(1) RMA and Schedule I NZCPS <br> 1994, the introduction or planting of any exotic <br> or introduced plant species within the CMA, <br> which is not already present in an area. | Discretionary |  |  |

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 <br> Activities that are not covered by any other rule^, or which do not comply with permitted activity^ ${ }^{\wedge}$ and controlled activity^ rules^ | Any activity that either: <br> (a) is subject to $\mathrm{s} 12(1), \mathrm{s} 12(2), \mathrm{s} 14(1), \mathrm{s} 14(2)$, s15(1) or s15(2) RMA and is not addressed by any other rule^ in this chapter; or <br> (b) does not comply with one or more conditions ${ }^{\wedge}$, standards or terms of a permitted activity^ or controlled activity^ rule ${ }^{\wedge}$ in this chapter, and which is not expressly classified as a discretionary activity^, non-complying activity^ or prohibited activity^. | Discretionary |  |  |



## 19 Financial Contributions

## $19.1 \quad$ 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 <br> 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^ ${ }^{\wedge}$ on the environment ${ }^{\wedge}$ by funding positive effects ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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
- $\wedge$ 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.


#### Abstract

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 $b e d^{\wedge}$ 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^. 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^ that does not meet the definition of river^ in s2 of the RMA. For the purposes of this Plan, it includes an irrigation canal, water^ supply race, canal for the supply of water^ for hydroelectricity power generation and farm drainage canal; but excludes a non-natural lake^.

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 ${ }^{\wedge}$.

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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ or opening designed for venting the airborne products of combustion.

Cleanfill means a landfill* that accepts only cleanfill materia/*.
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 materia/* 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 ${ }^{\wedge}$ 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^ 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* ${ }^{\text {specified in Table 14.2. }}$

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 ${ }^{\wedge}$ 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 $2,000 \mathrm{l} / \mathrm{d}$ ), 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:
(i) 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^, perennial streams and the bed^ of any lake ${ }^{\wedge}$;
(viii) location of any wetland ${ }^{\wedge}$ 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 $\mathrm{m}^{3} / \mathrm{s}$ or $\mathrm{I} / \mathrm{s}$ that is exceeded for the nominated percentage of time, eg., river ${ }^{\wedge}$ flow is higher than the $50^{\text {th }}$ flow exceedance percentile for 50 percent of the time, but higher than the $20^{\text {th }}$ 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 ${ }^{\wedge}$ 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*, and
(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 rushlike 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 $850^{\circ} \mathrm{C}$ 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^ with a preexisting slope* of $20^{\circ}$ or greater on which vegetation clearance*, land disturbance* forestry* or cultivation* and ancillary land disturbance* for the purposes of constructing erosion and sediment control methods to minimize run off to water^ 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 ${ }^{\wedge}$ 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 hapu${ }^{*}$, each recognising descent from a common ancestor(s). The hapū not only recognise genealogical ties but geographical, political and social ties. Today $i w i^{*}$ 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 hapū*.

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 ${ }^{\wedge}$ available applying the $3^{\text {rd }}$ or $2^{\text {nd }}$ 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 ${ }^{\wedge}$, 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 ${ }^{\wedge}$, 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 ${ }^{\wedge}$ 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 ${ }^{\circledR}$ 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 ${ }^{\circledR}$ 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 ${ }^{\wedge}$ 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 fuelburning 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^ on health or the environment^ 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.
$\mathbf{P M}_{10}$ 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 $P M_{10}{ }^{*}$ 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^ that are in the same ownership. A legal road^ is considered a property for the purposes of this Plan.

Public land means land ${ }^{\wedge}$ to which the public has free access at the time that an activity is undertaken.

Public road means any formed legal road ${ }^{\wedge}$ 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^ 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^ is water^ 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^ ${ }^{\wedge}$ of contaminants ${ }^{\wedge}$ into a river ${ }^{\wedge}$ or an artificial watercourse*, means either:
(a) a distance downstream of the discharge ${ }^{\wedge}$ that is the least of:
(i) the distance that equals seven times the width of the river^ at the point of discharge ${ }^{\wedge}$ when the flow is at half the median flow, or
(ii) 200 metres from the point of discharge^ or, for discharges ${ }^{\wedge}$ 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 $2-200 \mathrm{~mm}$ ) 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 ${ }^{\wedge}$ 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. Tussocksedges 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^ ${ }^{\wedge}$ 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 agrichemica/* 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 nonwoody 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 ${ }^{\wedge}$, 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 ${ }^{\wedge}$, 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*
(i) 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 ${ }^{\wedge}$ 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 hapū ${ }^{*}$ or ${ }^{i w i}{ }^{*}$ 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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| Surface Water Management Zones* - Regional Scale $^{\text {Surface Water Management Sub-zones }}$ - Catchment Scale  <br> Manawatu Catchment A-3-A-6 <br> Rangitikei Catchment A-7-A-12 <br> Whanganui Catchment A-13-A-16 - -20 <br> Whangaehu Catchment A-21-A-24 <br> Turakina Catchment A-25-A-28 <br> East Coast Catchment A-29-A-32 <br> West Coast, Ohau and Lake Horowhenua Catchments A-33-A-35 |  |



Figure A:1 Surface Water Management Zones* in the Region (refer to Table A. 1 for details)

| Parent Catchment | Surface Water <br> Management Zone* Code | Surface Water <br> Management Zone* Name |
| :---: | :---: | :---: |
| Manawatu | Mana_1 | Upper Manawatu |
|  | Mana_2 | Weber-Tamaki |
|  | Mana_3 | Upper Tamaki |
|  | Mana_4 | Upper Kumeti |
|  | Mana_5 | Tamaki-Hopelands |
|  | Mana_6 | Hopelands-Tiraumea |
|  | 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 |
| Rangitikei | Rang_1 | Upper Rangitikei |
|  | Rang_2 | Middle Rangitikei |
|  | Rang_3 | Lower Rangitikei |
|  | Rang_4 | Coastal Rangitikei |
| Whanganui | Whai_1 | Upper Whanganui |
|  | Whai_2 | Cherry Grove |
|  | Whai_3 | Te Maire |
|  | Whai_4 | Middle Whanganui |
|  | Whai_5 | Pipiriki |
|  | Whai_6 | Paetawa |
|  | Whai_7 | Lower Whanganui |
| Whangaehu | Whau_1 | Upper Whangaehu |
|  | Whau_2 | Middle 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 Iwi |
|  | 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)

Table A.2: Description of Manawatu Catchment Surface Water Management Zones* and Sub-zones*

| Water Management Zone* | Sub-zone* | Sub-zone* Description ${ }^{1}$ |
| :---: | :---: | :---: |
| Upper Manawatu (Mana_1) | Upper Manawatu (Mana_1a) | Manawatu River from Weber Road at approx. NZMS 260 U23:751-027 to source |
|  | 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 (Mana_2) | 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 |
|  | 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_5) | $\begin{gathered} \text { Tamaki-Hopelands } \\ \text { (Mana_5a) } \end{gathered}$ | 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 |
|  | 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 |
|  | $\begin{aligned} & \text { Oruakeretaki } \\ & \text { (Mana_5d) } \\ & \hline \end{aligned}$ | 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 |
| Tiraumea (Mana_7) | Upper Tiraumea (Mana_7a) | Tiraumea River from Makuri River confluence at approx. NZMS 260 T24:578-780 to source |
|  | $\begin{gathered} \hline \text { Lower Tiraumea } \\ \text { (Mana_7b) } \\ \hline \end{gathered}$ | Tiraumea River from Manawatu River confluence at approx. NZMS 260 T24:555-870 to Makuri River confluence at approx. NZMS 260 T24:578-780 |
|  | 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 |

[^24]| Water Management Zone* | Sub-zone* | Sub-zone* Description ${ }^{1}$ |
| :---: | :---: | :---: |
|  | Mangaramarama (Mana_7e) | Mangaramarama Creek from Tiraumea River confluence at approx. NZMS 260 T24:559-854 to source |
| Mangatainoka (Mana_8) | Upper Mangatainoka (Mana_8a) | Mangatainoka River from Larsons Road at approx. NZMS 260 T25:308-595 to source |
|  | 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 |
|  | 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_9) | Upper Gorge (Mana 9a) <br> (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 |
|  | 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_10) | $\begin{aligned} & \text { Middle Manawatu } \\ & \text { (Mana_10a) } \\ & \hline \end{aligned}$ | Manawatu River from Teachers College at approx. <br> 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 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. <br> 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_11) | Lower Manawatu (Mana_11a) | Manawatu River from Oroua River confluence at approx. <br> NZMS 260 S24:167-826 to Teachers College at approx. NZMS 260 T24:331-892 |
|  | $\begin{gathered} \text { Turitea } \\ \text { (Mana_11b) } \end{gathered}$ | Turitea Stream from Manawatu River confluence at approx. NZMS 260 T24:304-881 to source |
|  | 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 ${ }^{1}$ |
| :---: | :---: | :---: |
|  | Main Drain (Mana_11f) | Main Drain catchment (including Taonui Stream) from Manawatu River confluence at approx. NZMS 260 S24:181-836 to source |
| $\begin{aligned} & \text { Oroua } \\ & \text { (Mana_12) } \end{aligned}$ | 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 |
|  | $\begin{aligned} & \text { Lower Oroua } \\ & \text { (Mana_12c) } \\ & \hline \end{aligned}$ | 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 |
|  | $\begin{gathered} \text { Makino } \\ \text { (Mana_12e) } \end{gathered}$ | Makino Stream from Oroua River confluence at approx. NZMS 260 S23:243-004 to source |
| Coastal Manawatu (Mana_13) | 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 |
|  | $\begin{aligned} & \text { Lower Tokomaru } \\ & \text { (Mana_13c) } \\ & \hline \end{aligned}$ | Tokomaru River from Manawatu River confluence at approx. NZMS 260 S24:134-727 to Horseshoe Bend at approx. NZMS 260 S24:241-768 |
|  | $\begin{gathered} \text { Mangaore } \\ \text { (Mana_13d) } \\ \hline \end{gathered}$ | Mangaore River from Manawatu River confluence at approx. NZMS 260 S24:123-717 to source |
|  | $\begin{gathered} \text { Koputaroa } \\ \text { (Mana_13e) } \end{gathered}$ | Koputaroa Stream from Manawatu River confluence at approx. NZMS 260 S24:106-708 to source |
|  | Foxton Loop <br> (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)


[^25]

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 ${ }^{3}$ |
| :---: | :---: | :---: |
| Upper Whanganui (Whai_1) | Upper Whanganui <br> (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 <br> (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 <br> (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 at approx. NZMS 260 S18:108-785 |
| 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 |
| Middle Whanganui (Whai_4) | 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 |
|  | Upper Ohura (Whai_4b) | Ohura River from Tokorima at approx. NZMS 260 R18:863-521 to source |
|  | 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 <br> (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 |

[^26]


Figure A:5 Whangaehu Catchment - Surface Water Management Zones* and Sub-zones* (refer to Table A. 5 for details)

| Water Management Zone* | Sub-zone* | Sub-zone* Description ${ }^{1}$ |
| :---: | :---: | :---: |
| Upper Whangaehu (Whau_1) | Upper Whangaehu <br> (Whau_1a) | Whangaehu River from Karioi at approx. NZMS 260 S21:218-864 to source |
|  | 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_3) | 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 Makotuku <br> (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 |
|  | 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 <br> (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) |

[^27]

Figure A:6 Turakina Catchment - Surface Water Management Zones* and Sub-zones* (refer to Table A. 6 for details)

| Water Management Zone* | Sub-zone* | Sub-zone* Description ${ }^{1}$ |
| :---: | :---: | :---: |
| Turakina (Tura_1) | Upper Turakina (Tura_1a) | Turakina River from Otairi at approx. NZMS 260 S22:236-471 to source |
|  | 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 |

[^28]

Figure A:7 East Coast - Surface Water Management Zones* and Sub-zones* (refer to Table A. 7 for details)

| Water Management Zone* | Sub-zone* | Sub-zone* Description ${ }^{1}$ |
| :---: | :---: | :---: |
| 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) |
| Akitio (Akit_1) | Upper Akitio (Akit_1a) | Akitio River from Weber Road at approx. NZMS 260 U24:919-832 to source |
|  | Lower Akitio (Akit_1b) | Akitio River at approx. NZMS 260 U25:992-610 to Weber Road at approx. <br> 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) |

[^29]

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 ${ }^{7}$ |
| :---: | :---: | :---: |
| Northern Coastal (West_1) | Northern Coastal (West_1) | All coastal catchments and dune lakes between Kai lwi and Waitotara catchments |
| Kai Iwi (West_2) | Kai Iwi (West_2) | Kai Iwi 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 <br> (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 surrounding 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 catchment area |
| Waitarere (West_7) | Waitarere (West_7) | All lakes and lagoons between Coastal Manawatu and Lake Horowhenua catchment and all surrounding catchment area |
| Lake Papaitonga (West_8) | Lake Papaitonga (West_8) | Lake Papaitonga catchment |
| Waikawa (West_9) | 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 ) |
|  | Manakau (West_9b) | Manakau Stream from Waikawa Stream confluence at approx. NZMS 260 S25:946-549 to source |
| Ohau (Ohau_1) | Upper Ohau (Ohau_1a) | Ohau River from Rongomatane at approx. NZMS 260 S25:072-577 to source |
|  | Lower Ohau <br> (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 CMA boundary at NZMS 260 S25:2692921-6059503 seawards) |
| Lake Horowhenua (Hoki_1) | Lake Horowhenua <br> (Hoki_1a) | Whole lake catchment above Hokio Stream outlet |
|  | 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) |

[^30]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:

| Section | Page Numbers |
| :---: | :---: |
| Part B.1: Surface Water^ Management Values listed by Sub-zone* <br> Part B.2: Where Specific Surface Water^ Management Values Apply <br> Zone-wide values (except for LSC) <br> Life-supporting Capacity (LSC) Value <br> Natural State (NS) Value <br> Sites of Significance - Aquatic (SOS-A) Value <br> Sites of Significance - Riparian (SOS-R) Value <br> Inanga Spawning (IS) Value <br> Whitebait* Migration (WM) Value <br> Sites of Significance - Cultural (SOS-C) Value <br> Trout Fishery (TF) Value <br> Trout Spawning (TS) Value <br> Water^ Supply (WS) Value <br> Flood Control and Drainage (FC/D) Value <br> Amenity Value in the Manawatu (AM) Value Domestic Food Supply (DFS) Value <br> Part B.3: Surface Water^ Management Values Key (fold-out) | B-3 - B-14 <br> Not mapped <br> B-15 <br> B-17-B-20 <br> B-21 - B-32 <br> B-33 - B-38 <br> B-39-B-42 <br> B-43-B-46 <br> B-47-B-50 <br> B-51 - B-60 <br> B-61-B-72 <br> B-73 - B-80 <br> B-81-B-106 <br> B-107-B-112 <br> B-113 - B-116 <br> B-117 |

Part B.3: Surface Water^ Management Values Key (fold-out)

## Part B.1: Surface Water^ Management Values listed by Sub-zone*

## 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:


 Fishery; TS: Trout Spawning; WS: Water Supply, DFS: Domestic Food Supply, FCID: Food Control and Drainage.
 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

| Water Management Zone* | Sub-zone* | Sub-zone* Description ${ }^{1}$ | Zone-wide Values |  |  |  |  |  |  |  |  | NS | Site/Reach-specific Values |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | LSC | AE | CR | Mau | $\mathrm{IA}^{2}$ | 12 | SW | ■ | CAP ${ }^{3}$ |  | SOS-A | SOS-R | IS | AM | WM | SOS-C | TF | TS | ws | DFS | FCID |
| Upper <br> Manawatu <br> (Mana_1) | Upper Manawatu (Mana_1a) | Manawatu River from Weber Road at approx. NZMS 260 U23:751-027 to source | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  |  | II | $\checkmark$ |  |  | $\checkmark$ |
|  | Mangatewainui (Mana_1b) | Mangatewainui River from Manawatu River confluence at approx. <br> NZMS 260 U23:829-086 to source | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | 11 | $\checkmark$ |  |  | $\checkmark$ |
|  | Mangatoro (Mana_1c) | Mangatoro Stream from Manawatu River confluence at approx. <br> NZMS 260 U23:810-027 to source | HSS | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  | II | $\checkmark$ |  |  | $\checkmark$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Weber-Tamaki (Mana 2) | 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 | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  |  |  |  | 11 |  |  |  | $\checkmark$ |
|  | Mangatera (Mana_2b) | Mangatera Stream from Manawatu River confluence at approx. <br> NZMS 260 U23:737-025 to source | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  |  | $\checkmark$ |  |  | $\checkmark$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^31]${ }^{3}$ All natural water bodies* and their beds^ except those classified as NS.


| Water <br> Management Zone* | Sub-zone* | Sub-zone* Description ${ }^{1}$ | Zone-wide Values |  |  |  |  |  |  |  |  | NS | Site/Reach-specific Values |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | LSC | AE | CR | Mau | $\mathrm{IA}^{2}$ | 12 | SW | 曰 | CAP3 |  | SOS-A | SOS-R | IS | AM | WM | SOS-C | TF | TS | Ws | DFS | FCID |
|  | Mangaramarama (Mana_7e) | Mangaramarama Creek from Tiraumea River confluence at approx. NZMS 260 T24:559-854 to source | HSS | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  |  |  |  |  | $\checkmark$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mangatainoka (Mana_8) | Upper <br> Mangatainoka <br> (Mana_8a) | Mangatainoka River from Larsons Road at approx. NZMS 260 T25:308-595 to source | UHS | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | II | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |
|  | Middlle <br> 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 | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | II | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |
|  | Lower Mangatainoka (Mana_8c) | Mangatainoka River from Tiraumea River confluence at approx. <br> NZMS 260 T24:577-854 to Makakahi River confluence at approx. NZMS 260 T24:475-775 | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ |  |  | II | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |
|  | Makakahi <br> (Mana_8d) | Makakahi River from Mangatainoka River confluence at approx. <br> NZMS 260 T24:475-775 to source | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | II | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Upper Gorge (Mana_9) | Upper Gorge <br> (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 | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  | III |  |  |  | $\checkmark$ |
|  | Mangapapa (Mana_9b) | Mangapapa Stream from Mangaatua Stream confluence at approx. <br> NZMS 260 T24:515-922 to source | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |
|  | Mangaatua (Mana_9c) | Mangaatua Stream from Manawatu River confluence at approx. <br> NZMS 260 T24:496-925 to source | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  |  |  | $\checkmark$ |
|  | Upper Mangahao (Mana_9d) | Mangahao River from Ballance at approx. NZMS 260 T24:468-818 to source | UHS | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | III | $\checkmark$ |  |  | $\checkmark$ |
|  | 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 | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  |  |  |  | III | $\checkmark$ |  |  | $\checkmark$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ | III |  |  |  | $\checkmark$ |
|  | Upper Pohangina (Mana 10b) | Pohangina River from Totara Reserve at approx. NZMS 260 T23:534-167 to source | UHS | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  | III | $\checkmark$ |  |  | $\checkmark$ |
|  | 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 | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | III | $\checkmark$ |  |  | $\checkmark$ |


| Water <br> Management Zone* | Sub-zone* | Sub-zone* Description ${ }^{1}$ | Zone-wide Values |  |  |  |  |  |  |  |  | NS | Site/Reach-specific Values |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | LSC | AE | CR | Mau | $\mathrm{IA}^{2}$ | 12 | SW | ■ | CAP3 |  | SOS-A | SOS-R | IS | AM | WM | SOS-C | TF | TS | Ws | DFS | FCID |
|  | Lower Pohangina <br> (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 | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  | $\checkmark$ | III |  |  |  | $\checkmark$ |
|  | Aokautere <br> (Mana_10e) | Aokautere Stream from Manawatu River confluence at approx. NZMS 260 T24:349-899 to source | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lower Manawatu (Mana_11) | Lower Manawatu <br> (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 | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ | III |  |  |  | $\checkmark$ |
|  | Turitea (Mana_11b) | Turitea Stream from Manawatu River confluence at approx. <br> NZMS 260 T24:304-881 to source | UHS | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ |  |  | III | $\checkmark$ | $\checkmark$ |  |  |
|  | Kahuterawa (Mana_11c) | Kahuterawa Stream from Manawatu River confluence at approx. NZMS 260 S24:292-876 to source | UHS | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  |  | III | $\checkmark$ |  |  |  |
|  | Upper Mangaone Stream (Mana_11d) | Mangaone Stream from Milson Line at approx. NZMS 260 T24:311-953 to source | LM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  |  |  |  |  | $\checkmark$ |
|  | 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 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ |
|  | Main Drain (Mana_11f) | Main Drain catchment (including Taonui Stream) from Manawatu River confluence at approx. NZMS 260 S24:181-836 to source | LM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  |  |  |  |  |  |  |  | $\checkmark$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oroua (Mana 12) | Upper Oroua (Mana_12a) | Oroua River from Almadale at approx. NZMS 260 T23:365-113 to source | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | III | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
|  | 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 | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ |  |  | III |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
|  | 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 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  |  |  | $\checkmark$ | III |  |  | $\checkmark$ | $\checkmark$ |
|  | Kivitea <br> (Mana_12d) | Kivitea Stream from Oroua River confluence at approx. NZMS 260 T23:309-066 to source | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
|  | Makino (Mana_12e) | Makino Stream from Oroua River confluence at approx. NZMS 260 S23:243-004 to source | LM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ |  |  | III | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |


