

5 Water

5.1 Scope and Background

5.1.1 Scope

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

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

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

5.1.2 Overview

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

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 (m ³ /d)	2009 (m ³ /d)	Increase (%)
Groundwater	All Sectors	287,000	537,179	+85%



		1997 to 2009 Percentage Change in Consented Water Takes		
Source	Sector	1997 (m ³ /d)	2009 (m ³ /d)	Increase (%)
Surface water	Agriculture	70,668	385,579	+446%
	Industry	38,835	97,782	+152%
	Water supply	162,024	133,259	-18%
	All Sectors	271,527	616,620	+127%

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

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

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

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

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



5.1.4

Water Quality

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

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

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

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

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

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

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

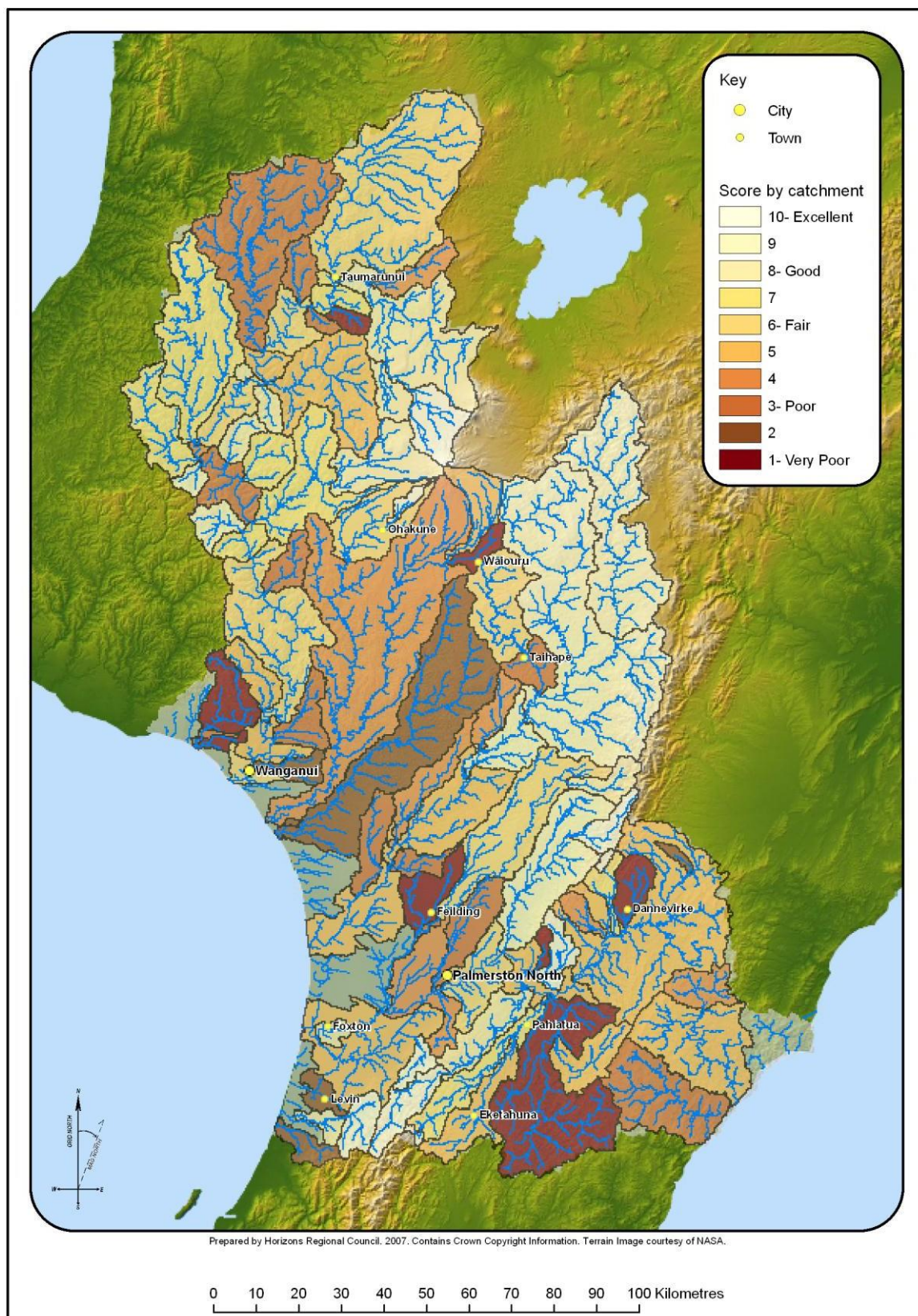


Figure 5.1 Suitability of water quality for contact recreation within the Region

5.1.5 Beds of Rivers and Lakes

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

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

5.2 Significant Resource Management Issues

Issue 5-1: Water quality

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

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

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

Issue 5-2: Water quantity and allocation

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

Issue 5-3: Beds of rivers and lakes

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



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

5.3

Objectives

Objective 5-1: *Water*[^] management Values

Surface *water bodies*[^] and their *beds*[^] are managed in a manner which safe guards their life supporting capacity and recognises and provides for the Values in Schedule B¹.

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

Whāinga 5-2: Te kounga o te wai

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

¹ Schedule B is not a component of Part I - the Regional Policy Statement. It is a component of Part II - the Regional Plan.

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 life-supporting capacity of rivers[^] and their beds[^] and providing for the other Values in Schedule B as appropriate
 - (ii) takes and flow regimes for existing hydroelectricity are provided for before setting minimum flow and allocation regimes for other uses
 - (iii) in times of water[^] shortage, takes are restricted to those that are essential to the health or safety of people and communities, or drinking water[^] for animals, and other takes are ceased
 - (iv) the amount of water[^] taken from lakes[^] 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 wetlands[^] are managed to protect the life-supporting capacity of the lakes[^] or wetlands[^]
 - (iv) the significant adverse effects[^] 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 whakatikina te tango wai hāunga rā hei tiaki i te hauora, te haumarū 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 whakamarumarū i te oranga tonutanga o ngā roto, ngā papa waiwai rānei*
- (iv) *ka pareā ngā pānga kino o te tango waiopapa ki te mahi tango i waiopapa kē, tango mata wai rānei*
- (v) *ka pareā 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[^] of rivers[^] and lakes[^] will be managed in a manner which:

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

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

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

Ka whakahaeretia ngā papa awa me ngā papa roto ka:

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

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



5.4 Policies

5.4.1 Water Management Framework

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

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

Table 5.2 Surface *Water*[^] Management Values and Management Objectives

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

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.



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

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

5.4.2 Water Quality

5.4.2.1 Surface Water Quality

Policy 5-2: *Water quality targets*^{*}

In Schedule E⁴, *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.

⁴ Schedule E is not a component of Part I - the Regional Policy Statement. It is a component of Part II - the Regional Plan.

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

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

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

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

Policy 5-5: Management of *water*[^] 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 Sub- zones**, where such information exists.



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

5.4.2.2

Groundwater Quality

Policy 5-6: Maintenance of groundwater quality

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

5.4.2.3

Discharges[^] and *Land*[^] use Activities Affecting *Water*[^] Quality

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

The management of *land*[^] use activities affecting groundwater and surface *water*[^] 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*[^] 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 Sub-zones*^{*} 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*[^] 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*[^] 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*[^] use activities must generally be regulated in targeted *Water Management Sub-zones** to achieve the nitrogen leaching maximums specified in (i).
- (iia) For existing intensive land uses that do not achieve the nitrogen leaching maximums established under (i), the regional plan must provide that any consents granted:
- (A) take into account all the non-point sources of nitrogen in the catchment
 - (B) will achieve the strategies for surface *water*[^] quality set out in Policies 5-2, 5-3, 5-4 and 5-5, and the strategy for groundwater quality in Policy 5-6
 - (C) recognise the productive capability of *land*[^] in the *Water Management Sub-zone**
 - (D) are of limited duration.
- (iii) New intensive farming *land*[^] use activities must be regulated throughout the Region to achieve the nitrogen leaching maximums specified in (i).

(b) Faecal contamination

- (i) Those persons carrying out existing intensive farming *land*[^] use activities in the targeted *Water Management Sub-zones** listed in Table 14.1 or new conversions to intensive farming *land*[^] use activities anywhere in the Region must be required, amongst other things, to:
- (A) prevent cattle access to some surface *water bodies*[^] and their *beds*[^]
 - (B) mitigate faecal contamination of surface *water*[^] from other entry points (eg., run-off from races, feed pads and paddocks)
 - (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.

(d) **Good management practices***

- (i) All intensive farming *land*[^] use activities must be regulated to, as a minimum, implement good management practices* to manage nutrient leaching and run-off, faecal contamination, and sediment losses

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*[^], including non-point source *discharges*[^] will cause the Schedule E *water quality targets*^{*} to be breached
- (c) the extent to which the activity is consistent with *contaminant*[^] treatment and *discharge*[^] best management practices
- (d) the need to allow reasonable time to achieve any required improvements to the quality of the *discharge*[^]
- (e) whether the *discharge*[^] is of a temporary nature or is associated with necessary *maintenance*[^] or *upgrade*^{*} work and the *discharge*[^] cannot practicably be avoided
- (f) whether adverse *effects*[^] resulting from the *discharge*[^] 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*[^]

Discharges[^] of *contaminants*[^] onto or into *land*[^] 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*[^] 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*[^] 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*[^] for the area and is reasonably forecast, plus
 - (viii) an allocation for leakage equal to 15% of the total of (i) to (vii) above.
- (e) When making decisions on consent applications where the existing allocation for a *public water supply*^{*} exceeds the allocation determined in accordance with (d)(i) to (d)(vi) above:
- (i) consideration must be given to imposing a timeframe within which it is reasonably practicable for the existing allocation to be reduced to the determined amount, or
 - (ii) if (i) is not imposed, an alternative allocation must be determined based on the particular social and economic circumstances of the community serviced by the *public water supply*^{*} and the actual and potential *effects*[^] of the abstraction on the relevant Schedule B Values for the reach of *river*[^] or its *bed*[^] affected by the take.

