

**WAIKATO AND WAIPĀ RIVER IWI – CONSOLIDATED PC1 (MARKED-UP)**

This is a marked-up version of the Consolidated Section 42A Report Version of PC1, with **all mark-ups shown in-line**. This document retains the mark-ups of the Section 42A Version of PC1 (see page 1 of PC1 for a key to those amendments), making further River Iwi amendments in yellow highlight as follows:

- Text that was deleted in the Section 42A Version of PC1, and that the River Iwi **propose to be reinstated** is highlighted **yellow only**.
- **New text proposed by the River** is highlighted **yellow and underlined**.
- Text that the River Iwi **proposes for deletion** is highlighted **yellow and with strikethrough**.

Provision	Amendment proposal	Consolidated PC1 Reference
Reference to Te Ture Whaimana	Block 3 Oral Submission – change ‘Vision and Strategy’ to ‘Te Ture Whaimana’ (consequential amendment – inclusion of definition of ‘Te Ture Whaimana’ referred to below in table).	Global Edit
Reference to Waipā River	To include macron on Waipā in English text of PC1 – currently included only in Te Reo Māori text.	Global Edit
Background and Explanation	As per River Iwi Legal Submissions on signalling the future: Block 3 Submissions at paras 12-32 and Closing Submissions at paras 8-10.	Page 4
Values and Uses	As per Janeen Kydd-Smith ( <b>JKS</b> ) Block 1 EIC regarding reference to waterbodies at paras 18-21.	Pages 12 – 16
‘Objective’ Headings	Reinstate as per JKS Block 1 EIC at para 34.	Pages 16 – 19
Objective 1	As per JKS Block 1 EIC at para 30.	Page 16
Objective 2	Add term ‘spiritual’ as per River Iwi Block 1 Legal Submissions at paras 54-57.	Page 16
Objective 3	Make distinction between short-term ‘objectives’ and long-term ‘states’ as per JKS Block 1 EIC at para 41 and Olivier Ausseil ( <b>OA</b> ) Block 1 EIC at para 44.	Page 16
Objective 4	As per JKS Block 1 EIC at para 47.	Page 17
Policy 1	As per JKS Block 2 EIC at paras 29, 35, 39, 40 and 58.	Page 20
Policy 2	As per JKS Block 2 EIC at para 58-59 and 63, and Block 2 Rebuttal at paras 14-15.	Pages 20 – 21
Policy 3	As per JKS Block 3 EIC at paras 36 and 41.	Pages 21 – 22
Policy 4	As per River Iwi Block 3 Legal Submissions on consent duration at paras 28 - 32.	Page 22
Policy 5	As per JKS Block 2 EIC at paras 81 and 82-84, and Hamish Lowe ( <b>HL</b> ) Block 2 EIC at para 73.	Pages 22 – 23
Policy 7	As per River Iwi Legal Submissions on signalling the future: Block 3 Submissions at paras 12-32 and Closing Submissions at paras 8-10.	Page 23
Policy 8	As per JKS Block 2 EIC at para 88.	Page 23
Policy 9	As per JKS Block 3 EIC at para 44.	Pages 23 – 24
Policy 10	As per JKS Block 3 Rebuttal at paras 56-57.	Page 24
Policy 11	As per JKS Block 2 Rebuttal at paras 17-25.	Page 24
Policy 12	As per JKS Block 2 EIC at para 121.	Pages 24 – 25
Policy 13	As per River Iwi Block 3 Legal Submissions on consent duration at paras 28 - 32.	Page 25
Policy 14	As per JKS Block 1 EIC at paras 57-58.	Page 25