| Water Management Zone* | Sub-zone* | Sub-zone* Description ${ }^{1}$ | Zone-wide Values |  |  |  |  |  |  |  |  | NS | Site/Reach-specific Values |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | LSC | AE | CR | Mau | $\mathrm{IA}^{2}$ | ${ }^{2}$ | SW | E | CAP3 |  | SOS-A | SOS-R | IS | AM | WM | SOS-C | TF | TS | Ws | DFS | FCID |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Coastal Manawatu (Mana 13) | Coastal <br> Manawatu <br> (Mana_13a) | Manawatu River at approx. <br> 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 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | III |  |  |  | $\checkmark$ |
|  | Upper Tokomaru (Mana 13b) | Tokomaru River from Horseshoe Bend at approx. NZMS 260 S24:241-768 to source | UHS | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | III | $\checkmark$ | $\checkmark$ |  |  |
|  | Lower Tokomaru <br> (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 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ |  |  | III | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |
|  | Mangaore (Mana_13d) | Mangaore River from Manawatu River confluence at approx. <br> NZMS 260 S24:123-717 to source | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  | $\checkmark$ |  | $\checkmark$ |
|  | Koputaroa <br> (Mana_13e) | Koputaroa Stream from Manawatu River confluence at approx. <br> NZMS 260 S24:106-708 to source | LM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  |  |  |  |  |  |  |  | $\checkmark$ |
|  | Foxton Loop (Mana_13f) | Manawatu River from downstream limit of Whirikino Cut at approx. <br> NZMS 260 S24:010-769 to SH1 | LM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  | $\checkmark$ |  | $\checkmark$ |  |  |  |  | $\checkmark$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Upper Rangitikei (Rang 1) | Upper Rangitikei (Rang_1) | Rangitikei River from Makahikatoa Stream at approx. NZMS 260 U21:726-888 to source | UHS | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | 1 | $\checkmark$ | $\checkmark$ |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Middle <br> Rangitikei <br> (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 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  | 1 | $\checkmark$ | $\checkmark$ |  |  |
|  | Pukeokahu Mangaweka (Rang_2b) | Rangitikei River from Mangaweka at approx. NZMS 260 T22:504-513 to Pukeokahu at approx. NZMS 260 U21:713-708 | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  |  | 1 | $\checkmark$ | $\checkmark$ |  |  |
|  | Upper Moawhango (Rang 2c) | Moawhango River from Moawhango Dam at approx. NZMS 260 T20:469-960 to source | UVA | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  |  |  | III | $\checkmark$ | $\checkmark$ |  |  |
|  | Middle <br> Moawhango <br> (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 | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  |  |  |  | III | $\checkmark$ | $\checkmark$ |  |  |


| Water <br> Management Zone* | Sub-zone* | Sub-zone* Description ${ }^{1}$ | Zone-wide Values |  |  |  |  |  |  |  |  | NS SOS-A |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | LSC | AE | CR | Mau | $\mathrm{IA}^{2}$ | 12 | SW | ■ | CAP ${ }^{3}$ |  |  | SOS-R ${ }^{\text {I }}$ IS AM |  |  | WM | SOS-C | TF | TS | ws | DFS | FCID |
|  | Lower <br> Moawhango <br> (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 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  | III |  | $\checkmark$ |  |  |
|  | Upper Hautapu (Rang 2f) | Hautapu River from Taihape at approx. NZMS 260 T21:506-670 to source | UVM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  | $\checkmark$ |  |  | II | $\checkmark$ | $\checkmark$ |  |  |
|  | 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 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  | $\checkmark$ |  |  | III | $\checkmark$ | $\checkmark$ |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lower <br> Rangitikei <br> (Rang 3) | Lower Rangitikei (Rang_3a) | Rangitikei River from Onepuhi at approx. NZMS 260 S23:201-222 to Mangaweka at approx. NZMS 260 T22:504-513 | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | I/II | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |
|  | Makohine <br> (Rang_3b) | Makohine Stream from Rangitikei River confluence at approx. NZMS 260 T22:400-443 to source | HSS | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Coastal <br> Rangitikei <br> (Rang 4) | Coastal Rangitikei (Rang_4a) | Rangitikei River from McKelvies at approx. NZMS 260 S24:033-985 to Onepuhi at approx. NZMS 260 S23:201-222 | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |  |  |  | III |  | $\checkmark$ |  | $\checkmark$ |
|  | Tidal Rangitikei (Rang_4b) | Rangitikei River at approx. <br> 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 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | III |  | $\checkmark$ |  | $\checkmark$ |
|  | Porewa (Rang_4c) | Porewa Stream from Rangitikei River confluence at approx. NZMS 260 S23:190-212 to source | HSS | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |
|  | Tutaenui <br> (Rang_4d) | Tutaenui Stream from Rangitikei River confluence at approx. NZMS 260 S23:101-095 to source | LM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ |  |  |  |  | $\checkmark$ |  | $\checkmark$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Upper Whanganui (Whai_1) | Upper Whanganui (Whai_1) | Whanganui River from Whakapapa River confluence at approx. NZMS 260 S19:189-499 to source | UVA | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | III | $\checkmark$ | $\checkmark$ |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cherry Grove <br> (Whai_2) | Cherry Grove <br> (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 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  | $\checkmark$ |  |  | III | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |


| $\begin{aligned} & \text { Water } \\ & \text { Management } \\ & \text { Zone* } \end{aligned}$ | Sub-zone* | Sub-zone* Description ${ }^{1}$ | Zone-vide Values |  |  |  |  |  |  |  |  | Site/Reach-specific Values |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | LSC | AE | CR | Mau | $\mathrm{IA}^{2}$ | 12 | SW | ■ | CAP3 | NS | SOS-A | Sos-R | IS | AM | UM | sos-c | TF | TS | ws | DFS | FCID |
|  | Upper Whakapapa (Whai 2b) | Whakapapa River from Footbridge at approx. NZMS 260 S19:226-293 to source | UNA | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | 11/II | $\checkmark$ | $\checkmark$ |  |  |
|  | 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 | UNA | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  |  | 11/11 | $\checkmark$ | $\checkmark$ |  |  |
|  | Piopiotea (Whai_2d) | Piopiotea Stream from Whakapapa River confluence at approx. NZMS 260 S19:174-356 to source | UNA | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | III | $\checkmark$ | $\checkmark$ |  |  |
|  | Pungapunga (Whai_2e) | Pungapunga River from Whanganui River confluence at approx. NZMS 260 S18:124-546 to source | UMM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | III | $\checkmark$ | $\checkmark$ |  |  |
|  | Upper Ongarue (Whai_2f) | Ongarue River from Waihuka Stream confluence at approx. NZMS 260 S18:108-785 to source | UNA | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | 11/11 | $\checkmark$ | $\checkmark$ |  |  |
|  | 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 | UMM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  |  | III | $\checkmark$ |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 | UMM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | III |  |  |  | $\checkmark$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Middle Whanganui (Whai_4) | 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 | UMM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | III |  |  |  |  |
|  | Upper Ohura (Whai 4b) | Ohura River from Tokorima at approx. NZMS 260 R18:863-521 to source | HSS | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  |  | $\checkmark$ |  |  |
|  | 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 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  |  |  |  |  |
|  | Retaruke (Whai_4d) | Retaruke River from Whanganui River confluence at approx. NZMS 260 R19:890-309 to source | UMM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | III | $\checkmark$ |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | III |  |  |  |  |


| Water Management Zone* | Sub-zone* | Sub-zone* Description ${ }^{1}$ | Zone-wide Values |  |  |  |  |  |  |  |  |  | Site/Reach-specific Values |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | LSC | AE | CR | Mau | $\mathrm{IA}^{2}$ | 12 | SW | ■ | CAP ${ }^{3}$ | NS | SOS-A | SOS-R | IS | AM | WM | SOS-C | TF | TS | ws | DFS | FCID |
|  | Tangarakau (Whai_5b) | Tangarakau River from Whanganui River confluence at approx. NZMS 260 R20:714-175 to source | HSS | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  |  |  |  |
|  | Whangamomona (Whai_5c) | Whangamomona River from Whanganui River confluence at approx. NZMS 260 R20:731-130 to source | HSS | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{gathered} \hline \text { Upper Manganui o } \\ \text { te Ao } \\ \text { (Mhai_5d) } \\ \hline \end{gathered}$ | Manganui o te Ao River from Makatote River confluence at approx. NZMS 260 S20:129-120 to source | UVA | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | 1 |  |  |  |  |
|  | Makatote (Whai_5e) | Makatote River from Manganui o te Ao River confluence at approx. NZMS 260 S20:129-120 to source | UVA | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | 1 | $\checkmark$ |  |  |  |
|  | Waimarino <br> (Whai_5f) | Waimarino Stream from Makatote River confluence at approx. NZMS 260 S20:129-120 to source | UVA | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | 1 |  |  |  |  |
|  | Middle Manganui ote Ao <br> (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 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  |  | 1 | $\checkmark$ |  |  |  |
|  | Mangaturuturu <br> (Whai_5h) | Mangaturuturu River from Manganui o te Ao River confluence at approx. NZMS 260 S20:057-067 to source | UVA | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | 1 |  |  |  |  |
|  | 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 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | 1 | $\checkmark$ |  |  |  |
|  | Orautoha (Whai_5j) | Orautoha Stream from Manganui o te Ao River confluence at approx. NZMS 260 S20:026-067 to source | UVM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | 1 | $\checkmark$ |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  | III |  | $\checkmark$ |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lower Whanganui (Mhai_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 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | III |  |  |  | $\checkmark$ |


| Water Management Zone* | Sub-zone* | Sub-zone* Description ${ }^{1}$ | Zone-vide Values |  |  |  |  |  |  |  |  | Site/Reach-specific Values |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | LSC | AE | CR | Mau | $\mathrm{IA}^{2}$ | 12 | SW | ■ | CAP3 | NS | SOS-A | SOS-R | IS | AM | WM | SOS-C | TF | TS | WS | DFS | FCID |
|  | Coastal <br> Whanganui <br> (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) | LM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | III |  |  |  | $\checkmark$ |
|  | Upokongaro (Whai_7c) | Upokongaro River from Whanganui River confluence at approx. NZMS 260 S22:908-463 to source | HSS | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  |  |  |  |  |  |  |  |  |
|  | Matarawa <br> (Whai_7d) | Matarawa River from Whanganui River confluence at approx. NZMS 260 R22:857-403 to source | HSS | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | $\checkmark$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Upper <br> Whangaehu <br> (Whau_1) | Upper Whangaehu (Mhau_1a) | Whangaehu River from Karioi at approx. NZMS 260 S21:218-864 to source | UVA | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  | $\checkmark$ |  |
|  | Waitangi <br> (Whau_1b) | Waitangi Stream from Whangaehu River confluence at approx. <br> NZMS 260 T21:316-888 to source | UVM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  | III | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |
|  | Tokiahuru (Whau_1c) | Tokiahuru Stream from Whangaehu River confluence at approx. NZMS 260 S21:219-865 to source | UVA | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  | III | $\checkmark$ |  | $\checkmark$ |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Middle Whangaehu (Whau_2) | Middlle Whangaehu (Whau_2) | Whangaehu River from Aranui at approx. NZMS 260 S21:175-627 to Karioi at approx. NZMS 260 S21:218-864 | HSS | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  |  |  |  | $\checkmark$ |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lower Whangaehu (Whau_3) | Lower <br> Whangaehu <br> (Mnau_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 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | III |  |  | $\checkmark$ | $\checkmark$ |
|  | Upper Makotuku (Whau_3b) | Makotuku River from water supply weir at approx. NZMS 260 S20:103-011 to source | UVA | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  | III | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |
|  | 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 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  | III | $\checkmark$ |  | $\checkmark$ |  |
|  | Upper <br> Mangawhero (Whau_3d) | Mangawhero River from Makotuku River confluence at approx. NZMS 260 S20:080-903 to source | UVA | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  |  | III | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |




| Water Management Zone ${ }^{\star}$ | Sub-zone* | Sub-zone* Description ${ }^{1}$ | Zone-wide Values |  |  |  |  |  |  |  |  | NS | Site/Reach-specific Values |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | LSC | AE | CR | Mau | $\mathrm{IA}^{2}$ | 12 | SW | ■ | CAP ${ }^{3}$ |  | SOS-A | SOS-R | IS | AM | WM | SOS-C | TF | TS | ws | DFS | FCID |
| Northern <br> 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 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | $\checkmark$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Waitarere <br> (West 7) | Waitarere (West_7) | All lakes and lagoons between Coastal Manawatu and Lake Horowhenua catchment and all surrounding catchment area | LS | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  | $\checkmark$ |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lake Papaitonga (West 8) | Lake Papaitonga (West_8) | Lake Papaitonga catchment | LS | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  |  |  |  | $\checkmark$ | $\checkmark$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Waikama (West 9) | Waikawa (West_9a) | Waikawa Stream at approx. <br> 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 ) | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
|  | Manakau <br> (West_9b) | Manakau Stream from Waikawa Stream confluence at approx. NZMS 260 S25:946-549 to source | HM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lake Horowhenua (Hoki_1) | Lake Horowhenua <br> (Hoki_1a) | Whole lake catchment above Hokio Stream outlet | LM | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ |
|  | $\begin{aligned} & \text { Hokio } \\ & \text { (Hoki_1b) } \end{aligned}$ | 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 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  | $\checkmark$ | $\checkmark$ |

Part B.2: $\quad$ 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


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).

| Water Management Zone* | Sub-zone* | Rivern | 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 <br> Tokomaru <br> (Mana_13b and <br> 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 Zone* | Sub-zone* | Site | Locality Description | Species |
| :---: | :---: | :---: | :---: | :---: |
| 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 Galaxias |
|  | Mangatewainui <br> (Mana_1b) | Mangatewainui River | From approx. NZMS 260 U23:828-177 to approx. NZMS 260 U23:785-231 | Dwarf Galaxias |
| 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 Galaxias |
| Upper Kumeti (Mana 4) | Upper Kumeti (Mana 4) | Kumeti/Mangapuaka Stream | From approx. NZMS 260 T23:646-091 to source | Dwarf Galaxias |
| Tamaki-Hopelands (Mana 5) | Lower Tamaki (Mana_5b) | Rokaiwhana Stream | From the confluence with the Tamaki River at approx. NZMS 260 T23:697-091 to source | Dwarf Galaxias |
|  | Oruakeretaki <br> (Mana_5d) | Mangapukakakahu Stream | From the confluence with the Oruakeretaki River at approx. NZMS 260 T23:666-023 to source | Dwarf Galaxias |
|  |  | Oruakeretaki Stream | From approx. NZMS 260 T23:642-045 to approx. NZMS 260 T23:618-067 | Dwarf Galaxias |
|  |  | Oruakeretaki Tributary | From the confluence with the Oruakeretaki Stream at approx. NZMS 260 T23:628-058 to source | Dwarf Galaxias |
| Tiraumea (Mana 7) | Lower Tiraumea (Mana 7b) | Makairo Stream | From approx. NZMS 260 T24:655-833 to source | Shortjaw kokopu and koaro |
| 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 koaro |
|  |  | 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 koaro |
|  |  | 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 Galaxias |
|  | 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 |


| 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 <br> (Mana_9) | Upper Gorge (Mana_9a) | Manawatu River Tributary | From the confluence with the Manawatu River at approx. NZMS 260 T24:486-899 to source | Redfin bully |
|  |  | Manawatu River Tributary | From the confluence with the Manawatu River at approx. NZMS 260 T24:490-928 to source | Redfin bully |
|  | Mangaatua (Mana_9c) | Mangaatua Stream | From approx. NZMS 260 T24:590-992 to approx. NZMS 260 T23:574-023 | Shortjaw kokopu |
|  | Lower Mangahao (Mana_9e) | Mangahao Tributary | From the confluence with the Mangahao River at approx. NZMS 260 S25:150-532 to source | Dwarf Galaxias |
|  |  | Mangahao River | From approx. NZMS 260 T25:324-679 to source | Dwarf Galaxias and shortjaw kokopu |
|  |  | Roaring Creek | From the confluence with the Mangahao River at approx. NZMS 260 S25:190-606 to source | Dwarf Galaxias |
|  |  | 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_10) | 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 |
|  | Upper Pohangina <br> (Mana_10b) | Pohangina Tributary | From the confluence with the Pohangina River at approx. NZMS 260 T23:652-233 to source | Koaro |
|  |  | Pohangina River | From approx. NZMS 260 U23:705-256 to approx. NZMS 260 U23:708-303 | Whio |
|  |  | Makawakawa Stream Tributary | From approx. NZMS 260 T23:606-173 to source | Koaro |
|  | Middle Pohangina <br> (Mana_10c) | Pohangina River | From approx. NZMS 260 T23:468-058 to approx. NZMS 260 T23:469-086 | Koaro |
|  |  | Waitokanui Stream | From the confluence with the Pohangina River at approx. NZMS 260 T23:474-069 to source | Redfin bully |
|  | Lower Pohangina <br> (Mana_10d) | Ashhurst Domain | At approx. NZMS 260 T24:446-967 to approx. NZMS 260 T24:444-940 | Brown mudfish |
| Lower Manawatu (Mana_11) | Turitea <br> (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 |
|  | 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 <br> (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 |


| Weter Management Zone* | Sub-zone* | Site | Locality Description | Species |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Oroua River | From approx. NZMS 260 T22:667-349 to source | Banded kokopu |
|  | $\begin{gathered} \text { Makino } \\ \text { (Mana_12e) } \end{gathered}$ | Mangaone West Stream | From approx. NZMS 260 S23:258-050 to approx. NZMS 260 S23:236-064 | Redfin bully |
| Coastal Manamatu (Mana 13) | Coastal Manawatu (Mana_13a) | Round Bush Scenic Reserve and Tributary | From approx. NZMS 260 S24:013-835 to source at approx. NZMS 260 S24:058-819 | Brown mudfish |
|  |  | Heatherlea Park Swamp | At approx. NZMS 260 S25:041-667 | Banded kokopu |
|  |  | Te Whanga Swamp | At approx. NZMS 260 S25:030-672 | Banded kokopu |
|  | Upper Tokomaru (Mana_13b) | 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 |
|  |  | 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 |
|  | 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 <br> (Mana_13d) | 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 |
|  | Koputaroa (Mana_13e) | Perawitis Wetland | At approx. NZMS 260 S25:094-688 and approx. NZMS 260 S25:095-688 | Brown mudfish |
| Upper Rangitikei (Rang 1) | Upper Rangitikei (Rang_1) | Rangitikei River | From approx. NZMS 260 U20:707-031 to approx. NZMS 260 U19:716-274 | Whio |
|  |  | Mangamarie River | From the confluence with the Rangitikei River at approx. NZMS 260 T20:691-090 to approx. NZMS 260 T20:699-102 | Whio |
|  |  | 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 | Dvarf Galaxias and redfin bully |
|  |  | Hikurangi Stream | From the confluence with the Kawhatau River at approx. NZMS 260 T22:661-530 to source | Dwarf Galaxias |
|  |  | Mangawhararik River | From approx. NZMS 260 T22:602-449 to approx. NZMS 260 T22:632-444 | Dwarf Galaxias |
| 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 (Rang 4) | Tidal Rangitikei (Rang_4b) | Forest Road Wetland | From approx. NZMS 260 S23:016-028 to approx. NZMS 260 S23:040-034 | Giant kokopu |
|  | 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 <br> (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 |
|  | Upper Whakapapa <br> (Whai_2b) | Waikare Stream | From the confluence with the Whakapapaiti Stream at approx. NZMS 260 S19:238-224 to approx. NZMS 260 S19:287-216 | Whio |
|  |  | Mangahuia Stream | From the confluence with the Whakapapaiti Stream at approx. NZMS 260 S19:233-230 to approx. NZMS 260 S19:238-166 | Whio |
|  |  | 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 <br> (Whai_2d) | Piopiotea Stream | From the confluence with the Whakapapa River at approx. NZMS 260 S19:174-356 to approx. NZMS 260 S19:183-275 | Whio |
|  |  | 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 <br> (Whai_2e) | Pungapunga River | From approx. NZMS 260 S18:291-612 to source | Whio |
|  |  | Pungapunga River | From approx. NZMS 260 S18:234-573 to source | Koaro |
|  | Upper Ongarue <br> (Whai_2f) | 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 |
|  |  | 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 <br> (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_4) | 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 |
|  | Retaruke <br> (Whai_4d) | Retaruke River | From the confluence with the Whanganui River at approx. NZMS 260 R19:890-309 to approx. NZMS 260 S19:072-213 | Whio |
|  |  | 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) | Pipiriki (Whai_5a) | Mangapurua Stream and tributaries | From approx. NVMS 260 R20:800-117 to source | Whio |
|  |  | Mangatiti Stream and tributaries | From approx. NZMS 260 R20:832-079 to source | Whio |
|  |  | Kainhakauka 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 |
|  | Tangarakau (Whai_5b) | Waitaanga Stream Tributary | From the confluence with the Waitaanga Stream at approx. NZMS 260 R18:710-645 to source | Redfin bully |
|  |  | Heao Stream | From approx. NZMS 260 R18:781-513 to source | Shortjaw kokopu and koaro |
|  |  | 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 |
|  | Whangamomona (Whai_5c) | Tirohanga Stream | From the confluence with the Whangamomona River at approx. NZMS 260 R20:658-157 to source | Shortjaw kokopu |
|  |  | 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 |
| :---: | :---: | :---: | :---: | :---: |
| Paetana <br> (Whai_6) | Upper Middlle 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 <br> (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 <br> (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 |
|  | Middlle Manganui o te Ao (Whai_5g) | Makomiko Stream | From the confluence with the Waimarino Stream at approx. NZMS 260 S20:153-168 to source | Koaro |
|  |  | 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 <br> (Whai_5h) | 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 |
|  |  | 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 |
|  | Paetawa <br> (Whai_6) | 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 |
|  |  | Otuporiki Stream | From the confluence with the Whanganui River at approx. NZMS 260 S21:950-696 to source | Redfin bully |
|  |  | 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 |