Policy 5-13: Efficient use of *water*[^]

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

- (a) requiring *water*[^] 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*[^] 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*[^] 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*[^] 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 *river*[^] 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 *river*[^] 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 *river*[^] 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*[^] that are more than minor on the Schedule B Values of the *water body*[^] or its *bed*[^]
 - (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*[^] and groundwater takes) or are for fire-fighting purposes must be allowed to continue regardless of *river*[^] flow.

- (b) **Existing hydroelectricity generation takes** - must be allowed to continue subject only to any minimum flow restrictions specified in their consent *conditions*^.
- (c) **Supplementary takes** - must cease at a flow specified in their consent *conditions*^ and that cessation flow must be higher than the Schedule C minimum flow such that the requirements of Policy 5-17(b)(i) are met.
- (d) **Essential takes** - The following core *water*^ allocation takes are deemed essential and must be managed in the manner described:
 - (i) takes greater than permitted by this Plan (and therefore subject to *resource consent*^) that are required for reasonable domestic needs, reasonable needs of animals for drinking *water*^, and reasonable dairy shed washdown *water*^ must be allowed to continue regardless of *river*^ flow, but must not exceed:
 - (A) up to 250 litres per person per day for domestic needs
 - (B) up to 70 litres per animal per day for drinking *water*^
 - (C) up to 70 litres per animal per day for dairy shed washdown
 - (ii) takes required to meet the reasonable needs of hospitals, other facilities providing medical treatment, marae, schools or other education facilities, New Zealand Defence Force facilities or correction facilities must be allowed to continue regardless of *river*^ flow, but must be required to minimise the amount of *water*^ taken to the extent reasonably practicable
 - (iii) takes which were lawfully established at the time of Plan notification (31 May 2007) required for industries which, if their take were to cease, would significantly compromise a community's ability to provide for its social, economic or cultural wellbeing or for its health or safety (including the hygienic production and processing of perishable food), must be allowed to continue regardless of *river*^ 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[^]* 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[^] and lakes[^]

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

- (a) recognises and provides for the Schedule B Values for the *Water Management Sub-zone(s)** in which the activity takes place, in the manner described in Policies 5-23, 5-24 and 5-25
- (b) avoids any significant reduction in the ability of a river[^] and its bed[^] to convey flood flows, or significant impedance to the passage of floating debris
- (c) avoids, remedies or mitigates any significant adverse *effects[^]* on the stability and function of the beds[^] of rivers[^] and lakes[^], and existing *structures[^]* including flood and erosion control *structures[^]*
- (d) avoids, remedies or mitigates any significant reduction in the habitat diversity, including the morphological diversity, of the river[^] or lake[^] or its bed[^]
- (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*[^], such as *bed*[^] style and width and the quality and quantity of *bed*[^] habitat

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

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

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

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

Policy 5-24: Activities in *rivers*[^] or *lakes*[^] and their *beds*[^] with a Value of Flood Control and Drainage

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

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

Policy 5-25: Activities in *rivers*[^] or *lakes*[^] and their *beds*[^] with other Schedule B Values

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

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



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

Policy 5-26: Essential and beneficial activities

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

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

Policy 5-27: Gravel extraction

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

5.5

Methods

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

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

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

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

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



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

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

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

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

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



Method 5-9 Water Quality Improvement	
Description	The Regional Council and other agencies will work with landowners to protect and enhance the water quality of the Region's water bodies. Landowners in those <i>Water Management Sub-zones*</i> where the nutrient management (non-point source discharge) control rules are to be introduced will receive the highest priority for assistance. This method represents an expansion of the Regional Council's existing water quality improvement programme, which focuses almost entirely on dairy farmers as part of the Dairying and Clean Streams Regional Action Plan for Manawatu-Wanganui Region. Landowners will be provided with advice and financial/project management assistance to carry out enhancement and protection measures including fencing and planting of riparian margins. The Regional Council will seek funding from third parties to assist with this method. The effectiveness of the protection and enhancement works will be monitored.
Who	Regional Council, Dairy NZ, Fonterra, Horticulture NZ, Territorial Authorities and funding agencies including the He Tini Awa Trust and Nga Whenua Rahui.
Links to Policy	This method implements Policies 5-2, 5-4 and 5-8.
Targets	• The targets of the Dairying and Clean Streams Regional Action Plan for Manawatu-Wanganui Region are achieved by the due dates. • Advice and assistance is offered to all landowners affected by the nutrient management rules. • All landowner requests for advice and assistance regarding 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 the Region of the significance of the water (quantity and quality) resource, the threats to it, and what they can do to protect/restore it. This will be achieved through various environmental education programmes/initiatives - for example, Green RIG, Enviroschools and Trees for Survival.
Who	Regional Council, various national and local environmental education providers and the Youth Environment Forum.
Links to Policy	This method implements Policy 5-2.
Targets	The Regional Council develops and delivers a water-related environmental education programme.

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

Method 5-12 Innovative Land Use Research

Description

Support initiatives by local communities, sector groups or tangata whenua which develop options for sustainable land use in the Region. Support for work in *Water Management Sub-zones** where nitrogen leaching is an issue, as identified in Table 14.1, will be a priority in order to find viable options (including nitrogen leaching mitigation options) for intensive farming land users that will have difficulty in reducing nitrogen loss to the extent necessary to achieve the nitrogen leaching maximums specified in the One Plan rules.

Horizons will provide assistance through providing data and information that will assist in the identification and evaluation of innovative nitrogen leaching mitigations or land use options and participating in any evaluative work as appropriate.

Method 5-13 Provision of Information

Description

Horizons will collate and publish information regarding Overseer and the identification and evaluation of nutrient management models and nitrogen loss assessment methods appropriate for calculation of the on-farm nutrient losses when considering applications for consent and in compliance monitoring. Horizons will register and maintain Overseer files for synthetic farm systems simulating the range of intensive farming land uses regulated under the One Plan. Horizons will make publicly available the estimated nitrogen leaching loss values for those synthetic farm systems, including values amended by Overseer version updates. Horizons will have regard to the impact of Overseer version updates, (as demonstrated by changes in the estimated nitrogen



leaching loss values of the synthetic farms over time), when considering applications for consent for IFLU activities and in compliance monitoring.

- Horizons will update Table 14.2 to respond to changes in Overseer through a plan change process (where necessary) and will provide clarification within the One Plan of the methodology used to establish the *Cumulative Nitrogen Leaching Maximums** in Table 14.2.
- Horizons will maintain representative Overseer farm system reference files and make their base files and nitrogen leaching loss estimates available on its website.
- Horizons will recognise the impact of Overseer version upgrades when comparing the outputs from future versions of Overseer with Table 14.2 CNLM values and with nitrogen leaching limits specified in consent conditions, to ensure comparability between Overseer estimates over time.
- A list of nutrient management models appropriate for use in intensive farming land is maintained on Horizons' website

5.6 Anticipated Environmental Results

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

Anticipated Environmental Result	Link to Policy	Indicator	Data Source
<i>Management Sub-zone*</i> 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 Region-wide, but with a focus on Opiki and Himatangi areas - Groundwater quality Region-wide, but with a focus on nitrates in Horowhenua and Tararua districts and conductivity along the Foxton-Tangimoana coast - Confirmed incidents where groundwater sources become unavailable (ie., dry up) or water quality is unfit for use	- The Regional Council's State of Environment groundwater monitoring programme - The Regional Council's compliance monitoring programme - The Regional Council's incidents database - Ministry of Health raw water monitoring