<b>Provision</b>	<b>Amendment proposal</b>	<b>Consolidated PC1 Reference</b>
Policy 17	The two sub-points are unnecessary; nor does the River Iwi consider the wider context of Te Ture Whaimana a 'secondary' matter.	Page 26
Implementation Method (IM) 3.11.4.3	Amendment regarding FEPs and activity status for farming as per JKS Block 2 EIC at para 99, JKS Block 3 EIC at para 51(c) and Closing Legal Submissions at paras 29-36.	Page 27
IM 3.11.4.4	As per JKS Block 3 EIC at para 51(d).	Pages 27-28
IM 3.11.4.5	As per JKS Block 3 EIC at paras 51(e).	Page 28
IM 3.11.4.10	As per JKS Block 3 EIC at para 51(h).	Page 29
IM 3.11.4.12	As per JKS Block 3 EIC at para 51(j).	Page 29
Rule 3.11.5.1A	<ul style="list-style-type: none"> <li>Amendment regarding FEPs and activity status for farming as per JKS Block 2 EIC at para 99, JKS Block 3 EIC at para 51(c) and Closing Legal Submissions at paras 29-36.</li> <li>Amendments also made to assist in the workability of retention of the hybrid approach.</li> <li>Rule 3.11.5.3 proposed to be deleted.</li> </ul>	Page 30
Rule 3.11.5.2		Page 31
Rule 3.11.5.2A		Page 33
Rule 3.11.5.3		Page 34
Rule 3.11.5.4		Page 35
Rule 3.11.5.5		Page 36-37
Rule 3.11.5.6A		Page 38
Rule 3.11.5.7	To reinstate end date to Rule 3.11.5.7 as per Block 2 Legal Submission at para 20.	Page 38
Rule 3.11.5.8	As per JKS Block 2 Rebuttal at paras 33-35. (JKS agrees with the evidence of Ms Marr for Fish & Game suggesting deletion of rules).	Page 39
Rule 3.11.5.9		Page 39
Schedule A	As per River Iwi Closing Legal Submissions at para 35.	Page 40
Schedule B	As per River Iwi Closing Legal Submissions at para 35.	Page 41
Schedule 1	As per River Iwi Closing Legal Submissions at paras 29-36.	Pages 44-50
3.11.1 List of Tables and Maps	Make distinction between short-term 'objectives' and long-term 'states' as per JKS Block 1 EIC at para 41 and OA Block 1 EIC at para 44.	Page 56
Table 3.11.1	Amendments consistent with OA recommendations in the JWS.	Page 57
Definition: Certified Farm Environment Planner	As per HL Block 3 EIC at para 31.	Pages 67-68
Definition: Farm	HL further reflection.	Page 70
Definition: Good Farming Practice	JKS Block 3 Rebuttal at para 35.	Page 70
Definition: Offset/s	JKS Block 2 Rebuttal at para 21.	Page 71
Definition: Planted Production Forest	As per HL Block 3 Rebuttal at para 14.	Page 71
Definition: Stocking rate	As per HL Block 3 Rebuttal at para 17.	Page 73
Definition: Te Ture Whaimana	Block 3 Oral Submission – change 'Vision and Strategy' to 'Te Ture Whaimana'.	Page 73

# Proposed Waikato Regional Plan Change 1 – Waikato and Waipā River Catchments

~~Notified version (October 2016)~~

## Officer's "Tracked Changes" Version Hearing Block 1, 2 and 3 Recommendations Only

**Red tracked changes** are insertions or deletions  
due to Variation 1

**Black tracked changes** are insertions or deletions  
recommended by the Council Officers

***Important:***

- 1. Relevant pages only (other pages will be addressed through future recommendations)***
- 2. In case of any conflicts, errors or omissions, the Section 42A Report prevails.***

# 3.11 Waikato and ~~Waipa~~Waipā River Catchments/Ngā Riu o ngā Awa o Waikato me Waipā

## Area covered by Chapter 3.11/Ngā Riu o ngā Awa o Waikato me Waipā

This Chapter 3.11 applies to the Waikato and ~~Waipa~~Waipā River catchments. The map shown in Map 3.11-1 shows the general catchment boundary. This Chapter is additional to all other parts of the Waikato Regional<sup>1</sup> Plan. Where there are any inconsistencies, Chapter 3.11 prevails.

Map 3.11-1 shows the general catchment boundary and includes the boundaries of each Freshwater Management Unit<sup>^</sup> (FMU): The FMUs are:

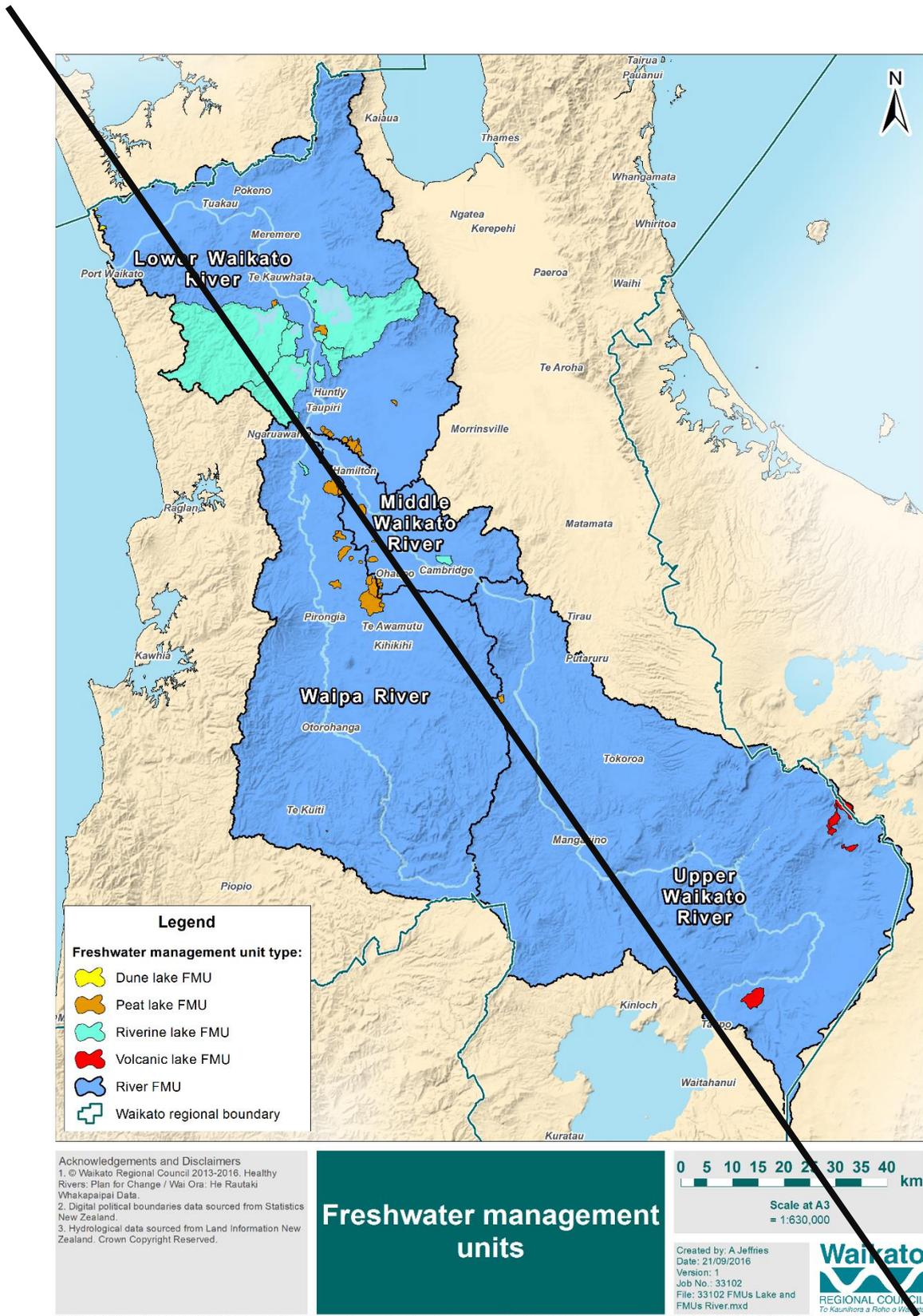
- Upper Waikato River
- Middle Waikato River
- Lower Waikato River
- ~~Waipa~~Waipā River
- Peat Lakes
- Riverine Lakes
- Dune Lakes
- Volcanic Lakes

FMUs are required by central government's National Policy Statement for Freshwater Management 2014. FMUs enable monitoring of progress towards meeting targets<sup>^</sup> and limits<sup>^</sup>.

The Plan maps of the Waikato and ~~Waipa~~Waipā River catchments are available electronically or for viewing at Waikato Regional Council offices on request.

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<sup>1</sup> Waikato Regional Council PC1-2976



Acknowledgements and Disclaimers  
 1. © Waikato Regional Council 2013-2016. Healthy Rivers: Plan for Change / Wai Ora: He Rautaki Whakapūāwai Data.  
 2. Digital political boundaries data sourced from Statistics New Zealand.  
 3. Hydrological data sourced from Land Information New Zealand. Crown Copyright Reserved.