| Weter Management Zone* | Sub-zone* | Site | Locality Description | Species |
| :---: | :---: | :---: | :---: | :---: |
| Lower Whanganui (Mhai_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 (Whau_1) | Upper Whangaehu (Mhau_1a) | Unnamed Tributary of the Whangaehu River | From approx. NZMS 260 T20:410-019 to source | Whio |
|  |  | 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 |
|  | Tokiahuru (Whau_1c) | Unnamed Tributary of the Tokiahuru Stream | From approx. NZMS 260 T20:341-027 to source | Whio |
|  |  | 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 (Mhau_3) | Lower Whangaehu (Mhau_3a) | Taukoro Stream | From the confluence with the Mangawhero River at approx. NZMS 260 S22:083-566 to source | Koaro |
|  | Upper Mangawhero (Whau_3d) | Mangawhero River | From approx. NZMS 260 S20:179-978 (Ohakune) to source | Whio |
|  |  | 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 |
| Ohau(Ohau_1) | Upper Ohau (Ohau_1a) | Waiti Stream | From the confluence with the Ohau River at approx. NZMS 260 S25:118-604 to source | Redfin bully |
|  | 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 |
|  | Lower Ohau (Ohau_1b) | Ohau River | From approx. NZMS 260 S25:982-578 to approx. NZMS 260 S25:039-574 | Redifin bully |
|  |  | Makorokio Stream | From the confluence with the Ohau River at approx. NZMS 260 S25:018-563 to source | Redfin bully, lamprey and shortjaw kokopu |
| Ovahanga (Owha 1) | Owahanga (Ouha_1) | Owahanga River | From approx. NZMS 260 U25:902-585 to approx. NZMS 260 U25:889-568 | Redfin bully |
|  |  | Pongaroa River | From approx. NZMS 260 U24:778-708 to source | Redin 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 | Redifin bully |


| Weter 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 |
| Akitio (Akit_1) | 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 |
|  | Lower Akitio (Akit_1b) | Middle Creek | From the confluence with the Akitio River at approx. NZMS 260 U25:986-654 to source | Redfin bully and banded kokopu |
|  |  | 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 |
| Northem Coastal (Mest 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 <br> NZMS 260 R22:2672640-6144895 to approx. NZMS 260 R22:743-462 | Redfin bully |
| Southern Whanganui Lakes (West_5) | Southern Whanganui Lakes (West_5) | Unnamed Stream Santoft Forest | From the cross-river CMA boundary at approx. <br> NZMS 260 S23:954-173 to Lake Koitiata at approx. NZMS 260 S23:973-185 | Banded kokopu |
|  |  | Waimahora Stream | From the cross-river CMA boundary at approx. <br> NZMS 260 S23:961-153 to approx. NZMS 260 S23:989-154 | Banded kokopu |
|  |  | 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 (West_8) | Lake Papaitonga (West_8) | Lake Papaitonga | Lake Papaitonga Wetland at approx. NZMS 260 S25:991-600 | Brown mudfish |
|  |  | Lake Papaitonga and tributaries | From the confluence with Lake Papaitonga and Waiwiri Stream at approx. NZMS 260 S25:977-600 to source | Banded kokopu |
| Waikana (West_9) | Waikawa (West_9) | Panatewaewae Stream | From the confluence with the Waikawa Stream at approx. NZMS 260 S25:017-498 to source | Koaro |
|  |  | 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 |


| Weter Management <br> Zonet | Sub-zone* | Site | Locality Description | Species |
| :---: | :---: | :---: | :---: | :---: |
| Lake Horowhenua <br> (Hoki_1) | Lake Horowhenua <br> (Hoki_1a) | Patiki Stream | From the confluence with Lake Horowhenua at <br> approx. $N$ MS 260 S25:019-642 to source | Giant kokopu |
|  | Whitiki Swamp | At approx. NZMS 260 S25:010-655 | Brown mudfish |  |



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* | Rivern | 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) | TamakiHopelands (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- <br> Tiraumea <br> (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 <br> 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 9) | 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 Mangahao (Mana 9d) | Mangahao River | From approx. NZMS 260 T24:469-826 to approx. NZMS 260 T25:309-684 | Gravel and sand (dotterel) |
|  | Lower Mangahao <br> (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_10) | 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) |
|  | Upper Pohangina (Mana_10b) | Pohangina River | From approx. NZMS 260 T23:534-168 to approx. NZMS 260 T23:577-213 | Gravel and sand (dotterel) |
|  | 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 Manamatu (Mana 11) | Lower Manawatu <br> (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 <br> (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 | Sub-zone* | River | Locality Description | Riparian Habitat Value |
| :---: | :---: | :---: | :---: | :---: |
|  | Kivitea (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 <br> Manawatu <br> (Mana_13a) | 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) |
|  |  |  | 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 (Rang 2) | Upper <br> Moawhango (Rang_2c) | Moawhango River and tributaries | From approx. NZMS 260 T20:468-948 to source | Gravel and sand (dotterel) |
|  | 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) | $\begin{gathered} \hline \begin{array}{c} \text { Lower Rangitikei } \\ \text { (Rang_3a) } \end{array} \\ \hline \end{gathered}$ | 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) |
| Paetana (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_7) | 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 |
|  |  | Kauarapaoa Stream | From the confluence of the Whanganui River and the Kaurapaoa Stream at approx. NZMS 260 R22:886-537 to 1 km upstream at approx. NZMS 260 R22:891-544 | Nankeen night heron roosts |
|  |  | Whanganui River | From approx. NZMS 260 R22:861-422 to approx. NZMS 260 R26:878-505 (near Kaiwhaik) | Mud/silt habitat and estuarine roosts (waders) |
|  | 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 (Whau_1) | Upper Whangaehu (Mhau_1a) | Whangaehu River and tributaries | From approx. NZMS 260 T20:397-960 to source | Gravel and sand (dotterel) |
|  |  | Makahikatoa Stream and tributaries | From approx. NZMS 260 T20:396-008 to source | Gravel and sand (dotterel) |
|  |  | 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 <br> 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 <br> (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) | Tuatane Stream | From approx. NZMS 260 V24:132-730 to approx. NZMS 260 V24:136-737 | Mud/silt habitat and estuarine roosts (waders) |
| Waikama (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) |



Figure B:5 Visual Guide to the Distribution of the Inanga Spawning (IS) Value

## Table B.5: Inanga Spamning (IS) Value in the Region

| Water Management Zone* | Sub-zone* | River | Locality Description |
| :---: | :---: | :---: | :---: |
| Coastal Manawatu (Mana 13) | Coastal Manawatu <br> (Mana_13a) | Manawatu River | From the cross-river CMA boundary at NZMS 260 S24:2700963-6076686 to a point 100 m upstream |
|  |  | Whitebait Creek | From the confluence with the Manawatu River at approx. NZMS 260 S24:982-791 to source |
| Coastal Rangitikei (Rang 4) | Tidal Rangitikei <br> (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_7) | Lower Whanganui (Mhai_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 |
|  | Coastal Whanganui (Whai_7b) | Whanganui River | From the cross-river CMA boundary at NZMS 260 R22:2684857-6138015 to a point 100 m upstream |
|  |  | 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 (Ohau_1) | Lower Ohau <br> (Ohau_1b) | Ohau River | From the cross-river CMA boundary at NZMS 260 S25:2692921-6059503 to approx. NZMS 260 S25:948-579 |
|  |  | 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 (Akit_1) | Lower Akitio <br> (Akit_1b) | Akitio River | From the cross-river CMA boundary at NZMS 260 U25:2799657-6061852 to a point 100 m upstream |
|  |  | 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 Ivi (West 2) | Kai Ivi (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 <br> (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 |
| Southem Whanganui Lakes (West 5) | 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 |
|  |  | Waimahora Stream | From the cross-river CMA boundary to intersection with Santoft Rd at approx. NZMS 260 S23:001-154 |
|  |  | Raumai Range Stream | From the cross-river CMA boundary to source |
| Northern Manavatu Lakes (West 6) | Northern Manawatu Lakes (West_6) | Kaikokopu Stream | From the cross-river CMA boundary to Lake Kaikokopu at approx. NZMS 260 S24:019-899 |
|  |  | 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) | Wainiri Stream | From the cross-river CMA boundary to a point 500 m upstream at approx. NZMS 260 S25:939-618 |
| Lake Horowhenua (West 9) | $\begin{aligned} & \text { Hokio } \\ & \text { (Hoki_1b) } \end{aligned}$ | Hokio Stream | From the cross-river CMA boundary at NVMS 260 S25:2694967-6065799 to 100 m upstream |



Figure B: $6 \quad$ Visual Guide to the Distribution of the Whitebait* Migration (WM) Value

## Table B.6: Whitebait* Mgration (MM) Value in the Region

| Water Management Zone ${ }^{\star}$ | Sub-zone* | Rivern | Locality Description |
| :---: | :---: | :---: | :---: |
| Coastal Manawatu <br> (Mana 13) | Coastal Manawatu <br> (Mana_13a) | 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 |
|  |  | 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 |
| 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_7) | Lower Whanganui <br> (Whai_7a) | 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 |
|  |  | 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. <br> NZMS 260 S22:936-551 |
|  | Coastal Whanganui (Whai_7b) | 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 |
|  |  | Omapu Stream | From the cross-river CMA boundary to a point 1 km upstream at approx. NZMS 260 R22:750-441 |
|  | Matarawa <br> (Whai_7d) | Matarawa Stream | From the confluence with the Whanganui River at approx. NZMS 260 R22:858-398 to the intersection with Ikitara Road at approx. NZMS 260 R22:869-409 |
| Coastal Whangaehu (Whau 4) | Coastal Whangaehu <br> (Whau_4) | Whangaehu River | From the cross-river CMA boundary at NZMS 260 S23:2690359-6128748 to the SH 3 bridge at approx. NZMS 260 S22:950-310 |
| Ohau <br> (Ohau 1) | Lower Ohau <br> (Ohau_1b) | Ohau River | From the cross-river CMA boundary at NZMS 260 S25:2692921-6059503 to approx. NZMS 260 S25:948-579 |
|  |  | 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 | Akitio River | From the cross-river CMA boundary at NZMS 260 U25:2799657-6061852 to a point 100 m upstream |


| Water Management <br> Zonet | Sub-zone* | Rivern | 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 |  |  |  |

Sites of Significance - Cultural (SOS-C)


Figure B:7 Visual Guide to the Distribution of the Sites of Significance - Cultural (SOS-C) Value

| Water Management Zone* | Sub-zone* | Fivern | Locality Description ${ }^{1}$ | Reason | Ivi |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Middle, Lower and Coastal Manamatu (Mana 10, Mana 11 and Mana 13) | Middlle, Lower and Coastal Manawatu <br> (Mana_10a, Mana_11a and Mana_13a) | Manawatu River | Specific sites* 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 <br> (Mana_10d) | Pohangina River | Specific sites* 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 <br> (Mana 12) | Lower Oroua (Mana_12c) | Oroua River | Specific sites* 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 <br> (Mana_13f) | Foxton Loop | Specific sites* 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 |

[^32]
## Trout Fishery (TF) Value



Figure B:8 Visual Guide to the Distribution of the Trout Fishery (TF) Value

Table B.8: Trout Fishery (IT) Value in the Region

| Water Management Zone* | Sub-zone* | Fivern | 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, TamakiHopelands and Hopelands-Tiraumea <br> (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. <br> 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 |
| Tiraumea (Mana_7) | 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 |
|  | Lower Tiraumea (Mana_7b) | Makairo Stream | From approx. NZMS 260 T24:598-831 to source | Other Trout Fishery |
|  | Makuri <br> (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 <br> (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 (Mana_9) | 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 |
|  | 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 |
| Middlle Manawatu (Mana 10) | Middle Manawatu <br> (Mana_10a) | Manawatu River | From approx. NZMS 260 T24:332-890 to approx. NZMS 260 T24:495-938 | Other Trout Fishery |
|  | 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 <br> (Mana_11b) | Turitea Stream | From approx. 800 m downstream of the Old West Road bridge at approx. NZMS 260 T24:331-875 to approx. <br> NZMS 260 T24:363-825 | Other Trout Fishery |


| Water Management Zone* | Sub-zone* | Rivern | 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 |
| Oroua <br> (Mana 12) | 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 |
|  | 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 Manavatu (Mana_13) | Coastal Manawatu <br> (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 |
|  | 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 <br> (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 |


| Weter 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 |
|  | Pukeokahu-Mangaweka (Rang_2b) | Rangitikei River | From the confluence with the Mangawharariki River at approx. NZMS 260 T22:504-519 to approx. NZMS 260 U21:713-707 | Outstanding |
|  |  | 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. NVMS 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 |
| Lover Rangitikei (Rang 2) | 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 |
|  |  | 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 (Mhai_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 | Other Trout Fishery |
|  |  | 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 |
|  |  | Herungaveka Stream | From the confluence with the Taringapupu Stream at approx. NZMS 260 S18:229-511 to source | Other Trout Fishery |


| Weter Management Zone* | Sub-zone* | Fiver^ | 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 |
|  | Upper Whakapapa (Whai_2b) | Whakapapaiti Stream | From the confluence with the Whakapapa River at approx. NZMS 260 S19:243-268 to source | Other Trout Fishery |
|  |  | 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 Streamat 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 |


| Weter Management Zone* | Sub-zone* | Fivern | 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 |
|  | Upper Ongarue <br> (Whai_2f) | 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 |
|  |  | 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 <br> (Whai_2g) | Mangakahu Stream | From the confluence with the Ongarue River at approx. NZMS 260 S18:087-736 to source | Other Trout Fishery |
|  |  | 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 <br> (Whai_4d) | Retaruke River | From the confluence with the Whanganui River at approx. NZMS 260 R19:889-309 to source | Other Trout Fishery |
| Pipiriki (Whai 5) | Makatote <br> (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 <br> (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 |
|  | 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 <br> (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 (Mhai_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 (Whau_2) | Waitangi (Whau_2b) | Waitangi Stream | From the confluence with the Whangaehu River at approx. NZMS 260 T21:315-888 to source | Other Trout Fishery |
|  | 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 |
| Lower Whangaehu (Whan_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 | Other Trout Fishery |
|  | 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 |
| Kaitoke Lakes (West 4) | Kaitoke Lakes (West_4) | Lake Writoa | Lake Writoa at approx. NZMS 260 R22:871-350 | Other Trout Fishery |
|  |  | 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 <br> (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 |



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 |
| :---: | :---: | :---: | :---: |
| Upper Manawatu (Mana_1) | Upper Manawatu (Mana_1a) | Manawatu River | From the confluence with the Kahututaeatua Stream at approx. NZMS 260 U23:891-194 to source |
|  |  | Mangarangiora Stream and tributaries | From the confluence with the Manawatu River at approx. NZMS 260 U23:879-145 to source |
|  |  | 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 |
|  |  | Mangapuaka Stream and tributaries | From the confluence with the Manawatu River at approx. NZMS 260 U23:841-044 to source |
|  | 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 |
|  |  | Mangatoro River and tributaries | From the confluence with the Mangamarie Stream at approx. NZMS 260 U24:838-991 to source |
| Weber - Tamaki (Mana 2) | 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 |
|  |  | 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 (Mana_5) | Tamaki - Hopelands (Mana 5a) | Otawhao Stream and tributaries | From the confluence with the Manawatu River at approx. NZMS 260 T24:651-935 to source |
|  |  | Totara Stream and tributaries | From the confluence with the Manawatu River at approx. NVMS 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 <br> (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 |


| Weter Management Zone* | Sub-zone* | Fiver | 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 |
| Mangatainoka (Mana 8) | 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 |
|  | Middle Mangatainoka (Mana_8b) | Mangaraupiu Stream | From the confluence with the Mangatainoka River at approx. NZMS 260 T25:366-655 to approx. NZMS 260 T25:322-665 |
|  |  | 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 |
| Upper Gorge (Mana 9) | 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 |
|  | Upper Mangahao (Mana_9d) | Unnamed Tributary | From the confluence with the Mangahao River at approx. NVMS 260 T24:348-700 to source |
|  |  | Unnamed Tributary | From the confluence with the Mangahao River at approx. NZMS 260 T24:364-704 to source |
|  |  | Orangane Stream | From the confluence with the Mangahao River at approx. NZMS 260 T24:377-716 to source |
|  |  | 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 Oreek | From the confluence with the Mangahao River at approx. NZMS 260 T24:484-844 to source |


| Water Management Zone* | Sub-zone* | River | Locality Description |
| :---: | :---: | :---: | :---: |
| Middle Manamatu (Mana 10) | Upper Pohangina (Mana_10b) | 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 Piver at approx. NZMS 260 T23:568-199 to source |
|  |  | 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 |
|  |  | Opave Stream | From the confluence with the Pohangina River at approx. NZMS 260 T23:544-161 to approx. NZMS 260 T23:556-144 |
|  | Middle Pohangina (Mana_10c) | Makiekie (Coal) Creek and tributaries | From the confluence with the Pohangina River at approx. NZMS 260 T23:528-165 to source |
|  |  | Ohinetapu Stream and tributaries | From the confluence with the Pohangina River at approx. NZMS 260 T23:517-131 to source |
|  |  | M 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 (Mana 11) | Turitea <br> (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 |
|  | Kahuterawa <br> (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 |
| $\begin{aligned} & \text { Oroua } \\ & \text { (Mana_12) } \end{aligned}$ | Upper Oroua <br> (Mana_12a) | Oroua River | From the confluence with the Tunupo Creek at approx. NZMS 260 T22:699-356 to approx. <br> NZMS 260 U22:715-378 |
|  |  | Tunupo Creek | From the confluence with the Oroua River at approx. NVMS 260 T22:699-356 to source |
|  |  | 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 |
| :---: | :---: | :---: | :---: |
|  | Kivitea (Mana_12c) | Kivitea Stream | From the confluence with the Oroua River at approx. NZMS 260 T23:308-066 to approx. NZMS 260 T23:363-215 |
|  | $\begin{gathered} \text { Makino } \\ \text { (Mana_12d) } \end{gathered}$ | Makino Stream | From approx. NZMS 260 S23:294-088 to approx. NZMS 260 T23:307-111 |
|  |  |  | From approx. NZMS 260 S23:279-058 to approx. NZMS 260 S23:286-069 |
|  |  |  | From the confluence with the Oroua River at approx. NZMS 260 S23:243-005 to approx. NZMS 260 S23:259-037 |
| Coastal Manamatu (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 |
| Upper Rangitikei (Rang 1) | Upper Rangitikei (Rang_1) | 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 |
|  |  | Waingakia Stream | From the confluence with the Rangitikei River at approx. NZMS 260 U20:715-053 to source |
|  |  | Oturua Stream | From the confluence with the Rangitikei River at approx. NVMS 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 |
| Middlle 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* | Rivern | 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. <br> 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 |
|  |  | 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. NVMS 260 T21:506-656 to source |
| Lower Rangitikei (Rang 3) | Lower Rangitikei (Rang_3a) | Mangamako Stream | From the confluence with the Rangitikei River at approx. NZMS 260 T22:389-415 to source |
|  | Makohine <br> (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 (Whai_1) | Upper Whanganui <br> (Whai_1) | Whanganui River | From the confluence with the Whakapapa River at approx. NZMS 260 S19:188-495 to approx. NZMS 260 T19:358-411 |
|  |  | 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 (Mhai_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 <br> (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* | Rivern | Locality Description |
| :---: | :---: | :---: | :---: |
|  | Upper Whakapapa (Whai_2b) | 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 |
|  |  | 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 <br> (Whai_2d) | 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 |
|  |  | Pukerimu Stream | From the confluence with the Piopiotea Stream at approx. NVMS 260 S19:168-285 to source |
|  |  | 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 <br> (Whai_2e) | Pungapunga River | From the confluence with the Whanganui River at approx. NZMS 260 S18:124-544 to source |
|  |  | 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 |
|  |  | Hawnai 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 <br> (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 (Whai_2g) | Mangakahu Stream | From the confluence with the Ongarue River at approx. NZMS 260 S18:087-736 to source |
|  |  | Otataka Stream | From the confluence with the Mangakahu Stream at approx. NVMS 260 S18:182-701 to source |
|  |  | Unnamed Tributary of the Taringamotu River | From the confluence with the Mangakahu Stream at approx. NVMS 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 |
| :---: | :---: | :---: | :---: |
|  | (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 |
| Ohau River (Ohau_1) | Upper Ohau (Ohau_1a) | Makahika Stream and tributaries | From the confluence with the Ohau River at approx. NZMS 260 S25:090-585 to source |
|  |  | Makaretu Stream and tributaries | From the confluence with the Ohau River at approx. NZMS 260 S25:083-579 to source |
|  | Lower Ohau <br> (Ohau_1b) | Makorokio Stream and tributaries | From the confluence with the Ohau River at approx. NZMS 260 S25:018-563 to source |