5.7

Explanations and Principal Reasons

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

Discharges to water and land

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

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

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



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

Surface Water Quantity

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

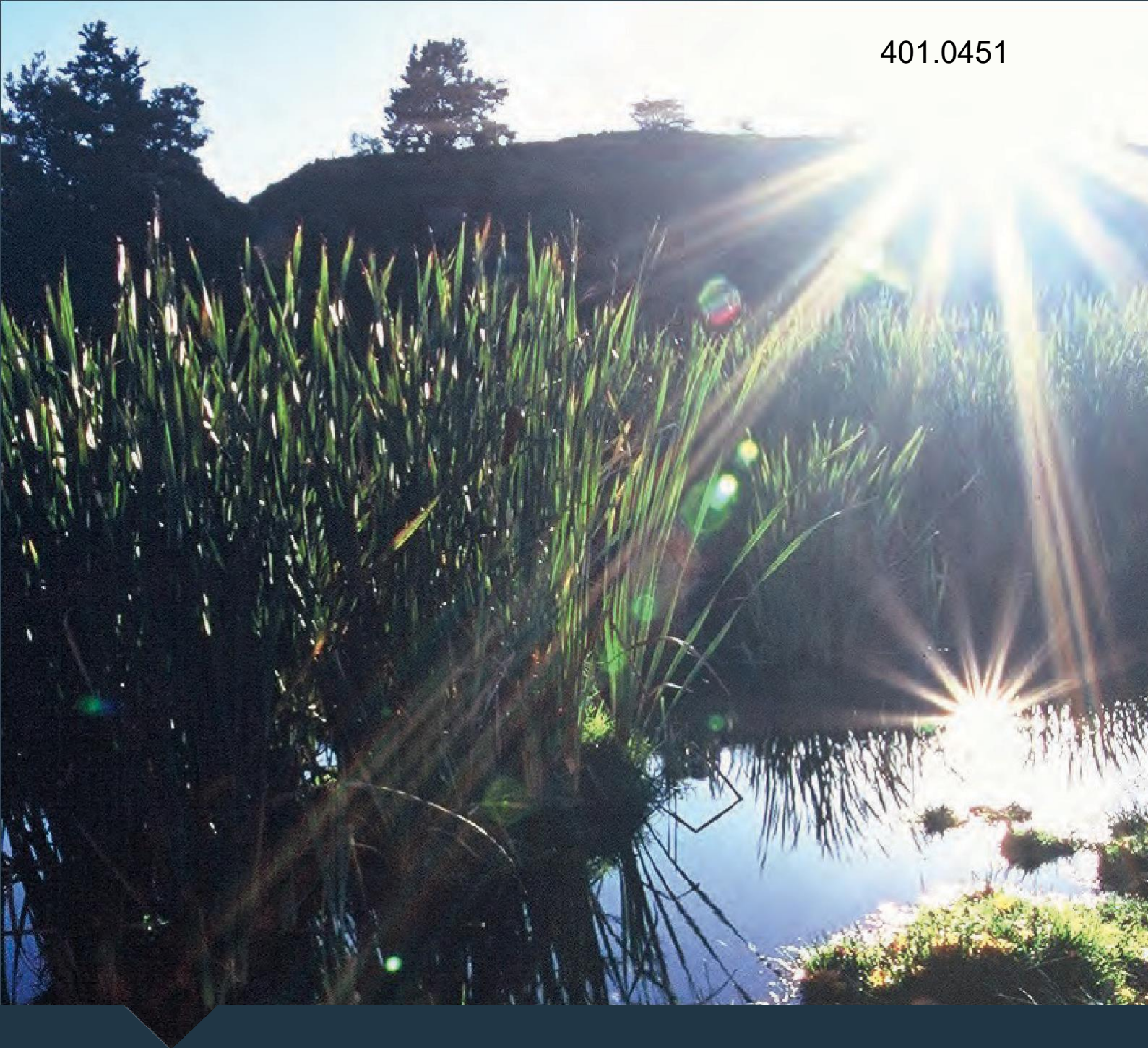
Groundwater

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

Beds of Rivers and Lakes

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

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



Chapter 14: Discharges to Land and Water

14 Discharges to Land and Water

14.1 Objectives

Objective 14-1: Management of discharges^ to land^ and water^ and land^ uses affecting groundwater and surface water quality

The management of *discharges^* onto or into *land^* (including those that enter *water^*) or directly into *water^* and *land^* use activities affecting groundwater and surface *water^* quality in a manner that:

- (a) safeguards the life supporting capacity of water and recognises and provides for the Values and management objectives in Schedule B,
- (b) provides for the objectives and policies of Chapter 5 as they relate to surface *water^* and groundwater quality, and
- (c) where a *discharge^* is onto or into *land^*, avoids, remedies or mitigates adverse *effects^* on surface *water^* or groundwater.

14.2 Policies

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

When making decisions on *resource consent^* applications, and setting consent *conditions^*, for *discharges^* of *water^* or *contaminants^* into *water^*, the Regional Council must specifically consider:

- (a) the objectives and Policies 5-1 to 5-5 and 5-9 of Chapter 5, and have regard to:
- (b) avoiding *discharges^* which contain any persistent *contaminants^* that are likely to accumulate in a *water body^* or its *bed^*,
- (c) the appropriateness of adopting the *best practicable option^* to prevent or minimise adverse *effects^* in circumstances where:
 - (i) it is difficult to establish *discharge^* parameters for a particular *discharge^* that give effect to the management approaches for *water^* quality and *discharges^* set out in Chapter 5, or
 - (ii) the potential adverse *effects^* are likely to be minor, and the costs associated with adopting the *best practicable option^* are small in comparison to the costs of investigating the likely *effects^* on *land^* and *water^*, and
- (d) the objectives and policies of Chapters 2, 3, 6, 9 and 12 to the extent that they are relevant to the *discharge^*.

Policy 14-2: Consent decision-making for discharges[^] to land[^]

When making decisions on *resource consent[^]* applications, and setting consent *conditions[^]*, for *discharges[^]* of *contaminants[^]* onto or into *land[^]* the Regional Council must have regard to:

- (a) the objectives and policies of Chapter 5 regarding the management of groundwater quality and *discharges[^]*,
- (b) where the *discharge[^]* may enter surface *water[^]* or have an adverse *effect[^]* on surface *water[^]* quality, the degree of compliance with the approach for managing surface *water[^]* quality set out in Chapter 5,
- (c) avoiding as far as reasonably practicable any adverse *effects[^]* on any sensitive receiving *environment[^]* or potentially incompatible *land[^]* uses, in particular any residential buildings, educational facilities, churches, marae, public areas, *infrastructure[^]* and other physical resources of regional or national importance identified in Policy 3-1, *wetlands[^]*, surface *water bodies[^]* and the *coastal marine area[^]*, (d) the appropriateness of adopting the *best practicable option[^]* to prevent or minimise adverse *effects[^]* in circumstances where:
 - (i) it is difficult to establish *discharge[^]* parameters for a particular *discharge[^]* that give effect to the management approaches for *water[^]* quality and *discharges[^]* set out in Chapter 5,
 - (ii) the potential adverse *effects[^]* are likely to be minor, and the costs associated with adopting the *best practicable option[^]* are small in comparison to the costs of investigating the likely *effects[^]* on *land[^]* and *water[^]*,
- (e) avoiding *discharges[^]* which contain any persistent *contaminants[^]* that are likely to accumulate in the soil or groundwater, and
- (f) the objectives and policies of Chapters 2, 3, 6, 9 and 12 to the extent that they are relevant to the *discharge[^]*.

Policy 14-3: Industry-based standards

The Regional Council will examine on an on-going basis relevant industry-based standards (including guidelines and codes of practice), recognising that such industry based standards generally represent current best practice, and may accept compliance with those standards as being adequate to avoid, remedy or mitigate adverse *effects[^]* to the extent that those standards address the matters in Policies 14-1, 14-2, 14-4 and 14-5.

Policy 14-4: Options for discharges[^] to surface water[^] and land[^]

When applying for consents and making decisions on consent applications for *discharges[^]* of *contaminants[^]* into *water[^]* or onto or into *land[^]*, the opportunity to utilise alternative *discharge[^]* options, or a mix of *discharge[^]* regimes, for the purpose of mitigating adverse *effects[^]*, applying the best practicable option, must be considered, including but not limited to:

- (a) discharging *contaminants[^]* onto or into *land[^]* as an alternative to discharging *contaminants[^]* into *water[^]*,
- (b) withholding from discharging *contaminants[^]* into surface *water[^]* at times of low flow, and

- (c) adopting different treatment and *discharge*[^] options for different receiving *environments*[^] or at different times (including different flow regimes or levels in surface *water bodies*[^]).

Policy 14-5: Management of intensive farming *land*[^] uses

In order to give effect to Policy 5-7 and Policy 5-8, intensive farming *land*[^] use activities affecting groundwater and surface *water*[^] quality must be managed in the following manner:

- (a) The following land uses have been identified as intensive farming *land*[^] uses:
- (i) *Dairy farming*^{*}
 - (ii) *Commercial vegetable growing*^{*}
 - (iii) *Cropping*^{*}
 - (iv) *Intensive sheep and beef*^{*}
- (b) The intensive farming *land*[^] uses identified in (a) must be regulated where:
- (i) They are existing intensive farming *land*[^] uses (i.e. established prior to the date specified in Table 14.1 on which Rule 14-1 had legal effect¹, in the targeted *Water Management Sub-zones*^{*} identified in Table 14.1.
 - (ii) They are new (~~i.e., established after the Plan has legal effect~~^{*}) intensive farming *land*[^] uses, in all *any* *Water Management Subzones*^{*} in the Region (that is, established after the date the Plan had legal effect, which is 24 August 2010 for dairy farming^{*} and 9 May 2013 for commercial vegetable growing^{*}, cropping^{*} and intensive sheep and beef^{*})².
- (c) Nitrogen leaching maximums have been established in Table 14.2.
- (d) Existing intensive farming *land*[^] uses regulated in accordance with (b)(i) must be managed to ensure that the projected long-term average 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(b) apply.
- (e) New intensive farming *land*[^] uses regulated in accordance with (b)(ii) 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.
- (f) Intensive farming *land*[^] uses regulated in accordance with (b) must exclude cattle from:
- (i) A *wetland*[^] or *lake*[^] that is a *rare habitat*^{*}, *threatened habitat*^{*} or *at-risk habitat*^{*}.
 - (ii) Any *river*[^] that is permanently flowing or has an *active bed*^{*} width greater than 1 metre.
- (g) All places where cattle cross a river that is permanently flowing or has an *active bed*^{*} width greater than 1 metre must be culverted or

¹ The third column of Table 14.1 specifies the date on which the Plan had legal effect in relation to Rule 14-1 in the targeted *Water Management Sub-zones*^{*}.