## Freshwater management units

0 5 10 15 20 25 30 35 40 km  
 Scale at A3 = 1:630,000

Created by: A Jeffries  
 Date: 21/09/2016  
 Version: 1  
 Job No.: 33102  
 File: 33102 FMUs Lake and FMUs River.mxd



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Map 3.11-1: Map of the Waikato and Waipa River catchments, showing Freshwater Management Units

Updated map showing corrected boundaries to be inserted

## Background and explanation

### Co-management of the Waikato and Waipā Rivers

There are three River Acts that establish co-governance arrangements for the Waikato and Waipā Rivers and catchment. These are Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010, Ngāti Tuwharetoa, Raukawa, and Te Arawa River Iwi Waikato River Act 2010 and Nga Wai o Maniapoto (Waipā River) Act 2012.

The iwi partners in the development of Chapter 3.11 are Maniapoto, Raukawa, Ngāti Tuwharetoa, Te Arawa River Iwi and Waikato-Tainui. The processes for preparing, reviewing, changing or varying the regional plan, in terms of River Iwi involvement in the process, is set out in the legislation. This includes a requirement for Council to establish a Joint Working Party with each of the River Iwi, the purposes of which include making joint recommendations to the Council regarding the plan change.

The three River Acts established the Vision and Strategy for the Waikato River/Te Ture Whaimana o Te Awa o Waikato (Vision and Strategy Te Ture Whaimana) as the primary direction setting document for the Waikato and Waipā Rivers. The Vision and Strategy Te Ture Whaimana prevails over any inconsistencies in a national policy statement or New Zealand coastal policy statement, and is deemed to be part of the Waikato Regional Policy Statement.

The Vision and Strategy Te Ture Whaimana states that the Waikato and Waipā Rivers are degraded and require, amongst other things, restoration and protection. One objective<sup>2</sup> has been given particular focus for this chapter: The restoration of water quality within the Waikato River so that it is safe for people to swim in and take food from over its entire length. The Vision and Strategy Te Ture Whaimana is being given effect to in Chapter 3.11 by:

- Reducing nitrogen, phosphorus, sediment and microbial pathogen losses from land
- Ongoing management of diffuse and point source discharges of nitrogen, phosphorus, sediment and microbial pathogens
- Giving people and communities time to adapt to the requirements of Chapter 3.11 and supporting actions to achieve short-term objectives while being clear that further reductions in nitrogen, phosphorus, sediment and microbial pathogen losses from land will be required in subsequent regional plans
- Ensuring that Waikato Regional Council continues to facilitate ongoing research, monitoring and tracking of changes on the land and in the water to provide for the application of Mātauranga Māori and latest scientific methods, as they become available
- Preparing for any future management regime (including allocation) for diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens in subsequent regional plans, requirements on what can be undertaken on the land, with limits ensuring that the management of land use and activities is closely aligned with the biophysical capabilities of the land, the spatial location, and the likely effects of discharges on the lakes, rivers and wetlands in the catchment.

### Collaborative approach

The co-governance partners agreed to adopt a collaborative approach to investigate and develop fresh water management approaches that would be implemented in the Waikato and Waipā River Catchments.

A key feature of the collaborative approach was the Collaborative Stakeholder Group (CSG), which represented stakeholders and the wider community in Healthy Rivers: Plan for Change/Wai Ora: He Rautaki Whakapaipai. The CSG was the central channel for stakeholder and broader community collaboration in the project. It intensively reviewed and deliberated on technical material from a group of external technical experts from a range of disciplines. For Proposed Plan Change 1, the CSG also sought input from their sectors and from the community, and ultimately proposed the contents of Chapter 3.11 to decision makers.

### Consultation

Schedule 1 of the RMA includes requirements to consult with certain parties, including iwi authorities, during the preparation of the Variation. Consultation has taken place with affected parties including the relevant iwi authorities and the issues raised during consultation have been taken into account by Waikato Regional Council in the development of Variation 1. Consultation has led to a Variation to Proposed Plan Change 1.

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<sup>2</sup> Te Ture Whaimana o te Awa o Waikato, Objective K

## Water quality and National Policy Statement for Freshwater Management

The National Policy Statement for Freshwater Management 2014 (NPS FM) requires regional councils to formulate freshwater objectives<sup>^</sup> and set limits<sup>^</sup> or targets<sup>^</sup> (a target is a limit to be achieved within a specified timeframe). Regional councils must ensure over-allocation<sup>^</sup> of the water resource is avoided, or addressed where that has already occurred.