## Water^ 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 | Weter^ 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 |
| Mangatainoka (Mana 8) | 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 |
|  | Lower Mangatainoka (Mana_8c) | Mangatainoka River and tributaries | From a point at approx. NZMS 260 T24:504-808 to source | Pahiatua |
|  | Makakahi <br> (Mana_8d) | Makakahi River and tributaries | From the confluence with the Mangatainoka River at approx. NZMS 260 T24:475-775 to source | Pahiatua |
|  |  |  | 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 <br> (Mana 9b) | Mangapapa Stream and tributaries | From a point at approx. NZMS 260 T24:543-986 to source | Dannevirke |
| Middle Manavatu (Mana 10) | Middle Pohangina <br> (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 Manavatu (Mana 11) | Turitea (Mana_11b) | Turitea Stream and tributaries | From a point at approx. NZMS 260 T25:368-827 to source | Palmerston North |
| Oroua <br> (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 | Kivitea, 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* | Fiver | Description | Weter^ 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 |
|  | Kinitea (Mana_12d) | Kivitea Stream and tributaries | From the confluence with the Oroua River at approx. NZMS 260 S24:167-826 to source | Manawatu Beef Packers |
|  |  | Kivitea Stream and tributaries | From a point at approx. NZMS 260 T23:369-239 to source | Waituna West and Manawatu Beef Packers |
| Coastal Manamatu (Mana 13) | Lower Tokomaru (Mana_13c) | Tokomaru River and tributaries | Including all tributaries upstream of a point at approx. NZMS 260 S24:242-767 | Tokomaru |
|  | $\begin{gathered} \text { Mangaore } \\ \text { (Mana_13d) } \end{gathered}$ | 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 Rangitikei (Rang_2a) | Rangitikei River and tributaries | From Pukeokahu at approx. NZMS 260 U21:713-708 to source | Mangaweka, Hunterville, Halcombe-Stanway, Sanson, Bulls and Ohakea |
|  |  | 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* | Fivers | Description | Watern Supply |
| :---: | :---: | :---: | :---: | :---: |
|  | Pukeokahu - <br> Mangaweka <br> (Rang_2b) | Rangitikei River and tributaries | From Mangameka at approx. NZMS 260 T22:504-513 to source | Mangaweka, Hunterville, Halcombe-Stanway, Sanson, Bulls and Ohakea |
|  |  | Makino Stream and tributaries | From a point at approx. NZMS 260 U22:707-589 to source | Omatane, Mangaweka, Hunterville, Halcombe-Stanway, Sanson, Bulls and Ohakea |
|  | Upper Hautapu (Rang_2f) | Hautapu River | From Taihape at approx. NZMS 260 T21:506-670 to source | Mangaweka, Hunterville, Halcombe-Stanway, Sanson, Bulls and Ohakea |
|  |  |  | From a point at approx. NZMS 260 T21:407-811 to source | Irirangi, Taihape, Mangaweka, Hunterville, Halcombe-Stanway, Sanson, Lake Alice, Bulls and Ohakea |
|  |  |  | 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* | Rivern | Description | Weter^ 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 (Rang 3) | Lower Rangitikei (Rang_3a) | Rangitikei River and tributaries | From Onepuhi at approx. NZMS 260 S23:201-222 to source | Halcombe-Stanway, Sanson, Bulls and Ohakea |
|  |  |  | From a point at approx. NZMS 260 T22:360-372 to source | Hunterville, Halcombe-Stanway, Sanson, Bulls and Ohakea |
|  | Makohine <br> (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 |
| Coastal Rangitikei (Rang 4) | Coastal Rangitikei (Rangi_4a) | Rangitikei River | From a point at approx. NZMS 260 S23:198-221 to source | Halcombe-Stanmay, Sanson, Bulls and Ohakea |
|  |  |  | From a point at approx. NZMS 260 S23:154-118 to source | Sanson, Bulls and Ohakea |
|  |  |  | From a point at approx. NZMS 260 S23:132-105 to source | Bulls and Ohakea |
|  |  |  | From a point at approx. NZMS 260 S23:125-099 to source | Ohakea |
|  | Tidal Rangitikei (Rang 4b) | Aock 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 Streamand 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 <br> 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 ${ }^{\text {n }}$ | 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 2) | Cherry Grove <br> (Whai_2a) | Whanganui River | From a point at approx. NZMS 260 S18:134-506 to source | Piriaka and Taumarunui |
|  |  |  | From a point at approx. NZMS 260 S18:102-556 to source | Taumarunui |
|  | Upper Whakapapa (Whai_2b) | Whakapapa River and tributaries | From footbridge at approx. NZMS 260 S19:226-293 to source | Piriaka and <br> Taumarunui |
|  |  | 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 |
|  | Lower Whakapapa (Whai_2c) | Whakapapa River | From the Whanganui confluence at approx. NZMS 260 S19:189-499 to source | Piriaka and <br> Taumarunui |
|  |  | Deep Creek and tributaries | From a point at approx. NZMS 260 S19:190-402 to source | Owhango, Piriaka and Taumarunui |
|  | Piopiotea <br> (Whai_2d) | Piopiotea Stream | From the confluence with the Whakapapa River at approx. NZMS 260 S19:174-356 to source | Piriaka and <br> 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 (Whai 2e) | Pungapunga River and tributaries | From the Whanganui confluence at approx. NZMS 260 S18:124-156 to source | Taumarunui |
|  |  |  | 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 | Matahivi |
| 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 (Mhau 3b) | Makotuku River and tributaries | From a point at approx. NZMS 260 S20:103-012 to source | Raetihi |


| Water Management Zone* | Sub-zone* | River ${ }^{\text {r }}$ | Description | Water ${ }^{\text {S }}$ Supply |
| :---: | :---: | :---: | :---: | :---: |
|  | Upper Mangawhero (Whau 3d) | Serpentine Stream and tributaries | From a point at approx. NZMS 260 S20:198-999 to source | Ohakune |
| Ohau (Ohau_1) | Upper Ohau (Ohau_1a) | Ohau River | From Rongomatane at approx. NZMS 260 S25:072-577 to source | Levin |
|  | Lower Ohau (Ohau 1b) | Ohau River | From a point at approx. NZMS 260 S25:064-577 to source | Levin |
| Akitio (Akit 1) | Waihi (Akit_1c) | Puketoi Range Stream and tributaries | From a point at approx. NZMS 260 U24:746-771 to source | Pongaroa |
|  |  | Waipuehu Stream Tributary and tributaries | From a point at approx. NZMS 260 U24:766-804 to source | Pongaroa |
| Waikava (West 9) | Waikawa (West_9a) | Waikawa Stream | Including all tributaries upstream of a point at approx. NVMS 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* | Rivern | 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- <br> Tiraumea, Upper Gorge <br> (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 |
| Upper Manawatu (Mana_1) | Upper Manawatu (Mana_1a) | 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 |
|  |  | 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 |
|  |  | Manawatu River Tributary | At approx. NZMS 260 U23:858-149 to approx. <br> 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 <br> (Mana_1b) | 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 |
|  |  | 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 (Mana 2) | Mangatera <br> (Mana_2b) | 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 |
|  |  | 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 |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Rokaiwhana Stream Tributary | From confluence with the Rokainhana 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 Rokainhana 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. <br> 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* | Fivern | 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. <br> 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 <br> (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 <br> (Mana_9b) | Mangapapa Stream Tributary (drain) | At approx. NZMS 260 T24:538-945 to approx. NZMS 260 T24:542-943 | South East Ruahine |
|  | Mangaatua <br> (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* | Rivern | Locality Description | Common Name of Scheme |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Mangaatua Stream Tributary and associated drainage network | From confluence with the Mangaatua Stream at approx. <br> NZMS 260 T24:528-915 to approx. NZMS 260 T24:556-891 and at approx. NZMS 260 T24:552-899 to approx. <br> NZMS 260 T24:553-900 and at approx. NZMS 260 T24:530-910 to approx. NZMS 260 T24:574-882 and at approx. <br> NZMS 260 T24:531-908 to approx. NZMS 260 T24:541-895 and at approx. NZMS 260 T24:540-897 to approx. <br> 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 T24:590962 | 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 |
| Upper Gorge (Mana_9) | Mangaatua (Mana_9c) | Mangaatua Stream Tributary | At approx. NZMS 260 T24:518-928 to approx. NZMS 260 T24:521-931 | South East Ruahine |
|  |  | Mangaatua Stream Tributary (drain) | At approx. NZMS 260 T24:548-905 to approx. <br> 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. <br> 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. <br> 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* | Rivern | 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. $\text { NZMS } 260 \text { T25:476-581 }$ | 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 theTawataia 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 |
|  |  | MMRC Drain 237 | At approx. NZMS 260 T25:472-571 to approx. NZMS 260 T25:470-571 | Mangaone-Tawataia |
| Tiraumea (Mana_7) | 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 |
|  |  | 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 |
|  | Mddle 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* | Rivern | 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 |
| Mangatainoka (Mana 8) | 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 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 <br> (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 |
|  |  | Westella-Hansen Drain | At approx. NZMS 260 T25:370-600 to source | Mangatainoka |
| Mangatainoka (Mana 8) | Makakahi <br> (Mana_8d) | Hamua Drains (part) | From confluence with the Makakahi River at approx. <br> 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* | Rivern | 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. <br> NZMS 260 T25:411-661 to approx. NZMS 260 T25:410-662 | Mangatainoka |
| Upper Gorge (Mana 9 ) | 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 |
|  |  | Woodland Road Drain | At approx. NZMS 260 T24:505-913 to approx. NZMS 260 T24:518-904 | Upper Manawatu |
|  | Upper and Lower Mangahao <br> (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 |
|  | Lower Mangahao (Mana_9e) | Soldiers Road Drain network | From confluence with the Mangahao River at approx. NZMS 260 T24:487-835 to source | Upper Manawatu |
|  |  | Ruawhata Drain <br> Network (part) | From confluence with the Mangahao River at approx. NZMS 260 T24:494-876 to source | Upper Manawatu |
|  |  | Ruawhata Drain <br> Network (part) | At approx. NZMS 260 T24:500-874 to approx. NZMS 260 T24:503-864 | Upper Manawatu |
|  |  | Ruawhata Drain <br> Network (part) | At approx. NZMS 260 T24:498-875 to approx. NZMS 260 T24:501-870 | Upper Manawatu |
| Middle Manawatu (Mana 10) | Middle Manawatu <br> (Mana_10a) | 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 |
|  |  | 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 |
| :---: | :---: | :---: | :---: | :---: |
|  | Middle Pohangina (Mana_10c) | 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 |
|  |  | Tokeawa stream | From confluence with the Pohangina River at approx. NZMS 260 T23:475-085 to approx. NZMS 260 T23:481-085 | Pohangina Oroua |
|  |  | 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 T23:484-101 to 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 |
| Middlle Manawatu (Mana_10) | 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 |
|  |  | 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 |



| Weter Management Zone* | Sub-zone* | Rivern | 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 |
| Oroua (Mana 12) | 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 |
|  | Upper, Middle and Lower Oroua, Kivitea (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 <br> (Mana_12c) | Oroua River Tributary | At approx. NZMS 260 S24:149-846 to source | Te Kawau |
|  |  | Blackmoor Drain | At approx. NVMS 260 S24:166-829 to source | Lower Manawatu |
| Oroua <br> (Mana 12) | Middle Oroua, Kinitea (Mana 12b, Mana_12d) | Kinitea Stream | From confluence with the Oroua River at approx. NZMS 260 T23:308-067 to approx. NZMS 260 T23:358-162 | Lower Manawatu, Kinitea |
|  | 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 Aoodway, 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 Foodway tributaries (drains) | From confluence with the Moutoa Foodway to source | Moutoa |
|  |  | Manawatu River Tributary (drain) | From confluence with the Manawatu River at approx. NZMS 260 S24:051-721 to source | Koputaroa |


| Weter 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) | Coastal Manawatu (Mana_13a) | 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 |
|  |  | Funells No.1 Drain | At approx. NZMS 260 S24:143-804 to approx. NZMS 260 S24:143-803 | Lower Manawatu |
|  |  | 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 |
|  |  | Prillips 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 upstreamas 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 ${ }^{\star}$ | Sub-zone* | Rivern | 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 |
| Coastal Manawatu <br> (Mana 13) | Lower Tokomaru (Mana_13c) | 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 |
|  |  | 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 |
|  | Mangaore <br> (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 <br> (Mana_13e) | Koputaroa Stream | Koputaroa Stream from confluence with the Manawatu River at approx. NZMS 260 S24:106-710 to source | Koputaroa |
|  | Foxton Loop <br> (Mana_13f) | Manawatu River Tributary (drains) | From confluence with the Foxton Loop (Manawatu River) at approx. NZMS 260 S24:032-783 to source | Foxton East |
|  |  | 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* | Fivern | Locality Description | Common Name of Scheme |
| :---: | :---: | :---: | :---: | :---: |
| Coastal Rangitikei (Rang 4) | 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 |
|  | Porewa <br> (Rang_4c) | 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. <br> NZMS 260 S22:259-348 to approx. <br> NZMS 260 S22:249-379 and from approx. <br> NZMS 260 S22:257-355 to approx. <br> NZMS 260 S22:256-356 | Porewa |
|  |  | Porewa Scheme <br> 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 <br> 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 95 | 100 metres upstream and downstream of approx. <br> NZMS 260 T22:336-428 | Porewa |
|  |  | Porewa Scheme Detention Dam 96 | 100 metres upstream and downstream of approx. <br> 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 (Rang_4d) | 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 |
|  |  | 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 DamE2 | 100 metres upstream and downstream of approx. NZMS 260 S23:146-224 | Tutaenui |
|  |  | Tutaenui Scheme Detention DamE3 | 100 metres upstream and downstream of approx. NZMS 260 S23:155-241 | Tutaenui |
|  |  | Tutaenui Scheme Detention DamE4 | 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 E1 | 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. <br> 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 F11 | 100 metres upstream and downstream of approx. NZMS 260 S23:170-301 | Tutaenui |
|  |  | Tutaenui Scheme Detention DamW1 | 100 metres upstream and downstream of approx. NZMS 260 S23:147-170 | Tutaenui |
|  |  | Tutaenui Scheme Detention DamW2 | 100 metres upstream and downstream of approx. NZMS 260 S23:119-239 | Tutaenui |
| Coastal Rangitikei (Rang 4) | Tutaenui (Rang_4d) | Tutaenui Scheme Detention DamW3 | 100 metres upstream and downstream of approx. NZMS 260 S23:119-248 | Tutaenui |
|  |  | Tutaenui Scheme Detention Dam W4 | 100 metres upstream and downstream of approx. NZMS 260 S23:126-247 | Tutaenui |
|  |  | Tutaenui Scheme Detention DamW5 | 100 metres upstream and downstream of approx. NZMS 260 S23:130-259 | Tutaenui |
|  |  | Tutaenui Scheme Detention Dam W6 | 100 metres upstream and downstream of approx. NZMS 260 S23:133-263 | Tutaenui |
|  |  | Tutaenui Scheme Detention DamW7 | 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 |
| :---: | :---: | :---: | :---: | :---: |
| Lower Whanganui (Whai_7) | Lower Whanganui (Whai_7a) | 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 |
|  |  | Mangamoku Stream | From confluence with the Mateongaonga Stream at approx. NZMS 260 S22:937-430 to source | Matarawa |
|  |  | 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 |
| Lower Whanganui (Whai_7) | Matarawa (Whai_7d) | 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 |
|  |  | Railway Drain | At approx. NZMS 260 S22:917-399 to approx. NZMS 260 S22:924-394 | Matarawa |
|  |  | 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 S22:989416 | 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 (Mhau_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 |


| Weter Management Zone* | Sub-zone* | Rivern | 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 <br> (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. <br> 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) | (Mhau_4) | Whangaehu River Tributary and drains | From confluence with the Whangaehu River at approx. NZMS 260 S22:009-341 to source | Haunui |
| Turaki | 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) | (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 |
| Ohau <br> (Ohau_1) | Upper and Lower Ohau (Ohau_1a, Ohau_1b) | Ohau River | From the cross-river CMA boundary at approx. <br> NZMS 260 S25:930-595 to approx. NZMS 260 S25:097-586 | Ohau Manakau |
|  | Lower Ohau <br> (Ohau_1a) | Ohau Loop | From confluence with the Ohau River at approx. <br> NZMS 260 S25:936-586 to approx. NZMS 260 S25:939-583 and at approx. NZMS 260 S25:933-586 to approx. <br> 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 |
|  |  | Kuku Stream | From confluence with the Ohau River at approx. NZMS 260 S25:947-578 to approx. NZMS 260 S25:022-547 | Ohau Manakau |
|  |  | 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 |


| Weter Management Zone* | Sub-zone* | Rivern | Locality Description | Common Name of Scheme |
| :---: | :---: | :---: | :---: | :---: |
| Ohau <br> (Ohau 1) | Lower Ohau (Ohau_1a) | Parkin Drain and tributaries | From confluence with the Ohau River at approx. NZMS 260 S25:960-582 to source | Ohau Manakau |
|  |  | Burnell Drain and tributaries | From confluence with the Ohau River at approx. NZMS 260 S25:963-585 to source | Ohau Manakau |
|  |  | Catley Drain and tributaries | From confluence with the Ohau River at approx. NZMS 260 S25:967-581 to source | Ohau Manakau |
|  |  | Honore Drain and tributaries | From confluence with the Ohau River at approx. NZMS 260 S25:972-586 to source | Ohau Manakau |
| Akitio <br> (Akit_1) | Upper and Lower Akitio (Akit_1a and Akit_1b) | Akitio River | From the cross-river CMA boundary at approx. NZMS 260 U25:996-618 to approx. NZMS 260 U24:918-832 | Akitio |
|  | Lower Akitio <br> (Akit_1b) | Wakawaihine Stream | From confluence with the Akitio River at approx. NZMS 260 U25:985-658 to approx. NZMS 260 U25:985-660 | Akitio |
|  |  | Akitio River Tributary | From confluence with the Akitio River at approx. NZMS 260 U25:982-658 to approx. NZMS 260 U25:980-657 | Akitio |
|  |  | Mangahewa Stream | From confluence with the Akitio River at approx. NZMS 260 U24:967-700 to approx. NZMS 260 U24:968-702 | Akitio |
|  |  | Akitio River Tributary | From confluence with the Akitio River at approx. NZMS 260 U24:955-705 to approx. NZMS 260 U24:955-702 | Akitio |
|  |  | Akitio River Tributary | From confluence with the Akitio River at approx. NZMS 260 U24:950-714 to approx. NZMS 260 U24:951-716 | Akitio |
|  |  | Mangahuia Stream | From confluence with the Akitio River at approx. NZMS 260 U24:932-706 to approx. NZMS 260 U24:932-704 | Akitio |
|  |  | Mangaone Stream | From confluence with the Akitio River at approx. NZMS 260 U24:929-713 to approx. NZMS 260 U24:929-711 | Akitio |
|  |  | Waihoro Stream | From confluence with the Akitio River at approx. NZMS 260 U24:907-722 to approx. NZMS 260 U24:906-723 | Akitio |
|  |  | Rakaupuhipuhi Stream | From confluence with the Akitio River at approx. NZMS 260 U24:913-762 to approx. NZMS 260 U24:914-763 | Akitio |
| Akitio (Akit 1) | Lower Akitio <br> (Akit_1b) | Akitio River Tributary | From confluence with the Akitio River at approx. NZMS 260 U24:889-761 to approx. NZMS 260 U24:888-760 | Akitio |
|  |  | Makupara Stream | From confluence with the Akitio River at approx. NZMS 260 U24:881-767 to NZMS 260 U24:879-766 | Akitio |



| Weter Management Zone ${ }^{*}$ | Sub-zone* | Rivern | 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 | Ohaw/Manakau |
|  |  | Manakau Stream Tributary including drains | From confluence with the Manakau Stream at approx. NZMS 260 S25:950-543 to source | Ohaw/Manakau |
| Lake Horowhenua <br> (Hoki_1) | 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 <br> (Hoki_1a) | 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 |
|  |  | Lake Horowhenua Tributary (drain) | From confluence with Lake Horowhenua at approx. NZMS 260 S25:996-628 to source | Hokio |
|  |  | 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 <br> (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 |
| Lake Horowhenua, Ohau (Hoki_1, Ohau_1) | Lake Horowhenua, Lower Ohau (Hoki_1a, Ohau_1b | 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 |
|  |  | Painua drains and tributaries | From confluence with Arawhata Drain at approx. NZMS 260 S25:996-622 to source | Hokio |
|  |  | 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 $260 \text { S25:028-589 }$ | 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 |