² As explained in footnote to Table 14.1, 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 for the purpose of regulating new intensive farming *land*[^] use activities under Rules 14-3 and 14-4.

bridged and those culverts or bridges must be used by cattle whenever they cross the river.

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.

Policy 14-6: Resource consent decision-making for intensive farming land^ uses

When making decisions on *resource consent*^ applications, and setting consent *conditions*^, for intensive farming *land*^ uses the Regional Council must:

- (a) Ensure the nitrogen leaching from the land is managed in accordance with Policy 14-5.
- (b) An exception may be made to (a) for existing intensive farming *land*^ uses in the following circumstances:
 - i. ~~to enable the transition to an alternative non-intensive farming land^ use over a period of time not exceeding five years to a use that meets the cumulative nitrogen leaching maximums* where the existing intensive farming land^ use occurs on land that has 50% or higher of LUC Classes IV to VIII and has an average annual rainfall of 1500 mm or greater; or~~
 - ii. ~~where the existing intensive farming land^ use cannot meet year 1 the cumulative nitrogen leaching maximums* but a trajectory toward meeting the -in year 1, cumulative nitrogen leaching maximums* within a reasonable timeframe is demonstrated shall be managed through conditions on their resource consent to ensure year 1 cumulative nitrogen leaching maximums* are met within 4 years; or~~
 - iii. ~~the exceedance of the cumulative nitrogen leaching maximums* is due to the calculation against Table 14-2 over-estimating nitrogen loss, as shown by the results of one or more scientifically robust models that estimate nitrogen loss and the opinion of a person who has a Certificate of Completion in Advanced Sustainable Nutrient Management from Massey University, and a trajectory toward meeting the cumulative nitrogen leaching maximums* within a reasonable timeframe is demonstrated; or-~~
 - iv. ~~for commercial vegetable growing*, the growing area does not exceed the baseline growing area* and, within 3 years of lodgment of the application, the activity will achieve a minimum reduction in cumulative nitrogen leaching loss from the land^ of 35% relative to the baseline growing period'~~
- (ba) ~~Where resource consent is sought for an existing intensive farming land used on the basis of the exception specified in Policy 14-6(b) ii. or iv., the decision-maker must:~~
 - A. ~~consider the contribution of the proposal to the maintenance and enhancement of mana whenua values, including those identified in Schedule B;~~
 - B. ~~take into account all non-point sources of nitrogen in the catchment;~~
 - C. ~~consider the extent of non-compliance with the nitrogen leaching maximums and the timing of planned reductions in nitrogen leaching loss from the land;~~
 - D. ~~be consistent with having more intensive land uses on land units with higher productive capability and discouraging intensive land uses on land units with lower productive capability, based on land use capability class*;~~
 - E. ~~consider potential effects of nutrient leaching and run-off, faecal contamination and sediment losses from the land^ on surface water^ and groundwater receiving environments, recognizing the state, sensitivity and absorptive capacity of the receiving environment and of downstream lakes and wetlands; and~~
 - F. ~~only grant consent if doing so aligns with the strategies for surface water quality set out in Policies 5-2, 5-3, 5-4, and 5-5, and the strategy for ground water quality in Policy 5-6.~~

- (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.
 - iii. There is no increase in nutrient leaching and run-off, faecal contamination and sediment losses from the land^;
 - iv. resource consent is not granted for a period exceeding ten years.
- (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 the effects of 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^ of domestic wastewater*

When making decisions on *resource consent*^ applications, and setting consent *conditions*^, for on-site *discharges*^ of *domestic wastewater**, 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*[^] does not result in actual or potential contamination of:
 - (i) groundwater at any point of abstraction utilised for irrigation, stock or domestic drinking *water*[^],
 - (ii) surface *water bodies*[^],
 - (iii) stormwater drains,
 - (iv) *artificial watercourses*^{*}, or
 - (v) neighbouring *properties*^{*},
- (c) the *discharge*[^] does not constitute a public health threat,
- (d) the *discharge*[^] does not cause any offensive or objectionable odour beyond the *property*^{*} boundary, and
- (e) a sufficient area of *land*[^] is set aside as a reserve disposal area.

Policy 14-8: Monitoring requirements for consent holders

Point source *discharges*[^] of *contaminants*[^] to *water*[^] must generally be subject to the following monitoring requirements:

- (a) the regular monitoring of *discharge*[^] volumes on *discharges*[^] smaller than 100 m³/day and making the records available to the Regional Council on request,
- (b) the installation of a pulse-count capable meter in order to monitor the volume *discharged*[^] for *discharges*[^] of 100 m³/day or greater,
- (c) the installation of a Regional Council compatible telemetry system on *discharges*[^] of 300 m³/day or greater, and
- (d) monitoring and reporting on the quality of the *discharge*[^] at the point of *discharge*[^] before it enters surface *water*[^] and the quality of the receiving *water*[^] upstream and downstream of the point of *discharge*[^] (after *reasonable mixing*^{*}) may also be required. This must align with the Regional Council's environmental monitoring programme where reasonably practicable to enable cumulative impacts to be measured.

Policy 14-9: Consent decision making requirements from the National Policy Statement for Freshwater Management

- (a) This policy applies to any application for the following *discharges*[^] (including a diffuse *discharge*[^] by any person or animal):
 - (i) a new *discharge*[^]; or
 - (ii) a change or increase in any *discharge*[^] –
 of any *contaminant*[^] into fresh *water*[^], or onto or into *land*[^] in circumstances that may result in that *contaminant*[^] (or, as a result of any natural process from the *discharge*[^] of that *contaminant*[^], any other *contaminant*^t) entering fresh *water*[^].

- (b) When considering any application for a *discharge*[^] the Regional Council must have regard to the following matters:
- (i) the extent to which the *discharge*[^] would avoid contamination that will have an adverse effect on the life-supporting capacity of fresh *water*[^] including on any ecosystem associated with fresh *water*[^]; and
 - (ii) the extent to which it is feasible and dependable that any more than minor adverse effect on fresh *water*[^], and on any ecosystem associated with fresh *water*[^], resulting from the *discharge*[^] would be avoided.
- This clause of the policy does not apply to any application for consent first lodged before the National Policy Statement for Freshwater Management 2011 took effect on 1 July 2011.
- (c) When considering any application for a *discharge*[^] the Regional Council must have regard to the following matters:
- (i) the extent to which the *discharge*[^] would avoid contamination that will have an adverse effect on the health of people and communities as affected by their secondary contact with fresh *water*[^]; and
 - (ii) the extent to which it is feasible and dependable that any more than minor adverse effect on the health of people and communities as affected by their secondary contact with fresh *water*[^] resulting from the *discharge*[^] would be avoided.
- This clause of the policy does not apply to any application for consent first lodged before the National Policy Statement for Freshwater Management 2014 took effect on 4 July 2014.

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Rules - Agricultural Activities

The requirements specified in the Resource Management (National Environmental Standards for Freshwater) Regulations also apply, as rules, in addition to the following rules. One Plan users must refer to the Regulations and they should be read in conjunction with the following rules. Where there is conflict between the provisions of the Regulations and any of the following rules, the more stringent provision will apply.

Table 14.1 sets out the target *Water Management Sub-zones*^{*} where management of existing intensive farming *land*[^] use activities must be specifically controlled.

Table 14.1 Targeted *Water Management Sub-zones*^{*}

Catchment	<i>Water Management Sub-zone</i> [*]	Date the Rules of the Plan have legal effect ¹ in relation to Rule 14-1
Mangapapa	Mangapapa Mana_9b	1 July 2014
Waikawa	Waikawa West_9a Manakau West_9b	1 July 2014

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.

Catchment	Water Management Sub-zone*	Date the Rules of the Plan have legal effect ² in relation to Rule 14-1
Other south-west catchments (Papaitonga)	Lake Papaitonga West_8	1 July 2014
Mangatainoka	Upper Mangatainoka Mana_8a Middle Mangatainoka Mana_8b Lower Mangatainoka Mana_8c Makakahi Mana_8d	1 July 2015
Other coastal lakes	Northern Manawatu Lakes West_6 Kaitoke Lakes West_4 Southern Wanganui Lakes West_5	1 July 2015
Coastal Rangitikei	Coastal Rangitikei Rang_4	1 July 2015
Lake Horowhenua	Lake Horowhenua Hoki_1a Hokio Hoki_1b	1 July 2015
Upper Manawatu above Hopelands	Upper Manawatu Mana_1a Mangatewainui Mana_1b Mangatoro Mana_1c Weber-Tamaki Mana_2a Mangatera Mana_2b Upper Tamaki Mana_3 Upper Kumeti Mana_4 Tamaki-Hopelands Mana_5a Lower Tamaki Mana_5b Lower Kumeti Mana_5c Oruakeretaki Mana_5d Raparapawai Mana_5e	1 July 2016
Manawatu above gorge	Hopelands-Tiraumea Mana_6 Upper Gorge Mana_9a Mangaatua Mana_9c	1 July 2016

Table 14.2 sets out the *cumulative nitrogen leaching maximum** for the *land^* used for intensive farming *land^* use activities within each specified *land use capability class**. The cumulative nitrogen leaching maximum* values in Table 14.2 were derived using Overseer® 6.2.3.