Current water quality monitoring results show that while there is variability across the Waikato and Waipā River catchments, there are adverse effects on water bodies associated with discharges of nitrogen, phosphorus, sediment and microbial pathogens. The CSG concluded that from a water quality point of view, over-allocation<sup>^</sup> has occurred. Water bodies in the Waikato and Waipā River catchments are not able to assimilate further discharges of nitrogen, phosphorus, sediment and microbial pathogens, without adversely affecting community-held values. Achieving the numeric, long-term freshwater objectives<sup>^</sup> in Chapter 3.11 will require reductions in diffuse and point source contaminants.

The NPS FM directs the Waikato Regional Council to establish freshwater objectives<sup>^</sup> that give effect to the objectives of the NPS FM and describe the state that Waikato regional communities want for fresh water in the future.

The NPS FM process followed in developing Chapter 3.11, included identifying FMUs and the values for each, and then choosing relevant water quality attributes<sup>^</sup> and attribute states<sup>^</sup> that can be monitored over time. Freshwater objectives<sup>^</sup> and limits<sup>^</sup> or targets<sup>^</sup> set out what is required to achieve the attribute states<sup>^</sup>. Under the NPS FM, a limit<sup>^</sup> is the maximum amount of resource use available, which allows a freshwater objective<sup>^</sup> to be met.

The CSG identified resource use that affects the achievement of the freshwater objectives<sup>^</sup> and long-term desired water quality, and for achieving the Vision and Strategy Te Ture Whaimana. Chapter 3.11 sets out policies and methods that restrict what can be done on the land and discharged to land or water.

### Full achievement of the Vision and Strategy Te Ture Whaimana will be intergenerational

The CSG has chosen an 80-year timeframe to achieve the water quality objectives of the Vision and Strategy Te Ture Whaimana. The timeframe is intergenerational and more aspirational than the national bottom lines set out in the NPS FM because it seeks to meet the higher standards of being safe to swim in and take food from over the entire length of the Waikato and Waipā Rivers and catchment. Based on the information currently available, the CSG has concluded full achievement of the Vision and Strategy Te Ture Whaimana by 2096 is likely to be costly and difficult. The 80-year timeframe recognises the 'innovation gap' that means full achievement of water quality requires technologies or practices that are not yet available or economically feasible. In addition, the current understanding is that achieving water quality restoration requires a considerable amount of land to be changed from land uses with moderate and high intensity of discharges to land use with lower discharges (e.g. through reforestation).

Because of the extent of change required to restore and protect water quality in the 80-year timeframe, the CSG has adopted a staged approach. This approach breaks the required improvements into a number of steps, the first of which is to put in place and implement the range of actions in a 10 year period that will be required to achieve 10 percent of the required change between current water quality and the long term water quality in 2096. The staged approach recognises that immediate large scale land use change may be socially disruptive, and there is considerable effort and cost for resource users, industry and Waikato Regional Council to set up the change process in the first stage. New implementation processes, expertise and engagement are needed to support the first stage. The staged approach also allows time for the innovation in technology and practices that will need to be developed to meet the targets<sup>^</sup> and limits<sup>^</sup> in subsequent regional plans to be developed.

Because of the extent of change required to meet the 80-year limits<sup>^</sup>, achieving even the first step towards the long-term freshwater objectives in this Plan is an ambitious target. This means the effects of actions and changes on the land may not be seen as water quality improvements in the water bodies in the short term. This is partly due to the time required for the concentration of contaminants in the water to reduce, following mitigation actions being put in place, and specifically, the time it takes for nitrogen to move through the soil profile to groundwater, and then to surface water. This means that the effect of actions put in place to reduce nitrogen now may not be seen in the water for some time (the length of time lag varies across the catchment). It also means there is a nitrogen 'load to come' from historic land use that is yet to be seen in the water.