Figure B:12 Visual Guide to the Distribution of the Amenity (AM) Value

| Water Management Zone* | Sub zone* | Site | Description |
| :---: | :---: | :---: | :---: |
| Upper Manawatu | Upper Manawatu | Manawatu River at Maunga Road | At approx. NZMS 260 U23:830-079At approx. NZMS 260 U23:749-026 |
|  |  | Manawatu River at Weber Road |  |
| HopelandsTiraumea | Hopelands-Tiraumea | Manawatu River at Kumeroa (Little Road) | At approx. NZMS 260 T24:636-923 |
|  |  | Manawatu River at Hopelands Domain (River Road) | At approx. NZMS 260 T24:613-895 |
| Mangatainoka | Lower Mangatainoka | Mangatainoka River | From approx. NZMS 260 T24:503-806 to approx. T24:500-802 |
|  |  | Mangatainoka River at SH2 Reserve | At approx. NZMS 260 T24:528-832 |
|  | Makakahi | Makakahi River at Bridge Street Eketahuna | At approx. NZMS 260 T25:383-588 |
| Upper Gorge | Upper Mangahao | Mangahao River at Marima Domain | At approx. NZMS 260 T24:398-745 |
| Middle Manamatu | Middle Manawatu | Manawatu River at Ashhurst Domain | At approx. NZMS 260 T24:445-964 |
|  |  | Manawatu River at Albert Street | At approx. NZMS 260 T24:342-891 |
|  | Middle Pohangina | Pohangina River at Totara Reserve | At approx. NZMS 260 T23:533-168 |
|  |  | Pohangina River at Raumai Reserve | At approx. NZMS 260 T23:474-072 |
| Middle and Lower Manavatu | Middle and Lower Manawatu | Manawatu River | From approx. NZMS 260 S24:291-872 to approx. T24:353-919 |
| Lower Manawatu | Turitea | Tiritea Stream | From approx. NZMS 260 T24:316-882 to approx. NZMS 260 T24:334-869 |
|  | Kahuterawa | Kahuterawa Stream at Reserve | At approx. NZMS 260 T24:322-810 |
|  |  | 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 | Upper Oroua | Oroua River at Londons Ford | At approx. NZMS 260 T23:502-254 |
|  |  | Oroua River at Bartletts Ford | At approx. NZMS 260 T23:490-226 |
|  |  | Oroua River at Almadale | At approx. NZMS 260 T23:362-113 |
|  | Middle Oroua | Oroua River at Timona Park | At approx. NZMS 260 S23:299-064 |
|  |  | Oroua River | From approx. NZMS 260 S24:293-043 to confluence with the Kivitea Stream at approx. NZMS 260 T23:308-066 |
|  | Kivitea | Kivitea Stream | From confluence with the Oroua River at approx. <br> NZMS 260 T23:308-066 to approx. NZMS 260 T23:311-075 |
|  | Makino | Makino Stream | From approx. NZMS 260 S23:276-053 to the intersection with Roots Street at approx. NZMS 260 S23:289-082 |
| Coastal Manavatu | Coastal Manawatu | Foxton Beach | At approx. NZMS 260 S24:978-806 |
|  | 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 |
|  |  | Foxton Loop Reserve | At approx. NZMS 260 S24:033-785 |
| Middle Rangitikei | Pukeokahu - Mangaweka | Rangitikei River upstream Hautapu Confluence (Toe Toe Rd) | At approx. NZMS 260 T22:531-573 |
|  | 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 |
|  | Lower Hautapu | Hautapu River at Papakai Park/Spooner's Hill | At approx. NZMS 260 T21:505-670 |
|  |  | Otaihape Stream | From confluence with the Hautapu River at approx. NZMS 260 T21:507-656 to approx. T21:492-652 |
| Lower Rangitikei | Lower Rangitikei | Rangitikei River at Mangaweka | At approx. NZMS 260 T22:503-513 |
|  |  | 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 |
| Coastal Rangitikei | Tidal Rangitikei | Holben Reserve | At approx. NZMS 260 S24:989-997 |
|  | Tutaenui | Tutaenui Stream | From approx. NZMS 260 S23:133-209 to approx. S23:133-252 |
| Cherry Grove | 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 |
|  |  | Whanganui River | From Confluence with the Ongarue River at approx. NZMS 260 S18:055-544 to approx. S18:100-554 |
|  | Lower Whakapapa | Whakapapa River at Onhango | At approx. NZMS 260 S19:178-426 |
|  | Lower Ongarue | Ongarue River at various swimming holes at Taringamotu | At approx. NZMS 260 S18:057-546 |
|  |  | 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 | Lower Whanganui | Whanganui River at Mosquito Point | At approx. NZMS 260 S22:902-473 |
|  | 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 |


| Weter Management Zone ${ }^{\star}$ | Sub zone* | Site | Description |
| :---: | :---: | :---: | :---: |
| Ohau | Lower Ohau | Ohau River at Kimberley Reserve | At approx. NZMS 260 S25:059-574 |
|  |  | Ohau River at Kirkcaldies Bridge Reserve | At approx. NZMS 260 S25:027-567 |
|  |  | 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 |
|  |  | Akitio Beach | At approx. NZMS 260 U25:989-597 |
| Northern Coastal | Northern Coastal | Ototoka Stream at William Birch Pool | At approx. NZMS 260 R22:676-519 |
|  |  | Ototoka Stream | At approx. NZMS 260 R22:666-471 |
|  |  | Ototoka Beach | At approx. NZMS 260 R22:667-471 |
| Kai Ini | Kai Ivi | Kai Ivi Stream | At approx. NZMS 260 R22:723-451 |
|  |  | Kai Ini Beach | At approx. NZMS 260 R22:725-448 |
| Mowhanau | Mowhanau | Mowhanau Stream | At approx. NZMS 260 R22:726-448 |
| Kaitoke Lakes | Kaitoke Lakes | Lake Writoa | At approx. NZMS 260 R22:882-344 |
|  |  | 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 Lakes | Northern Manawatu Lakes | Kaikokupu Stream at Himatangi Beach | At approx. NZMS 260 S24:993-905 |
|  |  | Himatangi Beach | At approx. NZMS 260 S24:991-905 |
| Waitarere | Waitarere | Waitarere Beach | At approx. NZMS 260 S24:958-701 |
|  |  | Wairarawa Stream at Waitarere Beach | At approx. NZMS 260 S24:959-709 |
| Waikama | 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 |



Figure B:13 Visual Guide to the Distribution of Domestic Food Supply (DFS) Value

| Water Management Zone* | Sub-zone* | Rivern | Description | Domestic Food Supply Value |
| :---: | :---: | :---: | :---: | :---: |
| Oroua <br> (Mana 12) | Upper, Middle and Lower Oroua and Kivitea and Makino <br> (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 <br> (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 <br> Mangawhero , and Makara <br> (Whau_3a, Whau_3b, Whau_3c, <br> 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 <br> (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 Waiviri Stream | Vegetable production |
| Waikava (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 <br> (Hoki_1) | Lake Horowhenua (Hoki_1a) | Lake Horowhenua and tributaries and <br> 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 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ecosystem Values | NS | Natural State | The river ${ }^{\wedge}$ and its bed ${ }^{\wedge}$ 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 water bodies^ and their beds^ <br> (8 LSC classes) | Figure $\mathrm{B}: 1$ page $\mathrm{B}-15$ |
|  | 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 $\mathrm{B}-23$ to $\mathrm{B}-32$ |
|  | SOS-R | Sites of Significance Riparian | Sites of significance for indigenous riparian biodiversity are maintained or enhanced | Specified sites/reaches | Figure $\mathrm{B}: 4$ page $\mathrm{B}-33$ and Table B. 4 pages $\mathrm{B}-35$ to $\mathrm{B}-37$ |
|  | 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 $\mathrm{B}: 6$ page $\mathrm{B}-43$ and Table B. 6 pages B-45 to B-46 |
| Recreational and Cultural Values | CR | Contact Recreation | The water body ${ }^{\wedge}$ and its bed ${ }^{\wedge}$ are suitable for contact recreation | All natural water bodies ${ }^{\wedge}$ and their beds ${ }^{\wedge}$ |  |
|  | AM | Amenity | The amenity values of the water body^ and its bed^ (and its margins where in public ownership) are maintained or enhanced | Specified sites/reaches | Figure $\mathrm{B}: 12$ page $\mathrm{B}-107$ and Table B. 12 pages B-109 to B-111 |
|  | Mau | Mauri* | The mauri* of the water body ${ }^{\wedge}$ and its bed ${ }^{\wedge}$ is maintained or enhanced | All natural water bodies ${ }^{\wedge}$ and their beds ${ }^{\wedge}$ |  |
|  | 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 $\mathrm{B}: 7$ page $\mathrm{B}-47$ and Table B. 7 page B-49 |
|  | TF | Trout Fishery | The water body^ and its bed ${ }^{\wedge}$ sustain healthy rainbow or brown trout fisheries | Specified zones/reaches (3 categories) | Figure $\mathrm{B}: 8$ page $\mathrm{B}-51$ and Table B. 8 pages B-53 to B-59 |
|  | TS | Trout Spawning | The water body ${ }^{\wedge}$ and its bed^ ${ }^{\wedge}$ meet the requirements of rainbow and brown trout spawning and larval and fry development | Specified sites/reaches | Figure $\mathrm{B}: 9$ page $\mathrm{B}-61$ and Table B. 9 pages B-63 to B-71 |
|  | AE | Aesthetics | The aesthetic values of the water body^ and its bed^ are maintained or enhanced | All natural water bodies ${ }^{\wedge}$ and their beds^ |  |
| Water^ Use | WS | Water^ Supply | The water^ is suitable, after treatment, as a drinking water^ source for human consumption | Catchments above surface water ${ }^{\wedge}$ takes for community water^ supply | Figure B:10 page $B-73$ and Table B. 10 pages B-75 to B-80 |
|  | IA | Industrial Abstraction | The water^ is suitable as a water^ source for industrial abstraction or use, including for hydroelectricity generation | All natural water bodies^ except those classified as NS and those identified as zero allocation Water Management Zones* or Sub-zones* (other than the Upper Moawhango (Rang 2c) Water Management Sub-Zone) in Schedule B |  |
|  | 1 | Irrigation | The water^ is suitable as a water^ source for irrigation | All natural water bodies^ except those classified as NS and those identified as zero allocation Water Management Zones* or Sub-zones* in Schedule B |  |
|  | SW | Stockwater | The water^ is suitable as a supply of drinking water^ for livestock | All water bodies ${ }^{\wedge}$ 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 $\mathrm{B}: 13$ page $\mathrm{B}-113$ and Table B .13 page $\mathrm{B}-115$ |
| Social/ Economic Values | CAP | Capacity to Assimilate Pollution | The capacity of a water body ${ }^{\wedge}$ and its bed ${ }^{\wedge}$ to assimilate pollution is not exceeded | All natural water bodies^ and their beds^ except NS |  |
|  | FC/D | Flood Control and Drainage | The integrity of existing flood and river^ bank erosion protection structures ${ }^{\wedge}$ and existing drainage structures ${ }^{\wedge}$ 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 |
|  | El | Existing Infrastructure^ | The integrity of existing infrastructure^ is not compromised | This applies in the general vicinity of any existing infrastructure^ such as roads, culverts, bridges, water^ intakes, discharge^ 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 <br> UVA: Upland Volcanic Acidic <br> UVM: Upland Volcanic Mixed <br> Uli: Upland Limestone <br> HM: Hill Mixed <br> HSS: Hill Soft Sedimentary <br> LM: Lowland Mixed <br> LS: Lowland Sand |  |  |
| TF | Trout Fishery | I: Outstanding <br> II: Regionally Significant <br> III: Other Trout Fishery |  |  |

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 ( $\mathrm{m}^{3} / \mathrm{s}$ ) | Flow monitoring site | Flow monitoring site location | Cumulative core allocation limit (m³/day) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Upper Manawatu (Mana_1) | Upper Manawatu (Mana_1a) | 1.600 | Manawatu at Weber Rd | U23:751-027 | 17,712 |
|  | 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 |

Table C.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone*

| Water Management Zone* | Sub-zone* | Minimum flow ( $\mathrm{m}^{3} / \mathrm{s}$ ) | Flow monitoring site | Flow monitoring site location | Cumulative core allocation limit ( $\mathrm{m}^{3} / \mathrm{day}$ ) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Whole Zone (Mana_1) |  |  |  |  | 17,172 |
| Weber-Tamaki (Mana_2) | Weber-Tamaki (Mana_2a) | 1.600 | Manawatu at Weber Rd | U23:751-027 | 21,600 |
|  | Mangatera (Mana_2b) | 1.600 | Manawatu at Weber Rd | U23:751-027 | 3,888 |
| Catchment cumulative allocable volume (Mana_1 + Mana_2) |  |  |  |  | 21,600 |
| 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 |
| Tamaki-Hopelands (Mana_5) | 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) |  |  |  | 12,096 |
|  | Lower Kumeti (Mana_5c) | 2.980 | Manawatu at Hopelands | T24:616-899 | 5,184 |
|  | Cumulative allocable volume (Mana_4 + Mana_5c) |  |  |  | 5,184 |
|  | 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 |
| Catchment cumulative allocable volume (Mana_1 + Mana_2 + Mana_3 + Mana_4 + Mana_5) |  |  |  |  | 83,808 |
| Hopelands-Tiraumea (Mana_6) | Hopelands-Tiraumea (Mana_6) | 2.980 | Manawatu at Hopelands | T24:616-899 | 90,720 |
| Catchment cumulative allocable volume (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 $\left(\mathrm{m}^{3} / \mathrm{s}\right)$ | Flow monitoring site | Flow monitoring site location | Cumulative core allocation limit ( $\mathrm{m}^{3} / \mathrm{day}$ ) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 volume (Mana_7a + Mana_7c + Mana_7d) |  |  |  | 8,640 |
|  | Mangaramarama (Mana_7e) | 2.040 | Tiraumea at Ngaturi | T24:578-780 | 2,160 |
| Whole Zone (Mana_7) |  |  |  |  | 23,328 |
| Mangatainoka (Mana_8) | Upper Mangatainoka (Mana_8a) | 0.370 | Mangatainoka at Larsons Road | T25:308-596 | 1,728 |
|  | Middle Mangatainoka (Mana_8b) | 1.305 | Mangatainoka at Pahiatua Town Bridge | T24:501-802 | 5,184 |
|  | 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 volume (Mana_8a + Mana_8b + Mana_8d) |  |  |  | 5,184 |
| Whole Zone (Mana_8) |  |  |  |  | 27,913 |
| Catchment cumulative allocable volume Mangatainoka and Tiraumea (Mana_7 + Mana_8) |  |  |  |  | 51,241 |
| Upper Gorge (Mana_9) | 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 |
|  | Mangaatua (Mana_9c) | 0.070 | Mangaatua at Hutchinsons | T24:581-932 | 432 |
|  | $\begin{gathered} \text { Upper Mangahao } \\ \text { (Mana_9d) } \\ \hline \end{gathered}$ | 1.415 | Mangahao at Ballance | T24:468-818 | 7,344 |
|  | Lower Mangahao <br> (Mana_9e) | 1.415 | Mangahao at Ballance | T24:468-818 | 7,344 |

Table C.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone*

| Water Management Zone* | Sub-zone* | $\begin{aligned} & \text { Minimum flow } \\ & \left(\mathrm{m}^{3} / \mathrm{s}\right) \end{aligned}$ | Flow monitoring site | Flow monitoring site location | Cumulative core allocation limit ( $\mathrm{m}^{3} / \mathrm{day}$ ) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cumulative allocable volume (Mana_9d + Mana_9e) |  |  |  | 7,344 |
| Whole Zone (Mana_9) |  |  |  |  | 198,288 |
| Catchment cumulative allocable volume (Mana_1 + Mana_2 + Mana_3 + Mana_4 + Mana_5 + Mana_6 + Mana_7 + Mana_8 + Mana_9) |  |  |  |  | 198,288 |
| Middle Manawatu (Mana_10) | 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 |
|  | Cumulative allocable volume (Mana_10b + Mana_10c) |  |  |  | 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) |  |  |  | 39,312 |
|  | Aokautere (Mana_10e) | 12.240 | Manawatu at Teachers College | T24:331-892 | 432 |
| Whole Zone (Mana_10) |  |  |  |  | 264,384 |
| Catchment cumulative allocable volume (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 |

Table C.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone*


Table C.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone*

| Water Management Zone* | Sub-zone* | Minimum flow ( $\mathrm{m}^{3} / \mathrm{s}$ ) | Flow monitoring site | Flow monitoring site location | Cumulative core allocation limit ( $\mathrm{m}^{3} / \mathrm{day}$ ) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Foxton Loop <br> (Mana_13f) | MALF* |  |  | 10\% of MALF* |
| Whole Zone (Mana_13) |  |  |  |  | 598,752 |
| Catchment cumulative allocable volume (Mana_1 + Mana_2 + Mana_3 + Mana_4 + Mana_5 + Mana_6 + Mana_7 + Mana_8 + Mana_9 + Mana_10 + Mana_11 + Mana_12 + Mana_13) |  |  |  |  | 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 |
|  | PukeokahuMangaweka (Rang_2b) | 12.250 | Rangitikei at Mangaweka | T22:504-513 | 52,704 |
|  | Cumulative allocable volume (Rang_2a + Rang_2b) |  |  |  | 52,704 |
|  | 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 volume (Rang_2f + Rang_2g) |  |  |  | 12,960 |
| Whole Zone (Rang_2) |  |  |  |  | 52,704 |
| Catchment cumulative allocable volume (Rang_1 + Rang_2) |  |  |  |  | 52,704 |
| Lower Rangitikei (Rang_3) | $\begin{gathered} \text { Lower Rangitikei } \\ \text { (Rang_3a) } \\ \hline \end{gathered}$ | 12.100 | Rangitikei at Onepuhi | S23:201-222 | 141,696 |
|  | Makohine (Rang_3b) | 0.040 | Makohine at Viaduct | T22:395-450 | 864 |

## Table C.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone*

| Water Management Zone* | Sub-zone* | Minimum flow ( $\mathrm{m}^{3 /} \mathrm{s}$ ) | Flow monitoring site | Flow monitoring site location | Cumulative core allocation limit ( $\mathrm{m}^{3} / \mathrm{day}$ ) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Whole Zone (Rang_3) |  |  |  |  | 141,696 |
| Catchment cumulative allocable volume (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 |
|  | $\begin{gathered} \text { Tidal Rangitikei } \\ \text { (Rang_4b) } \\ \hline \end{gathered}$ | 10.230 | Rangitikei at McKelvies | S24:033-985 | 285,120 |
|  | $\begin{gathered} \text { Porewa } \\ \text { (Rang_4c) } \\ \hline \end{gathered}$ | 12.100 | Rangitikei at Onepuhi | S23:201-222 | 0 |
|  | Tutaenui (Rang_4d) | 10.230 | Rangitikei at McKelvies | S24:033-985 | 6,653 |
| Whole Zone (Rang_4) |  |  |  |  | 285,120 |
| Catchment cumulative allocable volume (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 |
| Whole 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 Allocation Limits and Minimum Flows by Water Management Sub-zone*

| Water Management Zone* | Sub-zone* | $\begin{aligned} & \text { Minimum flow } \\ & \left(\mathrm{m}^{3} / \mathrm{s}\right) \end{aligned}$ | Flow monitoring site | Flow monitoring site location | Cumulative core allocation limit ( $\mathrm{m}^{3}$ /day) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Whole Zone (Whai_2) |  |  |  |  | 15,121 |
| Catchment cumulative allocable volume (Whai_1 + Whai_2) |  |  |  |  | 15,121 |
| Te Maire (Whai_3) | Te Maire (Whai_3) | MALF* |  |  | 10\% of MALF* |
| Catchment cumulative allocable volume (Whai_1 + Whai_2 + Whai_3) |  |  |  |  | 10\% of MALF* |
| Middle Whanganui (Whai_4) | Middle Whanganui (Whai_4a) | MALF* |  |  | 10\% of MALF* |
|  | Upper Ohura (Whai_4b) | MALF* |  |  | 10\% of MALF* |
|  | Lower Ohura (Whai 4c) | MALF* |  |  | 10\% of MALF* |
|  | Retaruke (Whai_4d) | MALF* |  |  | 10\% of MALF* |
| Whole Zone (Whai_4) |  |  |  |  | 10\% of MALF* |
| Catchment cumulative allocable volume (Whai_1 + Whai_2 + Whai_3 + Whai_4) |  |  |  |  | 10\% of MALF* |
| Pipiriki (Whai_5) | Pipiriki (Whai 5a) | MALF* |  |  | 10\% of MALF* |
|  | Tangarakau (Whai_5b) | MALF* |  |  | 10\% of MALF* |
|  | Whangamomona (Whai 5c) | MALF* |  |  | 10\% of MALF* |
|  | Upper Manganui o te Ao (Whai 5d) | n/a |  |  | 0 |
|  | Makatote (Whai_5e) | n/a |  |  | 0 |
|  | Waimarino (Whai_5f) | 7 day MALF* |  |  | $5 \%$ of 7 day MALF* |