Table 14.2 Cumulative nitrogen leaching maximum* by Land Use Capability Class*

Period (from the year that the rule has legal effect ¹)	LUC* I	LUC* II	LUC* III	LUC* IV	LUC* V	LUC* VI	LUC* VII	LUC* VIII
Year 1	<u>3051</u>	<u>2745</u>	<u>2440</u>	<u>1829</u>	<u>1625</u>	<u>1524</u>	<u>811</u>	<u>23</u>
Year 5	<u>2746</u>	<u>2542</u>	<u>2135</u>	<u>1626</u>	<u>1320</u>	<u>1016</u>	<u>68</u>	<u>23</u>
Year 10	<u>2644</u>	<u>2237</u>	<u>1932</u>	<u>1423</u>	<u>1320</u>	<u>1016</u>	<u>68</u>	<u>23</u>
Year 20	<u>2543</u>	<u>2135</u>	<u>1830</u>	<u>1321</u>	<u>1219</u>	<u>1016</u>	<u>68</u>	<u>23</u>

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.

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
14-1 Existing intensive farming land^ use activities	The use of <i>land^</i> pursuant to s9(2) RMA for any of the following types of intensive farming: (i) <i>dairy farming*</i> (ii) <i>commercial vegetable growing*</i> (iii) <i>cropping*</i> (iv) <i>intensive sheep and beef farming*</i> that was existing in the <i>Water Management Sub-zones*</i> listed in and from the dates specified in Table 14.1 and any of the following <i>discharges^</i> pursuant to ss15(1) or 15(2A) RMA associated with that intensive farming: (a) the <i>discharge^</i> of <i>fertiliser*</i> onto or into <i>land^</i> (b) the <i>discharge^</i> of <i>contaminants^</i> onto or into <i>land^</i> from	Controlled	(a) A <i>nutrient management plan*</i> must be prepared for the <i>land^</i>, and provided annually to the Regional Council. (b) The activity must be undertaken in accordance with the <i>nutrient management plan*</i> prepared under (a). (c) The <i>nutrient management plan*</i> prepared under (a) must demonstrate that the nitrogen leaching loss from the activity will not exceed the <i>cumulative nitrogen leaching maximum*</i> specified in Table 14.2. (d) Cattle must be excluded from: (i) <i>wetlands^</i> and <i>lakes^</i> that are a <i>rare habitat*</i> or <i>threatened habitat*</i>, and (ii) the <i>beds^</i> of <i>rivers^</i> that are permanently flowing or have an <i>active bed*</i> width greater than 1 m. (e) <i>Rivers^</i> that are permanently flowing or have an <i>active bed*</i> width greater than 1 m, that are crossed by cattle must be bridged or culverted, and the cattle must	Control is reserved over: (a) The <u>contents</u>, implementation <u>and review</u> of the <i>nutrient management plan*</i> <u>for the land^</u> (b) compliance with the <i>cumulative nitrogen leaching maximum*</i> specified in Table 14.2 (c) the matters of control in Rule 14-11 (d) avoiding, remedying or mitigating the effects of odour, dust, <i>fertiliser*</i> drift or effluent drift (e) provision of information including the <i>nutrient management plan*</i> (f) duration of consent (g) review of consent <i>conditions^</i> (h) compliance monitoring <u>and reporting</u> (i) the matters in Policy 14-9.

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	(i) the preparation, storage, use or transportation of stock feed on <i>production land</i>[^] (ii) the use of a <i>feedpad</i>[*] (c) the <i>discharge</i>[^] of <i>grade Aa biosolids</i>[*] or <i>compost</i>[*] onto or into <i>production land</i>[^] (d) the <i>discharge</i>[^] of <i>poultry farm litter</i>[*] onto or into <i>production land</i>[^] (e) the <i>discharge</i>[^] of farm <i>animal effluent</i>[*] onto or into <i>production land</i>[^] (or upon expiry or surrender of any existing consent for that <i>discharge</i>[^]) including: (i) effluent from dairy sheds and <i>feedpads</i>[*] (ii) effluent received from piggeries (iii) sludge from farm effluent ponds (iv) poultry farm effluent and any ancillary <i>discharge</i>[^] of <i>contaminants</i>[^] into air pursuant to ss15(1) or 15(2A) RMA. Where the existing intensive farming <i>land</i>[^] use is located partly on land within one or more of the <i>water management subzones</i>[*] listed in Table 14.1 and partly on other land, this rule only applies: (a) if at least 20% of the existing intensive farming <i>land</i>[^] use is located on land within the listed <i>water management sub-zones</i>[*]; and (b) to the portion of the existing intensive farming <i>land</i>[^] use that is located within the listed <i>water management subzones</i>[*].		cross via that bridge or culvert, and run-off originating from the carriageway of the bridge or culvert must be <i>discharged</i>[^] onto or into <i>land</i>[^]. (f) The <i>discharge</i>[^] of <i>fertiliser</i>[*] onto or into <i>land</i>[^] and any ancillary <i>discharge</i>[^] of <i>contaminants</i>[^] into air must comply with the <i>conditions</i>[^] of Rule 14-5. (g) The <i>discharge</i>[^] of <i>contaminants</i>[^] onto or into <i>land</i>[^] from: (i) the preparation, storage, use or transportation of stock feed on <i>production land</i>[^], or (ii) the use of a <i>feedpad</i>[*] and any ancillary <i>discharge</i>[^] of <i>contaminants</i>[^] into air must comply with the <i>conditions</i>[^] of Rule 14-6. (h) The <i>discharge</i>[^] of <i>grade Aa biosolids</i>[*] or <i>compost</i>[*] onto or into <i>production land</i>[^] and any ancillary <i>discharge</i>[^] of <i>contaminants</i>[^] into air must comply with the <i>conditions</i>[^] of Rule 14-7. (i) The <i>discharge</i>[^] of <i>poultry farm litter</i>[*] onto or into <i>production land</i>[^] and any ancillary <i>discharge</i>[^] of <i>contaminants</i>[^] into air must comply with the <i>conditions</i>[^] of Rule 14-9. (j) The <i>discharge</i>[^] of farm <i>animal effluent</i>[*] onto or into <i>production land</i>[^] including: (i) effluent from dairy sheds and <i>feedpads</i>[*] (ii) effluent received from piggeries (iii) sludge from farm effluent ponds (iv) poultry farm effluent and any ancillary <i>discharge</i>[^] of <i>contaminants</i>[^] into air must comply with the <i>conditions</i>[^], standards and terms of Rule 14-11.	<i>Resource consent</i>[^] applications under this <i>rule</i>[^] will not be notified and written approval of affected persons will not be required (notice of applications need not be <i>served</i>[^] on affected persons).

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
14-2 Existing intensive farming land[^] use activities not complying with <u>standards in (d) to (i) Rule 14-1.</u>	The use of <i>land[^]</i> pursuant to s9(2) RMA for any of the following intensive farming: (i) <i>dairy farming[*]</i> (ii) <i>commercial vegetable growing[*]</i> (iii) <i>cropping[*]</i> (iv) <i>intensive sheep and beef farming[*]</i> that was existing in the <i>Water Management Sub-zones[*]</i> listed in and from the dates specified in Table 14.1, and any of the following <i>discharges[^]</i> pursuant to ss15(1) or 15(2A) RMA associated with intensive farming, that do not comply with one or more of the <i>conditions[^]</i>, standards and terms of Rule 14-1 <u>(except for (a), (b), (c) or (d))</u>: (a) the <i>discharge[^]</i> of <i>fertiliser[*]</i> onto or into <i>land[^]</i> (b) the <i>discharge[^]</i> of <i>contaminants[^]</i> onto or into <i>land[^]</i> from (i) the preparation, storage, use or transportation of stock feed on <i>production land[^]</i> (ii) the use of a <i>feedpad[*]</i> (c) the <i>discharge[^]</i> of <i>grade Aa biosolids[*]</i> or <i>compost[*]</i> onto or into <i>production land[^]</i> (d) the <i>discharge[^]</i> of <i>poultry farm litter[*]</i> onto or into <i>production land[^]</i> (e) the <i>discharge[^]</i> of <i>farm animal effluent[*]</i> onto or into <i>production land[^]</i> (or upon	Restricted Discretionary	<u>(a) The activity must comply with the requirements specified in conditions, standards and terms (a) to (c) of Rule 14-1.</u>	Discretion is restricted to: (a) preparation of and compliance with a <i>nutrient management plan[*]</i> for the <i>land[^]</i> (b) the extent of non-compliance with the <i>cumulative nitrogen leaching maximum[*]</i> specified in Table 14.2 (c) measures to avoid, remedy or mitigate nutrient leaching, faecal contamination and sediment losses from the <i>land[^]</i> (d) measures to exclude cattle from <i>wetlands[^]</i> and <i>lakes[^]</i> that are a <i>rare habitat[*]</i> or <i>threatened habitat[*]</i>, and <i>rivers[^]</i> that are permanently flowing or have an <i>active bed[*]</i> width greater than 1 m (e) the bridging or culverting of <i>rivers[^]</i> that are permanently flowing or have an <i>active bed[*]</i> width greater than 1 m that are crossed by cattle (f) the matters referred to in the <i>conditions[^]</i> of Rules 14-5, 14-6, 14-7, and 14-9 (g) the matters referred to in the <i>conditions[^]</i> of Rule 14-11 and the matters of control in Rule 14-11 (h) avoiding, remedying or mitigating the effects of odour, dust, <i>fertiliser[*]</i> drift or effluent drift (i) provision of information including the annual <i>nutrient management plan[*]</i>