The approach to reducing contaminant losses from pastoral farm land implemented by Chapter 3.11 requires:

- stock exclusion from water bodies as a priority mitigation action

- Farm Environment Plans (including those for commercial vegetable producers) that ensure industry-specific good ~~management-farming practice, with monitoring and auditing to ensure outcomes are being achieved, and identify additional mitigation actions to reduce diffuse discharges by specified dates, which can then be monitored~~<sup>3</sup>
- a property scale nitrogen reference point to be established by modelling current nutrient losses from each property, with no property being allowed to ~~increase losses exceed its reference point~~<sup>4</sup> in the future and higher dischargers being required to reduce their nutrient losses
- an accreditation system to be set up for people who will assist farmers to prepare their Farm Environment Plan, and to certify agricultural industry schemes
- Waikato Regional Council to develop approaches outside the rule framework that allow contaminant loss risk factors to be assessed at a sub-catchment level, and implement mitigations that look beyond individual farm boundaries to identify the most cost-effective solutions.

There are a number of existing provisions, including rules, in the Waikato Regional Plan that will continue to apply for point source discharges.

Municipal and industrial point source dischargers will also be required to revise their discharges in light of ~~the Vision and Strategy Te Ture Whaimana~~ and the water quality objectives, and sub-catchment limits<sup>^</sup> and targets<sup>^</sup> that have been set. This will happen as the current consent terms expire.

~~There are a range of existing provisions in this Plan that deal with activities that relate to forestry. Forestry activities will continue to be managed by these existing provisions, with the addition of requirements around preparing harvest plans and notifying Waikato Regional Council of harvest activities.~~<sup>5</sup>

~~In the short term, land use change from tree cover to animal grazing, or any livestock grazing other the dairy or arable cropping to dairy, or any land use to commercial vegetable production, will be constrained. Provision has been made for some flexibility of land use for Māori land that has not been able to develop due to historic and legal impediments. As these impediments have had an impact on the relationship between tangata whenua and their ancestral lands, with associated cultural and economic effects, Chapter 3.11 seeks to recognise and provide for these relationships. These constraints on land use change are interim, until a future plan change introduces a second stage, where further reductions in discharges of sediment, nutrients and microbial pathogens from point sources and activity on the land will be required. This second stage will focus on land suitability and how land use impacts on water quality, based on the type of land and the sensitivity of the receiving water. Methods in Chapter 3.11 include the research and information to be developed to support this.~~<sup>6</sup>

### Reviewing progress toward achieving ~~the Vision and Strategy Te Ture Whaimana~~

The overall intent of Chapter 3.11 is to require resource users to make a start on reducing discharges of contaminants as the first stage of achieving ~~the Vision and Strategy Te Ture Whaimana~~, with on-farm actions carried out and point source discharges reviewed as existing resource consents come up for renewal. The staged approach gives people and communities time to adapt, while being clear that further reductions will be required by subsequent regional plans.

~~The Vision and Strategy Te Ture Whaimana~~ contained in each of the three River Acts is required to be reviewed periodically by the Waikato River Authority, which may make changes to insert limits and methods.

The Resource Management Act requires that regional councils commence reviews of their regional plans 10 years after those plans are operative. When this is done in the future, further changes to reduce diffuse and point source discharges will need to follow the initial preparatory stage embodied in Chapter 3.11 of this Plan.

During the life of this Plan, Waikato Regional Council will track the progress of actions undertaken on the land towards achieving ~~the Vision and Strategy Te Ture Whaimana~~. In addition, research and information collation will be used when this Plan is reviewed, to inform any future property-level allocation of contaminant discharges.

<sup>3</sup> G Carter PC1-8827, Wairakei Pastoral Ltd PC1-11406

<sup>4</sup> Balle Bros Group V1PC1-250

<sup>5</sup> Consequential to deletion of Part B

<sup>6</sup> Jack Farms PC1-8026, H and S Brooks PC1-84, Sieling Farms PC1-5465

## Te Horopaki me ngā Whakamārama

### Te whakahaere ngātahi i ngā awa o Waikato me Waipā

E toru ngā Ture mō ngā Awa e whakatū ana i ngā whakaritenga whakahaere ngātahi mō ngā awa o Waikato me Waipā, me ngā riu o aua awa. Ko ngā ture ēnei, ko te Te Ture Whakataunga Kokoraho Raupatu a Waikato-Tainui (Te Awa o Waikato) 2010, ko Te Ture o Ngā Iwi o Te Awa o Waikato 2010, arā o Ngāti Tūwharetoa, o Raukawa, o Te Arawa anō hoki me Te Ture o Ngā Wai o Maniapoto (Te Awa o Waipā) 2012.