Table C.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone*

| Water Management Zone* | Sub-zone* | $\underset{\left(\mathrm{m}^{3} / \mathrm{s}\right)}{\text { Minimum flow }}$ | Flow monitoring site | Flow monitoring site location | Cumulative core allocation limit (m³/day) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Middle Manganui o te Ao (Whai_5g) | 7 day MALF* |  |  | 5\% of 7 day MALF* |
|  | Mangaturuturu (Whai_5h) | n/a |  |  | 0 |
|  | Lower Manganui o te Ao (Whai 5i) | 7 day MALF* |  |  | 5\% of 7 day MALF* |
|  | Orautoha (Whai_5j) | 7 day MALF* |  |  | 5\% of 7 day MALF* |
| Whole Zone (Whai_5) |  |  |  |  | 10\% of MALF* |
| Catchment cumulative allocable volume (Whai_1 + Whai_2 + Whai_3 + Whai_4 + Whai_5) |  |  |  |  | 10\% of MALF* |
| Paetawa (Whai_6) | Paetawa (Whai_6) | MALF* |  |  | 10\% of MALF* |
| Catchment cumulative allocable volume (Whai_1 + Whai_2 + Whai_3 + Whai_4 + Whai_5 + Whai_6) |  |  |  |  | 10\% of MALF* |
| Lower Whanganui (Whai_7) | Lower Whanganui (Whai_7a) | MALF* |  |  | 10\% of MALF* |
|  | Coastal Whanganui (Whai_7b) | MALF* |  |  | 10\% of MALF* |
|  | Upokongaro <br> (Whai_7c) | MALF* |  |  | 10\% of MALF* |
|  | Matarawa (Whai_7d) | MALF* |  |  | 10\% of MALF* |
| Whole Zone (Whai_7) |  |  |  |  | 10\% of MALF* |
| Catchment cumulative allocable volume (Whai_1 + Whai_2 + Whai_3 + Whai_4 + Whai_5 + Whai_6 + Whai_7) |  |  |  |  | 10\% of MALF* |
| Upper Whangaehu (Whau_1) | Upper Whangaehu (Whau_1a) | 8.700 | Whangaehu at Karioi | S21:218-864 | 47,520 |
|  | Waitangi (Whau_1b) | 0.470 | Waitangi at Tangiwai | T21:316-886 | 9,504 |

Table C.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone*

| Water Management Zone* | Sub-zone* | Minimum flow ( $\mathrm{m}^{3} / \mathrm{s}$ ) | Flow monitoring site | Flow monitoring site location | Cumulative core allocation limit ( $\mathrm{m}^{3}$ /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 volume (Whau_1 + Whau_2) |  |  |  |  | 52,272 |
| Lower Whangaehu (Whau_3) | 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 |
|  | Upper Mangawhero <br> (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 volume (Whau_3b + Whau_3f) |  |  |  | 2,506 |
|  | Cumulative allocable volume (Whau_3b + Whau_3c + Whau_3f) |  |  |  | 3,802 |
| Whole Zone (Whau_3) |  |  |  |  | 127,008 |
| Catchment cumulative allocable volume (Whau_1 + Whau_2 + Whau_3) |  |  |  |  | 127,008 |
| Coastal Whangaehu <br> (Whau_4) | Coastal Whangaehu <br> (Whau_4) | 11.770 | Whangaehu at Kauangaroa | S22:045-397 | 127,008 |
| Catchment cumulative allocable volume (Whau_1 + Whau_2 + Whau_3 + Whau_4) |  |  |  |  | 127,008 |
| Turakina (Tura_1) | Upper Turakina (Tura_1a) | 0.340 | Turakina at Otairi | S22:236-471 | 3,024 |
|  | Lower Turakina (Tura_1b) | 0.805 | Turakina at O'Neills Bridge | S23:006-287 | 12,528 |

## Table C.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone*

| Water Management Zone* | Sub-zone* | Minimum flow ( $\mathrm{m}^{3} / \mathrm{s}$ ) | Flow monitoring site | Flow monitoring site location | Cumulative core allocation limit ( $\mathrm{m}^{3} / \mathrm{day}$ ) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ratana <br> (Tura_1c) | 0.805 | Turakina at O'Neills Bridge | S23:006-287 | 10\% of MALF |
| Whole Zone (Tura_1) |  |  |  |  | 12,528 |
| Catchment cumulative allocable volume (Tura_1) |  |  |  |  | 12,528 |
| Ohau (Ohau_1) | Upper Ohau (Ohau_1a) | 0.820 | Ohau at Rongomatane | S25:072-577 | 24,192 |
|  | Lower Ohau (Ohau_1b) | 0.820 | Ohau at Rongomatane | S25:072-577 | 24,192 |
| Whole Zone (Ohau_1) |  |  |  |  | 24,192 |
| Catchment cumulative allocable volume (Ohau_1) |  |  |  |  | 24,192 |
| Owahanga (Owha_1) | Owahanga (Owha_1) | 0.030 | Owahanga at Branscombe Bridge | U25:893-587 | 432 |
| $\begin{gathered} \text { East Coast } \\ \text { (East_1) } \end{gathered}$ | $\begin{gathered} \text { East Coast } \\ \text { (East_1) } \\ \hline \end{gathered}$ | MALF* |  |  | 10\% of MALF* |
| Akitio (Akit_1) | Upper Akitio (Akit_1a) | 0.045 | Akitio at Weber | U24:919-832 | 864 |
|  | Lower Akitio (Akit_1b) | 0.145 | Akitio at Mouth | U25:988-655 | 2,592 |
|  | $\begin{gathered} \text { Waihi } \\ \text { (Akit_1c) } \end{gathered}$ | 0.050 | Waihi at SH52 | U24:892-804 | 1,296 |
| Catchment cumulative allocable volume (Akit_1) |  |  |  |  | 2,592 |
| Northern Coastal (West_1) | Northern Coastal (West_1) | MALF* |  |  | 10\% of MALF* |
| $\begin{gathered} \text { Kai Iwi } \\ \text { (West_2) } \end{gathered}$ | $\begin{gathered} \text { Kai Iwi } \\ \text { (West_2) } \\ \hline \end{gathered}$ | 0.445 | Kai Iwi at Handley Road | R22:726-455 | 3,888 |
| Mowhanau (West_3) | Mowhanau (West_3) | MALF* |  |  | 10\% of MALF* |
| Kaitoke Lakes (West_4) | Kaitoke Lakes (West_4) | MALF* |  |  | 10\% of MALF* |

Table C.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone*

| Water Management Zone* | Sub-zone* | $\begin{gathered} \text { Minimum flow } \\ \left(\mathrm{m}^{3} / \mathrm{s}\right) \end{gathered}$ | Flow monitoring site | Flow monitoring site location | Cumulative core allocation limit (m3/day) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Southern Whanganui Lakes (West_5) | Southern Whanganui Lakes (West_5) | MALF* |  |  | 10\% of MALF* |
| Northern Manawatu Lakes <br> (West_6) | Northern Manawatu Lakes (West_6) | MALF* |  |  | 10\% of MALF* |
| Waitarere (West_7) | Waitarere (West_7) | MALF* |  |  | 10\% of MALF* |
| Lake Papaitonga (West_8) | Lake Papaitonga (West_8) | MALF* |  |  | 10\% of MALF* |
| Waikawa (West_9) | Waikawa (West_9a) | 0.220 | Waikawa at North Manakau Road | S25:987-530 | 6,048 |
|  | Manakau (West_9b) | 0.040 | Manakau at SH1 Bridge | S25:968-512 | 432 |
| Whole zone (West_9) |  |  |  |  | 6,048 |
| Lake Horowhenua (Hoki_1) | Lake Horowhenua (Hoki_1a) | MALF* |  |  | 10\% of MALF* |
|  | $\begin{gathered} \text { Hokio } \\ \text { (Hoki_1b) } \end{gathered}$ | MALF* |  |  | 10\% of MALF* |

Table 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 <br> (Rang_2) | Moawhango Dam | T20:472-962 |
| Upper Whanganui <br> (Whai_1) | Upper Whanganui <br> (Whai_1) | Okupata Intake | S19:287-351 |
| Upper Whanganui <br> (Whai_1) | Upper Whanganui <br> (Whai_1) | Taurewa Intake | T19:305-356 |
| Upper Whanganui <br> (Whai_1) | Upper Whanganui <br> (Whai_1) | Tawhitikuri Intake | T19:311-359 |

Table C.2: Location of Existing Hydroelectricity Generation Scheme Infrastructure

| Water Management Zone* | Sub-zone* | Intake/Dam Name | Locality Descriptions |
| :---: | :---: | :---: | :---: |
| 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 <br> (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 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.
Table D.1: Allocation limits by Groundwater Management Zone*

| Groundwater Management Zone* | Surface Water Management Zones* within GWMZ** | Annual Allocable Volume for GWMZ* ( $m^{3} / y$ ) |
| :---: | :---: | :---: |
| Whanganui | Lower Whanganui (Whai_7) <br> Northern Coastal (West_1) <br> Kai lwi (West_2) <br> Mowhanau (West_3) <br> Kaitoke Lakes (West_4) | 46,000,000 |
| Whangaehu | Upper Whangaehu (Whau_1) <br> Middle Whangaehu (Whau_2) <br> Lower Whangaehu (Whau_3) <br> Coastal Whangaehu (Whau_4) | 122,000,000 |
| Turakina | Turakina (Tura_1) | 50,000,000 |
| Rangitikei | Lower Rangitikei (Rang_3) <br> Coastal Rangitikei (Rang_4) <br> Southern Whanganui Lakes (West_5) <br> Northern Manawatu Lakes (West_6) | 75,000,000 |
| Manawatu | Middle Manawatu (Mana_10) <br> Lower Manawatu (Mana_11) <br> Oroua (Mana_12) <br> Coastal Manawatu (Mana_13) | 166,000,000 |
| Horowhenua | Lake Horowhenua (Hoki_1) <br> Ohau (Ohau_1) <br> Waitarere (West_7) <br> Lake Papaitonga (West_8) <br> Waikawa (West_9) | 27,000,000 |
| Tararua | Upper Manawatu (Mana_1) <br> Weber - Tamaki (Mana_2) <br> Upper Tamaki (Mana_3) <br> Upper Kumeti (Mana_4) <br> Tamaki - Hopelands (Mana_5) <br> Hopelands - Tiraumea (Mana_6) <br> Tiraumea (Mana_7) <br> Mangatainoka (Mana_8) <br> Upper Gorge (Mana_9) | 239,000,000 |
| East Coast | $\begin{aligned} & \text { Akitio (Akit_1) } \\ & \text { Owahanga (Owha_1) } \\ & \text { East Coast (East_1) } \end{aligned}$ | Unspecified |
| Northern Rangitikei | Upper Rangitikei (Rang_1) Middle Rangitikei (Rang_2) | Unspecified |
| Northern Whanganui | Upper Whanganui (Whai_1) <br> Cherry Grove (Whai_2) <br> Te Maire (Whai_3) <br> Middle Whanganui (Whai_4) <br> Pipiriki (Whai_5) <br> 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 $G W M Z^{*}$ and the annual allocable volume for each $G W M Z^{*}$

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

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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*)
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
Table E.4: Lake^ Water Quality Targets* (or standards where specified under conditions/standards/terms in a rule)
Table E.5: Water Quality Targets* (or standards where specified under conditions/standards/terms in a rule) Key (fold-out)

USER GUIDE: How to use the contents of Schedule E.
Step 1: Identify the $W M S Z^{*}$ for your proposed activity (go to Schedule A).
Step 2: Check if Trout Spawning is a Value for your $W M S Z^{*}$ ( 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 $\wedge$ :
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 ${ }^{\wedge}$ 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 $W M S Z^{*}$,
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^ 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^ in the coastal marine area^:
i. Turn to Tables 1.4 to 1.7 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-wide Water Quality Targets* (or standards where specified under conditions/standards/terms in a rule) that apply to all Rivers^

| Water Management Zone* | Sub-zone* | E.coli / 100 ml |  | Periphyton Filamentous Cover | Diatom or Cyanobacterial Cover | $\begin{aligned} & \text { QMCI } \\ & \% \Delta^{1} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | < $50{ }^{\text {th }} \%$ ile | < 20,th\%ile |  |  |  |
| All Water Management Zones* | All Water Management Subzones* | 260 | 550 | 30\% | 60\% | 20 |

[^33] 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^)

| Water Management Zone* | Sub-zone* | pH |  | Temp ( $\left.{ }^{\circ} \mathrm{C}\right)$ |  | $\begin{gathered} \text { DO } \\ \text { (\%SAT) } \end{gathered}$ | $\begin{gathered} \mathrm{scBOD} 5 \\ \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{gathered}$ | $\begin{aligned} & \text { POM } \\ & \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{aligned}$ | Periphyton | $\begin{gathered} \text { DRP } \\ \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{gathered}$ | $\begin{gathered} \mathrm{SIN} \\ \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{gathered}$ | Deposited Sediment Cover (\%) | MCI | Ammoniacal Nitrogen $\left(\mathrm{g} / \mathrm{m}^{3}\right)$ |  | Tox. | Visual Clarity <br> (m) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Range | $\triangle$ | < | $\triangle$ | > | < | < | $\begin{aligned} & \text { Chla } \\ & \left(\mathrm{mg} / \mathrm{m}^{2}\right) \end{aligned}$ | < | < | $\leq$ | > | $<$ | Max | \% | $\begin{aligned} & <50^{\text {th }} \\ & \% \text { ile } \end{aligned}$ | \% $\triangle$ |
| Upper Manawatu (Mana_1) | 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 |
|  | 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 <br> (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 <br> (Mana_2) | 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 |
|  | Mangatera <br> (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 |
| TamakiHopelands (Mana_5) | TamakiHopelands (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 |
|  | 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 |

[^34] sediment on the bed of the river will provide for and maintain the values in each WMSZ.