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	expiry or surrender of any existing consent for that <i>discharge</i>[^] including: (i) effluent from dairy sheds and <i>feedpads</i>* (ii) effluent received from piggeries (iii) sludge from farm effluent ponds (iv) poultry farm effluent and any ancillary <i>discharge</i>[^] of <i>contaminants</i>[^] into air pursuant to ss15(1) or 15(2A) RMA.			(j) duration of consent (k) review of consent <i>conditions</i>[^] (l) compliance monitoring (m) the matters in Policy 14-9.
Rule 14-2A Existing intensive farming land[^] use activities not complying with conditions, standards, or terms (a) to (c) of Rule 14-1 or condition (a) of Rule 14-2.	The use of land[^] pursuant to s9(2) RMA for any of the following intensive farming: (i) dairy farming* (ii) commercial vegetable growing* (iii) cropping* (iv) intensive sheep and beef farming* that was existing in the Water Management Sub-zones* listed in and from the dates specified in Table 14.1, and any of the following discharges[^] pursuant to ss15(1) or 15(2A) RMA associated with intensive farming, that do not comply with conditions, standards and term (a) to (c) of Rule 14-1.	Discretionary		

14-3 New intensive farming land[^] use activities	The use of <i>land[^]</i> pursuant to s9(2) RMA for any conversion to any of the following intensive farming: (i) <i>dairy farming[*]</i> (ii) <i>commercial vegetable growing[*]</i> (iii) <i>cropping[*]</i> (iv) <i>intensive sheep and beef farming[*]</i> that occurs from the date this rule has legal effect¹ anywhere within the Region and any of the following <i>discharges[^]</i> pursuant to ss15(1) or 15(2A) RMA associated with that intensive farming: (a) the <i>discharge[^]</i> of <i>fertiliser[*]</i> onto or into <i>land[^]</i> (b) the <i>discharge[^]</i> of <i>contaminants[^]</i> onto or into <i>land[^]</i> from (i) the preparation, storage, use or transportation of stock feed on <i>production land[^]</i>	Controlled	(a) A <i>nutrient management plan[*]</i> must be prepared for the <i>land[^]</i> and provided annually to the Regional Council. (b) The activity must be undertaken in accordance with the <i>nutrient management plan[*]</i> prepared under (a). (c) The <i>nutrient management plan[*]</i> prepared under (a) must demonstrate that the nitrogen leaching loss from the activity will not exceed the <i>cumulative nitrogen leaching maximum[*]</i> specified in Table 14.2. (d) Cattle must be excluded from: (i) <i>wetlands[^]</i> and <i>lakes[^]</i> that are a <i>rare habitat[*]</i> or <i>threatened habitat[*]</i>, and (ii) the <i>beds[^]</i> of <i>rivers[^]</i> that are permanently flowing or have an <i>active bed[*]</i> width greater than 1 m. (e) <i>Rivers[^]</i> that are permanently flowing or have an <i>active bed[*]</i> 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 <i>discharged[^]</i> onto or into <i>land[^]</i>.	Control is reserved over: (a) the implementation of the <i>nutrient management plan[*]</i> (b) compliance with the <i>cumulative nitrogen leaching maximum[*]</i> specified in Table 14.2 (c) the matters of control in Rule 14-11 (d) avoiding, remedying or mitigating the effects of odour, dust, <i>fertiliser[*]</i> drift or effluent drift (e) provision of information including the <i>nutrient management plan[*]</i> (f) duration of consent (g) review of consent <i>conditions[^]</i> (h) compliance monitoring (i) the matters in Policy 14-9. <i>Resource consent[^]</i> applications under this <i>rule[^]</i> will not be notified and written approval
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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.

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

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
14-3	(iii) <i>cropping*</i> (iv) <i>intensive sheep and beef farming*</i> that occurs from the date this rule has legal effect¹ anywhere within the Region, and any of the following <i>discharges^</i> pursuant to ss15(1) or 15(2A) RMA associated with intensive farming, that do not comply with one or more of the <i>conditions^</i>, standards and terms of Rule 14-3: (a) the <i>discharge^</i> of <i>fertiliser*</i> onto or into <i>land^</i> (b) the <i>discharge^</i> of <i>contaminants^</i> onto or into <i>land^</i> from (i) the preparation, storage, use or transportation of stock feed on <i>production land^</i> (ii) the use of a <i>feedpad*</i> (c) the <i>discharge^</i> of <i>grade Aa biosolids*</i> or <i>compost*</i> onto or into <i>production land^</i> (d) the <i>discharge^</i> of <i>poultry farm litter*</i> onto or into <i>production land^</i> (e) the <i>discharge^</i> of <i>farm animal effluent*</i> onto or into <i>production land^</i> including: (i) effluent from dairy sheds and <i>feedpads*</i> (ii) effluent received from piggeries (iii) sludge from farm effluent ponds (iv) poultry farm effluent			(b) the extent of non-compliance with the <i>cumulative nitrogen leaching maximum*</i> specified in Table 14.2 (c) measures to avoid, remedy or mitigate nutrient leaching, faecal contamination and sediment losses from the <i>land^</i> (d) measures to exclude cattle from <i>wetlands^</i> and <i>lakes^</i> that are a <i>rare habitat*</i> or <i>threatened habitat*</i>, and <i>rivers^</i> that are permanently flowing or have an <i>active bed*</i> width greater than 1 m (e) the bridging or culverting of <i>rivers^</i> that are permanently flowing or have an <i>active bed*</i> width greater than 1 m that are crossed by cattle (f) the matters referred to in the <i>conditions^</i> of Rules 14-5, 14-6, 14-7, and 14-9 (g) the matters referred to in the <i>conditions^</i> of Rule 14-11 and the matters of control in Rule 14-11 (h) avoiding, remedying or mitigating the effects of odour, dust, <i>fertiliser*</i> drift or effluent drift (i) provision of information including the annual <i>nutrient management plan*</i> (j) duration of consent (k) review of consent <i>conditions^</i> (l) compliance monitoring

¹ The rule has legal effect in the case of *dairy farming** from 24 August 2010 and for *commercial vegetable growing**, *cropping** and *intensive sheep and beef** it has legal effect from 9 May 2013.

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	and any ancillary <i>discharge</i> [^] of <i>contaminants</i> [^] into air pursuant to ss15(1) or 15(2A) RMA.			(m) the matters in Policy 14-9.
14-5 Fertiliser*	The <i>discharge</i> [^] of <i>fertiliser</i> * onto or into <i>land</i> [^] pursuant to ss15(1) or 15(2A) RMA and any ancillary <i>discharge</i> [^] of <i>contaminants</i> [^] into air pursuant to ss15(1) or 15(2A) RMA, except where the <i>discharge</i> [^] is undertaken in association with a use of <i>land</i> [^] controlled by Rules 14-1 to 14-4.	Permitted	(a) There must be no direct <i>discharge</i>[^] of <i>fertiliser</i>* into any surface <i>water body</i>[^] or its <i>bed</i>[^] or <i>artificial watercourse</i>* other than as provided for under (b). (b) All reasonable measures must be taken to prevent: (i) any <i>discharge</i>[^] of <i>fertiliser</i>* within the <i>bed</i>[^] of a <i>river</i>[^] that is permanently flowing or has an <i>active bed</i>* width greater than 2 m, or any <i>lake</i>[^] or <i>wetland</i>[^] that has an area of 1 ha or more (ii) any <i>discharge</i>[^] into any <i>rare habitat</i>*, <i>threatened habitat</i>* or <i>at-risk habitat</i>*, except for the purpose of enhancing such habitats. Under condition (b) "reasonable measures" includes the use of GPS technology. (c) For <i>production land</i>[^] the <i>fertiliser</i>* must be <i>discharged</i>[^] in accordance with the Code of Practice for Nutrient Management (New Zealand Fertiliser Manufacturers' Research Association, 2007). (d) Where nitrogen <i>fertiliser</i>* is <i>discharged</i>[^] onto <i>land</i>[^] in excess of 60 kgN/ha/year averaged across the whole farm area or in excess of an average rate of 150 kgN/ha/year on any application area a nutrient budget undertaken using the OVERSEER® model, which takes into account all other sources of nitrogen, and covers and identifies the whole farm area including details of individual blocks and which is designed to minimise nitrogen leaching rates, must be used to plan and carry out the <i>fertiliser</i>* <i>discharge</i>[^] and be made available to the Regional Council upon request. If a <i>nutrient management plan</i>* is required under Rules 14-1, 14-2, 14-3 or 14-4 then the nutrient	Discretion is restricted to: (a) preparation of and compliance with a <i>nutrient management plan</i>* for the <i>land</i>[^]