| Water Management Zone* | Sub-zone ${ }^{\text {* }}$ | pH |  | Temp <br> ( ${ }^{\circ} \mathrm{C}$ ) |  | $\begin{gathered} \text { DO } \\ (\% S A T) \end{gathered}$ | $\begin{gathered} \mathrm{scBOD} 5 \\ \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{gathered}$ | $\begin{aligned} & \text { POM } \\ & \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{aligned}$ | Periphyton | $\begin{aligned} & \text { DRP } \\ & \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{aligned}$ | $\begin{aligned} & \mathrm{SIN} \\ & \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{aligned}$ | Deposited Sediment Cover (\%) 2 | MCI | Ammoniacal Nitrogen ( $\mathrm{g} / \mathrm{m}^{3}$ ) |  | Tox. | Visual Clarity <br> (m) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Range | $\Delta$ | < | $\Delta$ | > | $<$ | < | $\begin{gathered} \text { Chla } \\ \left(\mathrm{mg} / \mathrm{m}^{2}\right) \end{gathered}$ | < | < | $\leq$ | > | < | Max | \% | $\begin{aligned} & <50^{\text {th }} \\ & \% \text { ile } \end{aligned}$ | \% $\triangle$ |
|  | 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 <br> (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 <br> (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- <br> Tiraumea <br> (Mana_6) | HopelandsTiraumea (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 |
| Tiraumea (Mana_7) | 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 <br> (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 |
|  | 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 <br> (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 <br> (Mana_8) | 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 |
|  | 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 Zone* | Sub-zone* | pH |  | Temp <br> ( ${ }^{\circ} \mathrm{C}$ ) |  | $\begin{gathered} \text { DO } \\ (\% \mathrm{SAT}) \end{gathered}$ | $\begin{gathered} \mathrm{scBOD} 5 \\ \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{gathered}$ | $\begin{aligned} & \text { POM } \\ & \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{aligned}$ | Periphyton | $\begin{aligned} & \text { DRP } \\ & \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{aligned}$ | $\begin{aligned} & \mathrm{SIN} \\ & \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{aligned}$ | Deposited Sediment Cover (\%) 2 | MCI | $\begin{gathered} \text { Ammoniacal } \\ \text { Nitrogen } \\ \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{gathered}$ |  | Tox. | Visual Clarity (m) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Range | $\Delta$ | < | $\Delta$ | > | $<$ | < | $\begin{aligned} & \text { Chla } \\ & \left(\mathrm{mg} / \mathrm{m}^{2}\right) \end{aligned}$ | < | < | $\leq$ | > | $<$ | Max | \% | $\begin{aligned} & <50^{\text {th }} \\ & \% \text { ile } \end{aligned}$ | \% $\triangle$ |
|  | 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 <br> (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 <br> (Mana_9) | Upper Gorge <br> (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 <br> (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 |
|  | 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 <br> (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 <br> (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_10) | 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 |
|  | 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 |
|  | Middle <br> Pohangina <br> (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 Zone* | Sub-zone* | pH |  | Temp <br> ( ${ }^{\circ} \mathrm{C}$ ) |  | $\begin{gathered} \text { DO } \\ (\% \mathrm{SAT}) \end{gathered}$ | $\begin{gathered} \mathrm{scBOD} 5 \\ \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{gathered}$ | $\begin{aligned} & \text { POM } \\ & \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{aligned}$ | Periphyton | $\begin{aligned} & \text { DRP } \\ & \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{aligned}$ | $\begin{aligned} & \mathrm{SIN} \\ & \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{aligned}$ | Deposited Sediment Cover (\%) 2 | MCI | Ammoniacal Nitrogen ( $\mathrm{g} / \mathrm{m}^{3}$ ) |  | Tox. | Visual Clarity (m) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Range | $\Delta$ | < | $\Delta$ | > | $<$ | < | $\begin{aligned} & \text { Chla } \\ & \left(\mathrm{mg} / \mathrm{m}^{2}\right) \end{aligned}$ | < | < | $\leq$ | > | < | Max | \% | $\begin{aligned} & <50^{\text {th }} \\ & \% \text { ile } \end{aligned}$ | \% $\triangle$ |
|  | Aokautere <br> (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_11) | 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 |
|  | Kahuterawa <br> (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 |
|  | 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 <br> (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 |
| $\begin{aligned} & \text { Oroua } \\ & \text { (Mana_12) } \end{aligned}$ | Upper Oroua <br> (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 |
|  | Middle Oroua <br> (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 |
|  | Lower Oroua <br> (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 Zone* | Sub-zone* | pH |  | Temp <br> ( ${ }^{\circ} \mathrm{C}$ ) |  | $\begin{gathered} \text { DO } \\ (\% \mathrm{SAT}) \end{gathered}$ | $\begin{gathered} \mathrm{scBOD} \\ \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{gathered}$ | $\begin{aligned} & \text { POM } \\ & \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{aligned}$ | Periphyton | $\begin{aligned} & \text { DRP } \\ & \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{aligned}$ | $\begin{gathered} \mathrm{SIN} \\ \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{gathered}$ | Deposited Sediment Cover (\%) 2 | MCI | $\begin{gathered} \text { Ammoniacal } \\ \text { Nitrogen } \\ \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{gathered}$ |  | Tox. | Visual Clarity (m) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Range | $\Delta$ | $<$ | $\Delta$ | > | < | < | $\begin{aligned} & \text { Chla } \\ & \left(\mathrm{mg} / \mathrm{m}^{2}\right) \end{aligned}$ | < | $<$ | $\leq$ | > | < | Max | \% | $\begin{aligned} & <50^{\text {th }} \\ & \% \text { ile } \end{aligned}$ | \% $\triangle$ |
|  | Makino <br> (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_13) | Coastal <br> Manawatu <br> (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 |
|  | 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 |
|  | Mangaore <br> (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 <br> (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 <br> (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 <br> (Rang_1) | Upper Rangitikei <br> (Rang_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 | 3.4 | 20 |
| Middle Rangitikei (Rang_2) | 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 |
|  | 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 Zone* | Sub-zone* | pH |  | Temp <br> ( ${ }^{\circ} \mathrm{C}$ ) |  | $\begin{gathered} \text { DO } \\ (\% \text { SAT }) \end{gathered}$ | $\begin{gathered} \mathrm{scBOD} 5 \\ \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{gathered}$ | $\begin{aligned} & \text { POM } \\ & \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{aligned}$ | Periphyton | $\begin{aligned} & \text { DRP } \\ & \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{aligned}$ | $\begin{gathered} \mathrm{SIN} \\ \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{gathered}$ | Deposited Sediment Cover (\%) | MCI | Ammoniacal Nitrogen $\left(\mathrm{g} / \mathrm{m}^{3}\right)$ |  | Tox. | Visual Clarity (m) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Range | $\Delta$ | < | $\Delta$ | > | $<$ | < | $\begin{aligned} & \text { Chla } \\ & \left(\mathrm{mg} / \mathrm{m}^{2}\right) \end{aligned}$ | $<$ | < | $\leq$ | > | $<$ | Max | \% | $\begin{aligned} & <50^{\text {th }} \\ & \% \text { ile } \end{aligned}$ | \% $\Delta$ |
|  | Upper <br> Moawhango <br> (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 <br> Moawhango <br> (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 <br> Moawhango <br> (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 (Rang_3) | 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 |
|  | Makohine <br> (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 Rangitikei (Rang_4) | Coastal Rangitikei <br> (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 |
|  | 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 <br> (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 Zone ${ }^{*}$ | Sub-zone* | pH |  | Temp ( ${ }^{\circ} \mathrm{C}$ ) |  | $\begin{gathered} \text { DO } \\ (\% \text { SAT }) \end{gathered}$ | $\begin{gathered} \mathrm{scBOD} 5 \\ \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{gathered}$ | $\begin{aligned} & \text { POM } \\ & \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{aligned}$ | Periphyton | $\begin{aligned} & \text { DRP } \\ & \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{aligned}$ | $\begin{gathered} \mathrm{SIN} \\ \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{gathered}$ | Deposited Sediment Cover (\%) 2 | MCI | Ammoniacal Nitrogen ( $\mathrm{g} / \mathrm{m}^{3}$ ) |  | Tox. | Visual Clarity <br> (m) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Range | $\Delta$ | < | $\Delta$ | > | $<$ | < | $\begin{aligned} & \text { Chla } \\ & \left(\mathrm{mg} / \mathrm{m}^{2}\right) \end{aligned}$ | < | < | $\leq$ | > | < | Max | \% | $\begin{aligned} & <50^{\text {th }} \\ & \% \text { ile } \end{aligned}$ | \% $\triangle$ |
|  | Tutaenui <br> (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 <br> (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_2) | Cherry Grove <br> (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 |
|  | Lower <br> Whakapapa <br> (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 |
|  | Piopiotea <br> (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 <br> (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 <br> (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 <br> (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 Zone* | Sub-zone ${ }^{\text {* }}$ | pH |  | Temp <br> ( ${ }^{\circ} \mathrm{C}$ ) |  | $\begin{gathered} \text { DO } \\ (\% S A T) \end{gathered}$ | $\begin{gathered} \mathrm{scBOD} 5 \\ \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{gathered}$ | $\begin{aligned} & \text { POM } \\ & \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{aligned}$ | Periphyton | $\begin{aligned} & \text { DRP } \\ & \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{aligned}$ | $\begin{aligned} & \mathrm{SIN} \\ & \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{aligned}$ | Deposited Sediment Cover (\%) 2 | MCI | Ammoniacal Nitrogen ( $\mathrm{g} / \mathrm{m}^{3}$ ) |  | Tox. | Visual Clarity <br> (m) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Range | $\Delta$ | < | $\Delta$ | > | $<$ | < | $\begin{gathered} \text { Chla } \\ \left(\mathrm{mg} / \mathrm{m}^{2}\right) \end{gathered}$ | < | < | $\leq$ | > | < | Max | \% | $\begin{aligned} & <50^{\text {th }} \\ & \% \text { ile } \end{aligned}$ | \% $\triangle$ |
| Middle Whanganui (Whai_4) | Middle Whanganui <br> (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 |
|  | Upper Ohura <br> (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 |
|  | Lower Ohura <br> (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 <br> (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 <br> (Whai_5) | Pipiriki <br> (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 <br> (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 |
|  | Upper Manganui ote 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 <br> (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 <br> (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 Zone* | Sub-zone* | pH |  | Temp <br> ( ${ }^{\circ} \mathrm{C}$ ) |  | $\begin{gathered} \text { DO } \\ (\% \mathrm{SAT}) \end{gathered}$ | $\begin{gathered} \mathrm{scBOD} 5 \\ \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{gathered}$ | $\begin{aligned} & \text { POM } \\ & \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{aligned}$ | Periphyton | $\begin{gathered} \text { DRP } \\ \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{gathered}$ | $\begin{gathered} \mathrm{SIN} \\ \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{gathered}$ | Deposited Sediment Cover (\%) | MCI | Ammoniacal Nitrogen ( $\mathrm{g} / \mathrm{m}^{3}$ ) |  | Tox. | Visual Clarity <br> (m) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Range | $\Delta$ | < | $\triangle$ | > | < | < | $\begin{aligned} & \text { Chla } \\ & \left(\mathrm{mg} / \mathrm{m}^{2}\right) \end{aligned}$ | $<$ | < | $\leq$ | > | $<$ | Max | \% | $\begin{aligned} & <50^{\text {th }} \\ & \text { \%ile } \end{aligned}$ | \% $\triangle$ |
|  | 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 <br> (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 <br> (Whai_6) | Paetawa <br> (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_7) |  | 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 |
|  | 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 |
|  | Upokongaro <br> (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 (Whau_1) | 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 |
|  | 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 Zone* | Sub-zone* | pH |  | Temp <br> ( ${ }^{\circ} \mathrm{C}$ ) |  | $\begin{gathered} \text { DO } \\ (\% \mathrm{SAT}) \end{gathered}$ | $\begin{gathered} \mathrm{scBOD} 5 \\ \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{gathered}$ | $\begin{aligned} & \text { POM } \\ & \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{aligned}$ | Periphyton | $\begin{aligned} & \text { DRP } \\ & \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{aligned}$ | $\begin{gathered} \mathrm{SIN} \\ \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{gathered}$ | Deposited Sediment Cover (\%) 2 | MCI | AmmoniacalNitrogen$\left(\mathrm{g} / \mathrm{m}^{3}\right)$ |  | Tox. | Visual Clarity (m) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Range | $\Delta$ | $<$ | $\Delta$ | > | < | < | $\begin{aligned} & \text { Chla } \\ & \left(\mathrm{mg} / \mathrm{m}^{2}\right) \end{aligned}$ | < | < | $\leq$ | > | < | Max | \% | $\begin{aligned} & <50^{\text {th }} \\ & \% \text { ile } \end{aligned}$ | \% $\triangle$ |
|  | 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_3) | Lower <br> Whangaehu <br> (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 <br> (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 Makotuku <br> (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 |
|  | Upper <br> Mangawhero <br> (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 <br> Mangawhero <br> (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 <br> (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 <br> (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 Zone* | Sub-zone* | pH |  | Temp <br> ( ${ }^{\circ} \mathrm{C}$ ) |  | $\begin{gathered} \text { DO } \\ (\% \mathrm{SAT}) \end{gathered}$ | $\begin{gathered} \mathrm{scBOD} 5 \\ \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{gathered}$ | $\begin{aligned} & \text { POM } \\ & \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{aligned}$ | Periphyton | $\begin{aligned} & \text { DRP } \\ & \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{aligned}$ | $\begin{gathered} \mathrm{SIN} \\ \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{gathered}$ | Deposited Sediment Cover (\%) 2 | MCI | Ammoniacal Nitrogen ( $\mathrm{g} / \mathrm{m}^{3}$ ) |  | Tox. | Visual Clarity (m) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Range | $\Delta$ | $<$ | $\Delta$ | > | < | < | $\begin{aligned} & \text { Chla } \\ & \left(\mathrm{mg} / \mathrm{m}^{2}\right) \end{aligned}$ | < | $<$ | $\leq$ | > | < | Max | \% | $\begin{aligned} & <50^{\text {th }} \\ & \% \text { ile } \end{aligned}$ | \% $\triangle$ |
|  | Lower Turakina <br> (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 (Ohau_1) | Upper Ohau <br> (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 |
|  | Lower Ohau <br> (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 <br> (Owha_1) | Owahanga <br> (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 <br> (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 |
| Akitio <br> (Akit_1) | Upper Akitio <br> (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 |
|  | Lower Akitio <br> (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 <br> (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 <br> (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 Iwi (West_2) | Kai Iwi (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 <br> (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 Zone* | Sub-zone* | pH |  | Temp ( ${ }^{\circ} \mathrm{C}$ ) |  | $\begin{gathered} \text { DO } \\ (\% \text { SAT) } \end{gathered}$ | $\underset{\left(\mathrm{g} / \mathrm{m}^{3}\right)}{\mathrm{scBOD}_{5}}$ | $\begin{aligned} & \text { POM } \\ & \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{aligned}$ | Periphyton | $\begin{gathered} \text { DRP } \\ \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{gathered}$ | $\begin{gathered} \mathrm{SIN} \\ \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{gathered}$ | Deposited Sediment Cover (\%) 2 | MCI | Ammoniacal Nitrogen ( $\mathrm{g} / \mathrm{m}^{3}$ ) |  | Tox. | Visual Clarity (m) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Range | $\Delta$ | $<$ | $\triangle$ | > | < | < | $\begin{aligned} & \text { Chla } \\ & \left(\mathrm{mg} / \mathrm{m}^{2}\right) \end{aligned}$ | $<$ | < | $\leq$ | $>$ | < | Max | \% | $\begin{aligned} & <50^{\text {th }} \\ & \% \text { ile } \end{aligned}$ | \% $\triangle$ |
| Kaitoke Lakes <br> (West_4) | Kaitoke Lakes <br> (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 <br> (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 <br> (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 <br> (West_9) | Waikawa <br> (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 |
|  | 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 (Hoki_1) | 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 |
|  | 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

| Temp <br> ( ${ }^{\circ} \mathrm{C}$ ) |  | $\begin{gathered} \text { DO } \\ (\% \text { SAT) } \end{gathered}$ | Deposited Sediment or POM |  | Toxicants (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| < | $\Delta$ | > | $\Delta^{3}$ | < 4 |  |
| 11 | 2 | 80 | No measurable increase of deposited sediment or particulate organic matter (POM) on the bed ${ }^{\wedge}$ of the river ${ }^{\wedge}$ | 10 | 99 |

[^35] sediment on the bed of the river will provide for and maintain the values in each WMSZ.

| Lake Type | Algal Biomass Chla (mg/m ${ }^{3}$ ) |  | $\begin{gathered} \mathrm{TP} \\ \left(\mathrm{~g} / \mathrm{m}^{3}\right) \end{gathered} ⿻ \begin{gathered} \text { ( } \end{gathered}$ | $\begin{gathered} \text { TN } \\ \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{gathered}$ | Ammoniacal <br> Nitrogen <br> $\left(\mathrm{g} / \mathrm{m}^{3}\right)$ <br> $<^{5}$ | Tox. <br> \% | Visual Clarity (m) |  | $\begin{gathered} \begin{array}{c} \text { Euphotic } \\ \text { Depth } \end{array} \\ \hline \% \Delta \end{gathered}$ | E. coli / 100 ml |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | < | Max. |  |  |  |  | > | \% $\triangle$ |  | $\begin{gathered} \text { Summer } \\ (1 \text { Nov - } 30 \text { Apr) } \end{gathered}$ | $\begin{gathered} \text { Winter } \\ (1 \text { May }-31 \text { Oct) }) \end{gathered}$ |
| Deep lakes ( $\geq 5 \mathrm{~m}$ 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 |

[^36]

[^37]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 |  |  |  |


| 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 canopy* 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 common* indigenous* broadleaved* species. <br> This habitat type is found on dry dune land ${ }^{\wedge}$ and low hill country (from sea level to 750 m asl). |
| Rimu/tawa-kamahi forest or treeland | Tawa and kamahi dominated ${ }^{*}$ forest ${ }^{*}$ or treeland* with scattered* emergent rimu. | Threatened | 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. <br> Rimu/tawa-kamahi forest can be found in all Districts of the Region from sea level to 800 m asl. |
| Podocarp/red beech-kamahi-tawa forest or treeland | Red beech, kamahi and tawa dominated* forest ${ }^{*}$ or treeland* occurring between $400-700 \mathrm{~m}$ asl. | Threatened | 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. At the higher altitudes of the range of this habitat type, silver beech becomes increasingly dominant*. <br> Podocarp/red beech-kamahi-tawa forest is largely confined to the Rang_2b Water Management Sub-zone*. |
| Podocarp/black beech/mountain beech forest or treeland | Black beech and mountain beech dominated ${ }^{*}$ forest ${ }^{*}$ or treeland ${ }^{*}$ occurring between 400-1250 m asl. | Threatened | 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. <br> This habitat type is found in dry climates, on free-draining, relatively fertile soils. |
| 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 | 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. <br> This habitat type is found in the montane areas of the Rangitikei and Manawatu Districts. |
| Kowhai-broadleaved forest or treeland | Forest* or treeland ${ }^{*}$ dominated* by kowhai on river^ terraces, river ${ }^{\wedge}$ risers or cliffs and bluffs associated with rivers^. <br> This habitat type is found in the central area of the Region, within the following Water Management Subzones*: Akit_1a, Akit_1b, Akit_1c, Mana_1a, Mana_1b, Mana_1c, Mana_7a, Mana_7b, Mana_7c, | Threatened | 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*. <br> The absence of a dense canopy* of tawa or kamahi from this habitat type is notable. |


| Habitat Type Label | Defined As | Classification | Further Description |
| :---: | :---: | :---: | :---: |
|  | Mana_7d, Mana_12d, Rang_2b, <br> Rang_2e, Rang_2f, Rang_2g, <br> Rang_3a, Rang_3b, Rang_4c, <br> Whai_6, Whai_7a, Whai_7c, <br> Whai_7d, Whau_2, Whau_3a, <br> 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 indigenous* broadleaved* species can also be present scattered* through the canopy* or understorey but will not be dominant*. |
| Forest*, Treeland** Scrub* or Shrubland** Habitat Types Classified as At-risk |  |  |  |
| 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 podocarp* species will be dependent on soil drainage and past disturbance history. Totara, miro and matai are likely to be more abundant ${ }^{*}$ on free-draining soils, with kahikatea likely to be dominant* on poorly-drained soils. Rimu will likely be dominant* in areas of high rainfall. Tawa, northern rata, hinau, black and white maire, fuchsia and/or mahoe may also be present. <br> 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. <br> 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 tree* species, although upland conifers (eg., Hall's totara, pahautea, and mountain toatoa) and other species (eg., silver beech, broadleaf) may be present (but not common*) in places, especially at lower elevations or where rainfall is higher. The understorey of mountain beech forest ${ }^{*}$ is typically sparse. Mountain beech can tolerate cold temperatures, dry winds, and low fertility soils. <br> Mountain beech forest can be the predominant habitat type at higher altitudes ( $650-1450 \mathrm{~m}$ asl), especially on eastern sites* and in areas with harsh environmental conditions. |

## Habitat Type Labe

Indigenous forest, treeland or scrub on alluvial terrace, floodplains, shingle fans or sand dunes supporting divaricating plant species

Defined As
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
Indigenous* forest** treeland** or scrub* on freely draining shingle fans, rive $r^{\wedge}$ terraces and sand dunes that provides habitat for matagouri (Discaria toumatou). Indigenous* forest* or scrub* habitat containing Powelliphanta travers traversi or Powelliphanta travers 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*.

## Classification Further Description

## 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).

## 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 indigenous* woody vegetation*, exotic woody vegetation*, or a combination of both indigenous* and exotic woody vegetation*. This habitat type varies greatly between sites* in both structure and composition, and might be highly modified, contain artificial assemblages of species or include deliberately planted woody species (indigenous* or exotic). |
| Tussockland* Habitat Type Classified as At-risk |  |  |  |
| Indigenous tussockland below the treeline | Red tussock (Chionochloa rubra subsp. rubra var. rubra) dominated* tussockland* below the treeline in areas with natural or human induced disturbance regimes, high water^ tables or temperature inversions. <br> This habitat type is found in Rang_1, Rang_2a, Rang_2b, Rang_2c, Rang_2d, Rang_2e, and Rang_2f, Water Management Sub-zones*. <br> This habitat type located within the beds* or rivers* is excluded. | At-risk | Red tussock is particularly dominant* 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. <br> Indigenous* and exotic woody species (eg., heather, monoao, Hebe, manuka and kanuka) are likely to be increasingly present as natural successional processes advance. |
| Wetland^ Habitat Types Classified as Rare or Threatened |  |  |  |
| Dune slack wetland | Dune slack wetlands^ support lowgrowing indigenous* herbfield* and occur in topographically low sites* where wind has eroded hollows or depressions in raw sand, or where water ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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. <br> 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 indigenous* 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^. <br> 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 ${ }^{\wedge}$ 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. <br> Fen wetlands ${ }^{\wedge}$ 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 ${ }^{\wedge}$. Fen wetlands ${ }^{\wedge}$ are of low to moderate acidity and fertility and the water ${ }^{\wedge}$ table is usually close to or just below the surface. <br> 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 ${ }^{\wedge}$ are rain-fed systems on mineral or peat, or mature, skeletal soils. | Rare | Pakihi wetlands ${ }^{\wedge}$ can be found on level to rolling or sloping land ${ }^{\wedge}$ in areas of high rainfall. Pakihi wetlands ${ }^{\wedge}$ are of very low fertility and low pH and are frequently saturated, but can be seasonally dry. <br> Pakihi wetlands ${ }^{\wedge}$ 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. <br> A spring wetland^${ }^{\wedge}$ occurs at the point that an underground stream emerges at a point source. | Rare | Seepage and spring wetlands ${ }^{\wedge}$ can be found at the point of change of slopes and places where the water ${ }^{\wedge}$ table is raised. Seepage wetlands ${ }^{\wedge}$ 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*. <br> Seepage and spring wetlands ${ }^{\wedge}$ are often small and can occur as isolated systems or in association* with other wetland $^{\wedge}$ types. The volume of water ${ }^{\wedge}$ within a seepage system is less than that within a spring system. <br> Seepage and spring wetlands ${ }^{\wedge}$ 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 ${ }^{\wedge}$ support indigenous* sedges, rushes, reeds, flaxland*, tall herbs, herbfield*, shrubs*, scrub* and forest*. <br> Swamp wetlands^ are generally of high fertility, receiving nutrients and sediment from surface run-off and groundwater. <br> Marsh wetlands ${ }^{\wedge}$ 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. <br> Swamp and marsh wetlands^ can usually be found on plains, valley floors and basins. Marsh wetlands ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ within a saltmarsh wetland ${ }^{\wedge}$ can be saline or brackish. Substrates are typically mineral. <br> Saltmarsh wetland^ 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 ${ }^{\wedge}$ 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 ( $<3 \mathrm{~cm}$ 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, river^, and volcanic landforms and include dune lakes, ox-bow lakes and tarns. <br> Lakes and lagoons can exist in isolation, be entirely within, or have elements of, other wetland^ habitat types. <br> Exotic species (aquatic, wetland ${ }^{\wedge}$ or terrestrial) may also be present. |


| Habitat Type Label | Defined As | Classification | Further Description |
| :---: | :---: | :---: | :---: |
|  | Lakes are areas of standing (nonflowing) water^. Lagoons are shallow lakes, connected to, or independent of, a river ${ }^{\wedge}$, lake or the sea. |  |  |
| Naturally Uncommon Habitat 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. <br> OR <br> Where bare substrate or herbfield* dominated* by indigenous* species occurs on flat land ${ }^{\wedge}$ at the top of coastal cliffs. | Rare | Vegetation types typically found in this habitat include indigenous* lichen species, non-woody or low-growing semiwoody herbs, tussocks, shrubs* and scrub*. Species characteristic of these vegetation types include, for example, Pimelea, sea primrose, Selliera, Myosotis, shore puha, flax, toetoe, Astelia, Hebe, daisy species, kawakawa, mahoe and broadleaf. Exotic species may also be present. <br> 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 1 km of the coast and less than 300 m 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. <br> Acidic rock types include mudstone (papa), sandstone, greywacke, rhyolite, granite and schist. | Rare | Vegetation types typically found in this habitat include indigenous* lichen species, non-woody or low-growing semiwoody herbs, tussocks, shrubs* and scrub*. Species characteristic of these vegetation types include, for example, Pimelea, Myosotis, flax, toetoe, Astelia, Hebe, daisy and tree-daisy species, Gaultheria, Dracophyllum, mahoe and broadleaf. Exotic species may also be present. <br> 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. <br> Quartzose rock types include quartzite and soft quartzitic sediments. | Rare | Vegetation types typically found in this habitat include indigenous* lichen species, non-woody or low-growing semiwoody herbs, tussocks, shrubs* and scrub*. Species characteristic of these vegetation types include, for example, Pimelea, Myosotis, flax, toetoe, Astelia, Hebe, daisy and tree-daisy species, Gaultheria, Dracophyllum, mahoe and broadleaf. Exotic species may also be present. <br> 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. <br> 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 indigenous*lichen species, non-woody or low-growing semiwoody herbs, tussocks, shrubs* and scrub*. Species characteristic of these vegetation types include, for example, Pimelea, Myosotis, flax, toetoe, Astelia, Hebe, daisy and tree-daisy species, ferns, Gaultheria, Dracophyllum, mahoe and broadleaf. Exotic species may also be present. <br> 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 ${ }^{\star}$, 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 semisubterranean. <br> Karst systems provide habitat for highly specialised indigenous* species (often endemic*) that are adapted to subterranean environments. <br> 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. <br> 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. <br> 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 (Oligosomia microlepis). <br> 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. <br> 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. <br> 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). <br> 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. <br> 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. <br> 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). <br> 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. <br> 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. <br> 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). <br> 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. <br> 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. <br> 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). <br> 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. <br> 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 duneland* include tussocks, low-growing or semi-woody herbs and shrubs*. These vegetation types characteristically support, for example, toetoe, Selliera rotundifolia, 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 duneland*. <br> The threatened species Pimelea actea is known from the Tura_1b, West_5, and Whau_4 Water Management Zones*. |
| Inland duneland | Indigenous* scrub*, tussockland*, herbfield* or forest* occurring on inland duneland* formed on raw or recent sands inland. | Rare | Vegetation types typically found on inland duneland* include tussock, low-growing or semi-woody herbs, shrubs*, and trees*. These vegetation types characteristically support, for example, toetoe, flax, native spinach, manuka, 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

i. 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.
Or
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.

Or

## Wetland^ Habitat Types Classified as Threatened

viii. Areas of naturally occurring indigenous* wetland ${ }^{\wedge}$ 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^ 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.

Or

## Wetland ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ habitat maintained in relation to the implementation of any resource consent ${ }^{\wedge}$ conditions $^{\wedge}$ or agreements relating to the operation* of any hydroelectric power scheme currently lawfully established.
Or
vii. Open water^ 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 ManawatuWanganui 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

Outstanding Natural Features or Landscapes
(a) Tongariro National Park

## Characteristics / Values

(i) 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
(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

Outstanding Natural Features or Landscapes

|  | (v) Recreational values, particularly tramping and hunting, and those provided by the water and riparian margins <br> (vi) Recognised protection - national park <br> (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 <br> (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 contrast between the sky and the solid nature of the land at the crest of the highest points along the ridges | (i) Visual and scenic characteristics, particularly the visual prominence of the skyline in the eastern part of the Region <br> (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 <br> (ii) Intrinsic value <br> (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 <br> (iv) Scientific value, particularly Reporoa Bog and Makirikiri Tarns <br> (v) Importance to tangata whenua |
| (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 Waimarino and Orautoha valleys or the Ruatiti Stream or valley) | (i) Visual and scenic characteristics, particularly river gorges and riparian margins and outstanding wild and scenic characteristics <br> (ii) Ecological significance, providing a habitat for the Blue Duck (whio), and wildlife and fisheries <br> (iii) Recognised protection - National Water Conservation Order <br> (iv) Historic heritage, in particular historical importance, archaeological sites and high potential for archaeological site discovery |
| (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 (approximate map reference NZMS 260 T22:488-496) to the confluence of Whakaurekou River and Ohutu Stream (approximate map reference NZMS 260 U21:714-691) | (i) 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) <br> (ii) Scientific and educational value <br> (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 <br> (ii) Ecological values, including values associated with mature indigenous forest, remnant and regenerating indigenous vegetation and important habitat <br> (iii) Contribution to the national conservation estate |


| Outstanding Natural Features or Landscapes |
| :--- |
| (k) $\begin{array}{l}\text { The Tararua Forest Park (land administered by the } \\ \text { Department of Conservation) }\end{array}$ |

## Characteristics / Values

(iv) Recreational values, especially tramping and hunting
(v) Historical values associated with early recreation, hunting and botanical exploration
(vi) Cultural values
(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
(I) 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, including the adjacent scenic reserve(i) Visual and scenic characteristics, particularly provided by its distinctive landscape
(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
(i) Visual and scenic characteristics, particularly its special coastal landscape features
(ii) Coastal geological processes
(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


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 $\mathrm{I}: 3-\mathrm{I}: 9$ depict the location of the mouth ${ }^{\wedge}$ 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^ | $\mathrm{l}: 1$ | The west coast CMA, beaches and some rivers^ of the Manawatu-Wanganui Region. <br> The east coast CMA and some rivers^ of the ManawatuWanganui Region. |
| Coastal Marine Area^ - river^ mouths ${ }^{\wedge}$ and cross-river CMA boundaries. <br> These figures also show the Estuary Water Management Sub-zones* relevant to Part C. | $\mathrm{l}: 3$ $\mathrm{l}: 4$ $\mathrm{l}: 5$ $\mathrm{l}: 6$ $\mathrm{l}: 7$ $\mathrm{l}: 8$ $\mathrm{l}: 9$ | Kai Iwi Stream and Mowhanau Stream. Whanganui River and Whangaehu River. Turakina River and Rangitikei River. Manawatu River and Hokio Stream. Ohau River and Waikawa Stream. Akitio River and Owahanga River. Wainui River. |
| Activity Management Areas | $\begin{aligned} & \mathrm{I}: 10 \\ & \mathrm{I}: 11 \\ & \mathrm{l}: 12 \\ & \mathrm{l}: 13 \end{aligned}$ | Port Activity Management Area. Protection Activity Management Areas: <br> - Whanganui River and Whangaehu River. <br> - Turakina River and Rangitikei River. <br> - Manawatu River and Cape Turnagain. |

## Part A: CMA Boundaries

Figures $\mathrm{I}: 1-\mathrm{I}: 2$ 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
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 ${ }^{\wedge}$ of the river^, or
(b) the point upstream that is calculated by multiplying the width of the river ${ }^{\wedge}$ mouth^ by five.

The rules ${ }^{\wedge}$ 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 Iwi 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 ${ }^{\wedge}$ 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 ${ }^{\wedge}$ 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 1.1 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 I:10.

Table I.1: Protection Activity Management Areas: ecological and other important characteristics

| Protection Activity Management Area | Ecological and other important characteristics |
| :---: | :---: |
| Whanganui River | - Nationally important as a nursery for freshwater and estuarine species. <br> - Nationally important ecosystem for bird species. <br> - Nationally important strategic site* for migratory bird species. <br> - Provides habitat for threatened species. <br> - Important roosting and feeding area for wading birds |


| Protection Activity Management Area | Ecological and other important characteristics |
| :---: | :---: |
|  | (especially shellfish beds). <br> - Important feeding and breeding ground for many fish species (especially access ways for whitebait* and lamprey). <br> - Corliss Island has a saltmarsh fringe and is important for hawks. <br> - Landguard Bluff comprises a nationally important sequence of Pleistocene sedimentary strata and pectin shells. <br> - Coastal landforms and adjacent dunes are important nesting habitat. <br> - Historic heritage^^. |
| Whangaehu River | - Nationally important strategic site* for migratory bird species. <br> - Provides habitat for threatened bird species. <br> - Important roosting and feeding area for wading birds. <br> - Regionally important for its high degree of naturalness. <br> Note: <br> - The Whitiau Scientific Reserve is located adjacent to the true right bank of the estuary. <br> - There is a dense concentration of archaeological sites adjacent to the estuary. |
| Turakina River | - Nationally important strategic site* for migratory bird species. <br> - Provides habitat for threatened bird species. <br> - Important roosting and feeding habitat for wading birds. <br> - Regionally distinct vegetation communities. <br> - Regionally important for its high degree of naturalness. <br> - Locally rich in archaeological sites. |
| Rangitikei River | - Contains regionally important plant species. <br> - Regionally important for bird species. <br> - Regionally important for saltmarsh communities and estuarine native turf species. <br> - Provides habitat for rare and threatened bird species. <br> - Important roosting and feeding area for wading birds. <br> - Important for whitebait* spawning. <br> - Historic heritage^. |
| Manawatu River | - Nationally important as a nursery for freshwater and estuarine species. <br> - Internationally important strategic site* for migratory bird species. <br> - Provides habitat for rare and threatened bird species. <br> - Important roosting and feeding area for wading birds. <br> - Contains regionally important plant species. <br> - Internationally recognised as a wetland^ of international importance under the RAMSAR Convention. <br> - Regionally important for its high degree of naturalness and diversity. |
| Cape Turnagain | - Important haul out area for marine mammals. <br> - Important feeding, roosting and breeding area for birds (especially blue penguins). <br> - Site* of high value to $i{ }^{*} \mathbf{I}^{*}$. <br> - Site* of geological importance. <br> - Historic heritage^. |



Figure I:10 Port Activity Management Area


$\qquad$ Protection 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: $\quad$ 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*:

| Table Number | 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. |
|  | SOS-R | Sites of Significance - Riparian | Sites of significance for indigenous riparian biodiversity within the CMA are maintained or enhanced. |
|  | 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 as <br> whitebait*. |
| Recreational and <br> Cultural Values | CR | Contact Recreation | The CMA is suitable for contact recreation. |
|  | Am | Amenity | The amenity values of the CMA are maintained or enhanced. |
|  | Mau | Mauri* | 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 <br> Values | CAP | Capacity to Assimilate Pollution | The capacity of the CMA to assimilate pollution is not exceeded. |

## 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; El: 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^ quality and life-supporting capacity.

|  | Estuary Water | Zone-wide Values |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Zone* | Management Sub-zone* | LSC | SOS-A | SOS-R | IS | WM | CR | Am | Mau | SG | SOS-C | IA | CAP | EI |
| Seawater Management <br> Zone* (entire CMA <br> excluding Estuary Water <br> Management Sub-zones*) | N/A | M |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Coastal Manawatu (Mana_13) | Manawatu Estuary (Mana_13CMA) See Figure I:6 | LM |  | $\sqrt{1,2}$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark 4$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Coastal Rangitikei (Rang_4) | Rangitikei Estuary <br> (Rang_4CMA) See Figure l:5 | LM |  | $\checkmark 1$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Lower Whanganui (Whai_7) | Whanganui Estuary (Whai_7CMA) See Figure I:4 | LM |  | $\checkmark^{1,2}$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Coastal Whangaehu (Whau_4) | Whangaehu Estuary <br> (Whau_4CMA) See Figure l:4 | HSS |  | $\checkmark 1,2$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Turakina (Tura_1) | Turakina Estuary (Tura_1CMA) See Figure l:5 | HSS |  | $\checkmark^{1,2}$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |

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 Zone* | Estuary Water Management Sub-zone* | Zone-wide Values |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | LSC | SOS-A | SOS-R | IS | WM | CR | Am | Mau | SG | SOS-C | IA | CAP | EI |
| Ohau (Ohau_1) | Ohau Estuary (Ohau_1CMA) See Figure I:7 | HM |  | $\checkmark 1,2$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Lake Horowhenua (Hoki_1) | Hokio Estuary <br> (Hoki_1CMA) <br> See Figure I:6 | LS |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Owahanga (Owha_1) | Owahanga Estuary (Owha_1CMA) See Figure l:8 | HSS |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| East Coast (East_1) | Wainui Estuary (East_1CMA) See Figure I:9 | HSS |  | $\checkmark 2$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Akitio (Akit_1) | Akitio Estuary (Akit_1CMA) See Figure I:8 | HSS |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Kai Iwi (West_2) | Kai Iwi Estuary (West_2CMA) See Figure I:3 | HSS |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Mowhanau (West_3) | Mowhanau Estuary (West_3CMA) See Figure I:3 | LM |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Waikawa (West_9) | Waikawa Estuary (West_9CMA) See Figure I:7 | HM | $\checkmark 3$ | $\checkmark 1,2$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |

[^38]
## 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 $\mathbf{I} .5$ must read as follows (the numerical values in Table I. 5 are indicated by [...]):

| Abbreviations used in Table l. 5 |  | Full wording of the target |
| :---: | :---: | :---: |
| Header | Sub-header |  |
| Temp ( ${ }^{\circ} \mathrm{C}$ ) | $<$ | The temperature of the water ${ }^{\wedge}$ must not exceed [...] degrees Celsius. |
| DO (\%SAT) | > | The concentration of dissolved oxygen must exceed [...] \% of saturation. |
| Algal biomass Chl a $\left(\mathrm{mg} / \mathrm{m}^{3}\right)$ | < | 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 ( $\mathrm{g} / \mathrm{m}^{3}$ ) | < | The annual average concentration of dissolved reactive phosphorus (DRP) when the river^ flow is at or below the $20^{\text {th }}$ flow exceedance percentile* must not exceed [...] grams per cubic metre. |
| SIN (g/m ${ }^{3}$ ) | $<$ | The annual average concentration of soluble inorganic nitrogen $(\mathrm{SIN})^{1}$ when the river^ flow is at or below the $20^{\text {th }}$ flow exceedance percentile* must not exceed [...] grams per cubic metre. |
| Ammoniacal nitrogen ${ }^{2}\left(\mathrm{~g} / \mathrm{m}^{3}\right)$ | < | The average concentration of ammoniacal nitrogen must not exceed [...] grams per cubic metre. |
| Tox. | \% | For toxicants not otherwise defined in these targets, the concentration of toxicants in the water^ 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 th \% ile | The concentration of Escherichia coli must not exceed [...] per 100 millilitres 1 November - 30 April (inclusive) when the river ${ }^{\wedge}$ flow is at or below the $50^{\text {th }}$ flow exceedance percentile*. |
|  | $<20^{\text {th }} \%$ \%ile | The concentration of Escherichia coli must not exceed [...] per 100 millilitres year round when the river ${ }^{\wedge}$ flow is at or below the $20^{\text {th }}$ flow exceedance percentile*. |
| Euphotic depth | \% $\triangle$ | The euphotic depth must not be reduced by more than [...]\%. |
| Visual clarity (m) | \% $\triangle$ | The visual clarity of the water^ measured as the horizontal sighting range of a black disc must not be reduced by more than [...] \%. |
|  | > | 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 $50^{\text {th }}$ flow exceedance percentile*. |

[^39]Table I.5: Estuary Water Management Sub-zones*: Water^ Quality Targets
The following water^ quality targets apply to the Estuary Water Management Sub-zones*:

| Water Management Zone* | Estuary Sub-zone* | Temp ( $\left.{ }^{\circ} \mathrm{C}\right)$ | $\begin{gathered} \text { DO } \\ \text { (\%SAT) } \end{gathered}$ | Algal Biomass | Macroalgae | $\begin{gathered} \text { DRP } \\ \left(\mathrm{g} / \mathrm{m}^{3}\right) \end{gathered}$ | $\underset{\left(\mathrm{g} / \mathrm{m}^{3}\right)}{\mathrm{SIN}}$ | Ammoniacal Nitrogen $\left(\mathrm{g} / \mathrm{m}^{3}\right)$ | Tox. | E.coli / 100 ml |  | Euphotic Depth | Visual Clarity <br> (m) | Visual Clarity (m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | < | > | $\begin{gathered} \text { Chl a } \\ \left(\mathrm{mg} / \mathrm{m}^{3}\right) \end{gathered}$ | $\begin{gathered} \% \\ \text { cover } \end{gathered}$ | < | < | < | \% | $\begin{aligned} & \hline \text { < } 50^{\text {th }} \\ & \% \text { ile } \end{aligned}$ | $\begin{aligned} & \text { <20 }{ }^{\text {th }} \\ & \text { \%ile } \end{aligned}$ | \% $\triangle$ | > | \% $\triangle$ |
| Coastal Manawatu (Mana_13) | Manawatu Estuary <br> (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 <br> (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 Iwi (West_2) | Kai Iwi 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^ quality targets for the Seawater Management Zone*, as defined in Table I.7, must read as follows (the numerical values in Table I. 7 are indicated by [...]):

| Abbreviations used in Table l. 7 |  | Full wording of the target |
| :---: | :---: | :---: |
| Header | Sub-header |  |
| DO (\%SAT) | > | The concentration of dissolved oxygen must exceed [...] \% of saturation. |
| Algal biomass Chl a ( $\mathrm{mg} / \mathrm{m}^{3}$ ) | $<$ | The annual average algal biomass must not exceed [...] milligrams of chlorophyll a per cubic metre. |
| TP (g/m ${ }^{3}$ ) | < | The annual average concentration of total phosphorus must not exceed [...] grams per cubic metre. |
| TN (g/m ${ }^{3}$ ) | < | The annual average concentration of total nitrogen must not exceed [...] grams per cubic metre. |
| Ammoniacal nitrogen $\left(\mathrm{g} / \mathrm{m}^{3}\right)$ | < | The average concentration of ammoniacal nitrogen must not exceed [...] grams per cubic metre. |
| Tox. | \% | For toxicants not otherwise defined in these targets, the concentration of toxicants in the water^ 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 $[\ldots]$ \% of species. For metals the trigger value must be adjusted for hardness and apply to the dissolved fraction as directed in the table. |
| Visual clarity (m) | \% $\Delta$ | The visual clarity of the water^ measured as the horizontal sighting range of a black disc must not be reduced by more than [...] \%. |
|  | > | 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). |
|  | 1 May-31 October (inclusive) | The concentration of enterococci must not exceed [...] per 100 millilitres 1 May - 31 October (inclusive). |
| Faecal coliforms | < | The median concentration of faecal coliforms must not exceed [...] per 100 millilitres. |
|  | 90 ${ }^{\text {th }}$ \%ile | The $90^{\text {th }}$ 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 | $\begin{gathered} \text { DO } \\ \text { (\%SAT) } \end{gathered}$ | Algal Biomass | $\underset{\left(\mathrm{g} / \mathrm{m}^{3}\right)}{\mathrm{TP}}$ | $\underset{\left(\mathrm{g} / \mathrm{m}^{3}\right)}{\mathrm{TN}}$ | Ammoniacal Nitrogen ( $\mathrm{g} / \mathrm{m}^{3}$ ) | Tox. | Visual Clarity (m) |  | Enterococci |  | Faecal Coliforms |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $>$ | Chla (mg/m ${ }^{3}$ | < | < | < | (\%) | $>$ | \% $\Delta$ | 1 Nov - 30 April | 1 May - 31 Oct | < | 90th\%ile |
| Seawater 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


[^0]:    Michael McCartney
    CHIEF EXECUTIVE

[^1]:    1 "Biodiversity" may be used as an alternative to "biological diversity".

[^2]:    1 Te Ao Māori - The Māori World.

[^3]:    2 The $i w i^{*}$ of Whanganui and Taranaki use a dialectal variation, mouri. Kei ngā mita o ngā iwi o Whanganui me Taranaki ka mahia te kupu, mouri.

[^4]:    As identified in the Land Use Capability Classification system.
    2 For general information purposes these soils largely comprise the following soil series: Egmont, Kiwitea, Westmere, Manawatu, Karapoti, Dannevirke, Ohakune, Kairanga, Opiki and Te Arakura.

[^5]:    1 Schedule B is not a component of Part I - the Regional Policy Statement. It is a component of Part II - the Regional Plan.

[^6]:    2 Schedule A is not a component of Part I - the Regional Policy Statement. It is a component of Part II - the Regional Plan.
    ${ }^{3}$ Schedule D is not a component of Part I - the Regional Policy Statement. It is a component of Part II - the Regional Plan.

[^7]:    + 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^.

[^8]:    4 Schedule E is not a component of Part I - the Regional Policy Statement. It is a component of Part II - the Regional Plan.

[^9]:    1 Schedule G is a component of Part I - the Regional Policy Statement.

[^10]:    1 Schedule H is not a component of Part I - the Regional Policy Statement. It is a component of Part II - the Regional Plan.

[^11]:    2 The date of 1 September 2013 for achieving compliance with the national ambient air ${ }^{*}$ quality standard for $P M_{10}{ }^{*}$, is set in the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004.

[^12]:    3 Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004

[^13]:    4 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.

[^14]:    Schedule J is not a component of Part I - the Regional Policy Statement. It is a component of Part II - the Regional Plan.
    2 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

[^15]:    1 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.

[^16]:    2 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.

[^17]:    3 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.

[^18]:    4 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.

[^19]:    5 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.

[^20]:    1 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
    2 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.

[^21]:    (v) land disturbance* pursuant to s9(2)RMA

[^22]:    one plan

[^23]:     context of this rule^ any discharge ${ }^{\wedge}$ or contaminants^ resulting from hull cleaning or anti fouling or painting of vessels must be collected and removed from the coastal marine area^.

[^24]:    1 Includes all inflowing tributaries and surrounding catchment area unless otherwise specified.

[^25]:    1 Includes all inflowing tributaries and surrounding catchment area unless otherwise specified.

[^26]:    3 Includes all inflowing tributaries and surrounding catchment area unless otherwise specified.

[^27]:    1 Includes all inflowing tributaries and surrounding catchment area unless otherwise specified.

[^28]:    1 Includes all inflowing tributaries and surrounding catchment area unless otherwise specified.

[^29]:    1 Includes all inflowing tributaries and surrounding catchment area unless otherwise specified.

[^30]:    7 Includes all inflowing tributaries and surrounding catchment area unless otherwise specified.

[^31]:    1. Includes all inflowing tributaries and surrounding catchment area unless otherwise specified.
    ${ }^{2}$ All natural water bodies* except those classified as NS and those identified as zero allocation in Schedule C.
[^32]:    1 Details of the particular location of the sites* are available from Rangitaane o Manawatu

[^33]:     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

[^34]:    

[^35]:     rivers valued for Trout Spawning. Measurements should be undertaken using the deposited sediment protocols of Clapcott et al., (2010).
    

[^36]:    5 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)

[^37]:    6 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.
    7 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)

[^38]:    1 Gravel and sand (dotterel).
    2 Mud / silt habitat and estuarine roosts (waders).
    3 Shortjaw kokopu and redfin bully.

[^39]:    1 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.
    2 Ammoniacal nitrogen is a component of SIN. SIN standards should also be considered when assessing ammoniacal nitrogen concentrations against the standards.