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
			budget required by this <i>condition</i>[^] must be consistent with it and the activity must be carried out in accordance with it. (e) The <i>discharge</i>[^] must not result in any offensive or objectionable odour or <i>fertiliser</i>[*] drift beyond the <i>property</i>[*] boundary.	
14-6 Stock feed including feedpads*	The <i>discharge</i>[^] of <i>contaminants</i>[^] onto or into <i>land</i>[^] pursuant to ss15(1) or 15(2A) RMA from: (a) the preparation, storage, use or transportation of stock feed on production land[^], or (a) the use of a feedpad[*] and any ancillary <i>discharge</i>[^] of <i>contaminants</i>[^] into air pursuant to ss15(1) or 15(2A) RMA, except where the <i>discharge</i>[^] is undertaken in association with a use of land[^] controlled by Rule 14-1 to 14-4.	Permitted	(a) All silage (excluding maize silage) storage pits that have an area greater than 500 m² and all <i>feedpads</i>[*], must be sealed to restrict seepage of <i>contaminants</i>[^]. The permeability of the sealing layer must not exceed 1x10⁻⁹ m/s. (b) All areas used for storing stock feed, for <i>feedpads</i>[*] 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: (i) run-off from the area into surface <i>water</i>[^] or <i>artificial watercourses</i>[*], is prevented (ii) run-off from the surrounding catchment is prevented from entering the area. (c) All areas used for storing stock feed, for <i>feedpads</i>[*] or for otherwise feeding stock (including feeding silage) must comply with the following separation distances: (i) 50 m from <i>rare habitats</i>[*], <i>threatened habitats</i>[*] and <i>at-risk habitats</i>[*], (ii) 20 m from <i>bores</i>[*], surface <i>water bodies</i>[^], <i>artificial watercourses</i>[*], and the <i>coastal marine area</i>[^], and (iii) 50 m from any <i>historic heritage</i>[^] identified in any <i>district plan</i>[^] or <i>regional plan</i>[^]. (d) All <i>animal effluent</i>[*] collected from <i>feedpads</i>[*] must be treated and <i>discharged</i>[^] in accordance with Rule 14-11. (e) The <i>discharge</i>[^] must not result in any offensive or objectionable odour or dust beyond the <i>property</i>[*] boundary.	

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
14-7 Discharges[^] of grade Aa biosolids* and compost* to production land[^]	The <i>discharge[^]</i> of <i>grade Aa biosolids*</i> or <i>compost*</i> onto or into <i>production land[^]</i> pursuant to ss15(1) or 15(2A) RMA, and any ancillary <i>discharge[^]</i> of <i>contaminants[^]</i> into air pursuant to ss15(1) or 15(2A) RMA, except where the <i>discharge[^]</i> is undertaken in association with a use of <i>land[^]</i> controlled by Rules 14-1 to 14-4.	Permitted	(a) There must be no direct <i>discharge[^]</i> or run-off into any surface <i>water body[^]</i> or its <i>bed[^]</i> or <i>artificial watercourse*</i>. (b) For <i>compost*</i> the material must not contain any human or animal pathogens, or any <i>hazardous substances*</i>. (c) For <i>grade Aa biosolids*</i> the <i>discharge[^]</i> must comply with the requirements for <i>grade Aa biosolids*</i> 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). (d) The <i>discharge[^]</i> must comply with the following separation distances: (i) 50 m from <i>rare habitats*</i>, <i>threatened habitats*</i> and <i>at-risk habitats*</i> (ii) 20 m from <i>bores*</i>, surface <i>water bodies[^]</i>, <i>artificial watercourses*</i> and the <i>coastal marine area[^]</i> (iii) 50 m from any <i>historic heritage[^]</i> identified in any <i>district plan[^]</i> or <i>regional plan[^]</i>. (e) A nutrient budget undertaken using the OVERSEER® model, which takes into account all other sources of nitrogen and which is designed to minimise nitrogen leaching rates, must be used to plan and carry out the <i>discharge[^]</i> of the <i>grade Aa biosolids*</i> or <i>compost*</i>. If a <i>nutrient management plan*</i> is required under Rules 14-1 to 14-4 then the nutrient budget required by this <i>condition[^]</i> must be consistent with it and the activity must be carried out in accordance with it. (f) The <i>discharge[^]</i> must not result in any offensive or objectionable odour or dust beyond the <i>property*</i> boundary.	

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
			(g) The discharger must keep the following records: (i) a daily record of the <i>discharge</i>[^] volume and location (ii) a monthly (or more frequent) analysis of the nitrogen concentration of a <i>discharge</i>[^] sample and make these records available to the Regional Council upon request.	
14-8 Grade Ab, Ba or Bb biosolids*	The <i>discharge</i> [^] of grade Ab, Ba or Bb <i>biosolids</i> * onto or into <i>production land</i> [^] pursuant to ss15(1) or 15(2A) RMA, and any ancillary <i>discharge</i> [^] of <i>contaminants</i> [^] into air pursuant to ss15(2) or 15(2A) RMA, except where the <i>discharge</i> [^] is undertaken in association with a use of <i>land</i> [^] controlled by Rules 14-1 to 14-4.	Restricted Discretionary	(a) There must be no direct <i>discharge</i> [^] or run-off into any surface <i>water body</i> [^] or its <i>bed</i> [^] or <i>artificial watercourse</i> *. (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). <i>Hazardous substances</i> * must not exceed b grade limits as given by the Guidelines for the Safe Application of Biosolids to Land in New Zealand (New Zealand Water and Waste Association, August 2003). (c) The <i>discharge</i> [^] must comply with the following separation distances: (i) 150 m from residential buildings, public places and amenity areas where people congregate, education facilities and public roads (ii) 50 m from <i>property</i>* boundaries (iii) 50 m from <i>rare habitats</i>*, <i>threatened habitats</i>* and <i>at-risk habitats</i>* (iv) 20 m from <i>bores</i>*, surface <i>water bodies</i>[^], <i>artificial watercourses</i>* and the <i>coastal marine area</i>[^] (v) 50 m from any <i>historic heritage</i>[^] identified in any <i>district plan</i>[^] or <i>regional plan</i>[^].	Discretion is reserved over: (a) the rate of <i>discharge</i>[^] and frequency of <i>discharge</i>[^] to control nutrient and contaminant loading rates (b) maintenance of vegetative cover in the area of <i>discharge</i>[^] (c) avoiding, remedying or mitigating the effects of odour or dust (d) contingency measures, including for events of mechanical failure and prolonged wet weather (e) monitoring and information requirements (f) duration of consent (g) review of consent <i>conditions</i>[^] (h) compliance monitoring (i) the matters in Policy 14-9.

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
			(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 <i>biosolids* discharge^</i>. If a <i>nutrient management plan*</i> is required under Rules 14-1 to 14-4 then the nutrient budget required by this <i>condition^</i> must be consistent with it and the activity must be carried out in accordance with it. (e) The <i>discharge^</i> must not result in any offensive or objectionable odour or dust beyond the <i>property* boundary</i>.	
14-9 Discharges^ of poultry farm litter* or pig farm litter* and associated temporary stockpiling	The <i>discharge^</i> of <i>poultry farm litter*</i> or <i>pig farm litter*</i> and associated stockpiling onto or into <i>production land^</i> pursuant to ss15(1) or 15(2A) RMA and any ancillary <i>discharge^ of contaminants^</i> into air pursuant to ss15(1) or 15(2A) RMA, except where the <i>discharge^</i> is undertaken in association with a use of <i>land^</i> controlled by Rules 14-1 to 14-4.	Permitted	(a) The rate of <i>discharge^</i> must be no greater than 150 kgN/ha/ year in any 12 month period and must not exceed 60 kgN/ha in any 24 hour period. (b) There must be no direct <i>discharge^</i> or run-off into any surface <i>water body^</i> or its <i>bed^</i> or <i>artificial watercourse*</i>. (c) The <i>discharge^</i> of <i>poultry farm litter*</i> or <i>pig farm litter*</i> and associated temporary stockpiling must comply with the following separation distances: (i) 150 m from any residential buildings, public places and amenity areas where people congregate, and education facilities (ii) 50 m from <i>property* boundaries</i> (iii) 50 m from <i>rare habitats*</i>, <i>threatened habitats*</i> and <i>at-risk habitats*</i> (iv) 20 m from <i>bores*</i>, surface <i>water bodies^</i>, <i>artificial watercourses*</i> and the <i>coastal marine area^</i> (v) 50 m from any <i>historic heritage^</i> identified in any <i>district plan^</i> or <i>regional plan^</i>.	

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
			(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 <i>discharge</i>[^] of <i>poultry farm litter</i>[*] or <i>pig farm litter</i>[*]. If a <i>nutrient management plan</i>[*] is required under Rules 14-1 to 14-4 then the nutrient budget required by this <i>condition</i>[^] must be consistent with it and the activity must be carried out in accordance with it. (e) The <i>discharge</i>[^] of <i>poultry farm litter</i>[*] or <i>pig farm litter</i>[*] and associated temporary stockpiling must not result in any offensive or objectionable odour or dust beyond the <i>property</i>[*] boundary. (f) All areas used for temporary stockpiling must be located and managed in a manner that ensures at all times when such areas are in use: (i) run-off from the area into <i>water</i>[^] or an <i>artificial watercourse</i>[*] is prevented (ii) run-off from the surrounding catchment is prevented from entering the area.	
14-10 Offal holes and farm dumps	The <i>discharge</i> [^] of <i>contaminants</i> [^] onto or into <i>production land</i> [^] pursuant to ss15(1), 15(2) or 15(2A) RMA associated with an offal hole or farm dump, and any ancillary <i>discharge</i> [^] of <i>contaminants</i> [^] into air pursuant to ss15(1) or 15(2A) RMA, except where the <i>discharge</i> [^] is undertaken in association with a use of <i>land</i> [^] controlled by Rules 14-1 to 14-4.	Permitted	(a) Only animal carcasses, or parts thereof, and <i>waste</i>[*], which is sourced from the <i>property</i>[*] on which the offal hole or farm dump is located, can be disposed of. (b) The <i>waste</i>[*] must not contain any <i>hazardous substances</i>[*] or sewage. (c) There must be no <i>discharge</i>[^] into any surface <i>water body</i>[^] or its <i>bed</i>[^] or <i>artificial watercourse</i>[*]. (d) The lowest point of the offal hole or farm dump must be at least 1 m above the seasonally highest <i>water</i>[^] table. (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 (ii) 10 m from <i>property</i>[*] boundaries (iii) 50 m from <i>rare habitats</i>[*], <i>threatened habitats</i>[*] and <i>at-risk habitats</i>[*] (iv) 20 m from <i>bores</i>[*], <i>surface water bodies</i>[^], <i>artificial watercourses</i>[*] and the <i>coastal marine area</i>[^] (v) 50 m from any <i>historic heritage</i>[^] identified in any <i>district plan</i>[^] or <i>regional plan</i>[^]. (f) Measures must be used as necessary to minimise animal pests from entering the offal hole or farm dump. (g) There must be no offensive or objectionable odour or dust beyond the <i>property</i>[*] boundary.	
14-11 Farm animal effluent[*] including effluent from dairy sheds, poultry farms and piggeries	The <i>discharge</i>[^] of farm <i>animal effluent</i>[*] onto or into <i>production land</i>[^] pursuant to ss15(1) or 15(2A) RMA including: (a) effluent from dairy sheds and <i>feedpads</i>[*] (b) effluent from piggeries (c) sludge from farm effluent ponds (d) poultry farm effluent and any ancillary <i>discharge</i>[^] of <i>contaminants</i>[^] into air pursuant to ss15(1) or 15(2A) RMA, except where the <i>discharge</i>[^] is undertaken in association with a use of <i>land</i>[^] controlled by Rules 14-1 to 14-4.	Controlled	(a) There must be no direct <i>discharge</i>[^] or run-off of effluent into a surface <i>water body</i>[^] or its <i>bed</i>[^] or <i>artificial watercourse</i>[*], including from effluent holding facilities. (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 <i>operative</i>[^]. The permeability of the sealing layer must not exceed 1×10^{-9} m/s subject to the following exceptions: (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: (a) amount of effluent per <i>discharge</i>[^] and frequency of <i>discharge</i>[^] (b) effluent <i>discharge</i>[^] volume and rate in relation to the infiltration rate and the available <i>water</i>[^] storage capacity of the soil (deferred irrigation) (c) nitrogen loading in terms of kgN/ha/year and kgN/ha in any 24 hour period (d) effluent storage facilities (including storage volume) to allow for the withholding of effluent during periods of prolonged wet weather when the soil moisture deficit is insufficient to allow for deficit effluent irrigation to occur

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. (c) The <i>discharge</i>[^] must comply with the following separation distances: (i) for <i>discharges</i>[^] of piggery effluent, 150 m from any residential buildings, public places and amenity areas where people congregate and education facilities (ii) for other <i>discharges</i>[^], 20 m from any residential buildings, public places and amenity areas where people congregate and education facilities (iii) for all <i>discharges</i>[^], 50 m from <i>rare habitats</i>[*], <i>threatened habitats</i>[*] and <i>at-risk habitats</i>[*] (iv) for all <i>discharges</i>[^], 20 m from <i>bores</i>[*], <i>surface water bodies</i>[^], <i>artificial watercourses</i>[*] and the <i>coastal marine area</i>[^] (v) for all <i>discharges</i>[^], 50 m from any <i>historic heritage</i>[^] identified in any <i>district plan</i>[^] or <i>regional plan</i>[^]. (d) Stormwater from ancillary roof areas, and hardstand areas which do not hold animals, must not <i>discharge</i>[^] to the effluent storage facility unless the volume calculation for the pond takes into consideration the input from ancillary roof and hardstand areas. (e) A nutrient budget, undertaken using the OVERSEER[®] model, which takes into account all other sources of nitrogen and which is designed to minimise nitrogen leaching rates, must be used to plan and carry out the <i>animal effluent</i>[*] <i>discharge</i>[^]. If a <i>nutrient management plan</i>[*] is required under Rules 14-1 to 14-4 then the nutrient budget required by this <i>condition</i>[^] must be consistent with it and the activity must be carried out in accordance with it. (f) There must be no offensive or objectionable odour, dust, or effluent drift beyond the <i>property</i>[*] boundary.	(e) measures to manage the ponding of effluent on the <i>discharge</i>[^] area (f) maintenance of vegetative cover on the <i>discharge</i>[^] area (g) management of odours arising from the effluent <i>discharge</i>[^] (h) contingency measures, including for events of mechanical failure and prolonged wet weather (i) duration of consent (j) review of consent <i>conditions</i>[^] (k) compliance monitoring (l) the matters in Policy 14-9. Except for new piggeries, <i>resource consent</i>[^] applications under this <i>rule</i>[^] will not be notified and written approval of affected persons will not be required (notice of applications need not be <i>served</i>[^] on affected persons).

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 ss15(1) RMA that are not covered by the rules above are a **discretionary activity** under Rule 14-30.

Activities that do not comply - Except for Rule 14-3, activities pursuant to ss15(1) or 15(2A) RMA that do not comply with the permitted or controlled activity rules above are a **discretionary activity** under general Rule 14-30.

144 Rules - Discharges of Water

The requirements specified in the Resource Management (National Environmental Standards for Freshwater) Regulations also apply, as rules, in addition to the following rules. One Plan users must refer to the Regulations and they should be read in conjunction with the following rules. Where there is conflict between the provisions of the Regulations and Rule 14-12, the more stringent provision will apply.

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
14-12 Discharges[^] of water[^] to water[^]	The <i>discharge[^]</i> of <i>water[^]</i> into <i>water[^]</i> pursuant to s15(1) RMA (excluding drainage <i>water[^]</i> which is regulated by Rules 16-10 and 16-11 and the <i>discharge[^]</i> of <i>water[^]</i> into <i>water[^]</i> that is part of the normal <i>operation[*]</i> of a dam which is regulated by Rule 17-7 or Rule 17-8).	Permitted	(a) The <i>discharge[^]</i> must not cause or exacerbate the flooding of any neighbouring <i>property[*]</i>. (b) The <i>discharge[^]</i> must not cause any scouring or erosion of any <i>land[^]</i> or <i>bed[^]</i> of a <i>water body[^]</i> beyond the point of <i>discharge[^]</i>. (c) The <i>discharge[^]</i> must not alter the natural course of any <i>water body[^]</i>. (d) The <i>discharge[^]</i> must not be to any <i>rare habitat[*]</i>, <i>threatened habitat[*]</i> or <i>at-risk habitat[*]</i> (<i>discharges[^]</i> into <i>at-risk habitats[*]</i> are <i>discretionary activities[^]</i> under Rule 13-8 and into <i>rare habitats[*]</i> or <i>threatened habitats[*]</i> are non-complying activities under Rule 139). (e) The <i>discharge[^]</i> must not, after <i>reasonable mixing[*]</i>, change the natural temperature of the receiving <i>water[^]</i> by more than the maximum temperature or temperature change specified by the water quality standards for the <i>Water Management Sub-zone[*]</i> listed in Schedule E.	

Rule Guide:

Activities that do not comply - Discharges of water pursuant to s15(1) RMA that do not comply with the permitted activity rule above are a **discretionary activity** under Rule 14-30.

145 Rules - Human effluent and domestic wastewater*
[omitted]

14.6 Rules - Stormwater

[Omitted]

14.7 Rules - Dyes and Tracers

[omitted]

14.8 Rules - *Cleanfill Material, *Composting**, *Landfills** and *Solid Waste****

[Omitted]

14.9 Rules - Discharges of Contaminants to Natural State Reaches and Sites of Significance – Aquatic

[Omitted]

14.10 Rules - Generic Discharge Rules

[Omitted]

14.11 Rules - Default Discharge Rule

The requirements specified in the Resource Management (National Environmental Standards for Freshwater) Regulations and the Resource Management (National Environmental Standards for Storing Tyres Outdoors) Regulations also apply, as rules, in addition to the following rules. One Plan users must refer to the Regulations and they should be read in conjunction with the following rules. Where there is conflict between the provisions of the Regulations and Rule 14-30, the more stringent provision will apply.

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
14-30 Discharges[^] of water[^] or contaminants[^] to land[^] or water[^] not covered by other rules[^] in this Plan or chapter	The <i>discharge[^]</i> of <i>water[^]</i> or <i>contaminants[^]</i> into surface <i>water[^]</i> pursuant to s15(1) (a) RMA or <i>discharge[^]</i> of <i>contaminants[^]</i> onto or into <i>land[^]</i> pursuant to ss15(1) (b), 15(1)(d) or 15(2A) RMA which are not regulated by other <i>rules[^]</i> in this Plan, or which do not comply with the <i>permitted</i> <i>activity[^]</i> , <i>controlled activity[^]</i> or <i>restricted</i> <i>discretionary activity[^]</i> <i>rules[^]</i> in this chapter.	Discretionary		