Ko ngā āpiti ā-iwi i whai wāhi ki te whanaketanga o te Upoko 3.11, ko Maniapoto rātou ko Raukawa, ko Ngāti Tūwharetoa, ko ngā iwi o ngā awa o Te Arawa me Waikato-Tainui. Kei roto i te ture ngā whakamārama mō te āhua o te whai wāhitanga o ngā iwi o te awa ki ngā tukanga whakarite, arotake, panoni rānei i te mahere ā-rohe. Kei reira anō hoki te here kei runga i te Kaunihera ki te whakatū i tētehi Ohu Mahi Ngātahi i te taha o tēnā iwi, o tēnā iwi o te awa, ko tētehi o ngā aronga, ko te whakatakoto ngātahi i ngā tūtohunga ki te Kaunihera mō te panonitanga o te mahere.

I whakatūria Te Ture Whaimana o Te Awa o Waikato e ngā Ture e toru mō ngā Awa hei pukapuka matua e whakatau ana i te anga whakamuatanga mō ngā awa o Waikato me Waipā. Mehemea ka kitea he taupatuatutanga i tētehi Tauākī kaupapa here ā-motu, i te Tauākī kaupapa here takutai moana a Aotearoa rānei, kei runga ko Te Ture Whaimana, waihoki he wāhanga tēnei nō Te Tauākī Kaupapa Here ā-Rohe a Waikato.

E kī ana te Ture Whaimana, kua whakakinongia ngā awa o Waikato me Waipā, ā, me whakaora mai, me tiaki anō hoki ka tika, heoi he mahi anō i tua atu i ērā. E kaha arotahingia ana tētehi whāinga i tēnei upoko, arā ko te whakaoranga o te koununga wai o roto i te awa o Waikato, kia pai ai tā te tangata kaukau ki roto, kia pai ai te kahi kai i ngā wāhi katoa o te awa, mai i te mātāpuna ki te pūaha. E whakatinanahia ana te Ture Whaimana i te Upoko 3.11 mā te:

- whakaiti i te ngaronga o te hauota, o te pūtūtae-whetū, o te waiparapara me te tukumate ora poto i te whenua
- whakahaere tonu i te rukenga roha me te rukenga pū tuwha o te hauota, o te pūtūtae-whetū, o te waiparapara, o te tukumate ora poto anō hoki
- tuku i te tangata me ngā hapori kia taunga haere ai rātou ki ngā here o te Upoko 3.11 me te tautoko i ngā tūmahi kia tutuki ai ngā whāinga taupoto, i runga anō i te mārama me whai wāhi tonu ki ngā mahere ā-rohe ka whai ake, te whakaitinga o te ngaronga o te hauota, o te pūtūtae-whetū, o te waiparapara me te tukumate ora poto i te whenua
- whakaū kia whakahaere tonu te Kaunihera ā-rohe o Waikato i ngā rangahau, i te aroturuki me te mātai i ngā rerekētanga ā-whenua, i roto anō hoki i te wai kia āhei ai te whai i te Mātauranga Māori me ngā tikanga pūtaiao o te wā, ka puta mai ana aua tikanga
- whakarite i ngā herenga o anamata mō ngā mahi i runga i te whenua, me te āpiti atu i ngā tāpuitanga<sup>^</sup> e whakaū ana i te hāngai pū o ngā tūmahi me te whakahaeretanga o te whakamahinga whenua ki ngā āheinga ahupūngao koiora o te whenua, ki te wāhi me ngā pānga o ngā rukenga ki ngā roto, ki ngā awa me ngā repo i roto i te riu.

### Te huarahi o te mahi ngātahi

I whakaae ngā āpiti hautū ngātahi ki te whai i te huarahi o te mahi ngātahi ki te whakatewhatewha me te whakawhanake i ngā huarahi whakahaere wai Māori ka whāia i ngā riu o ngā awa o Waikato me Waipā.

Ko tētehi āhuatanga matua o te huarahi o te mahi ngātahi ko te Rōpū Mahi Ngātahi o ngā Hunga Whai Pānga, i noho mai hei kanohi mō te hunga whai pānga me te hapori whānui i te kaupapa o Wai Ora: He Rautaki Whakapaipai. Ko te Rōpū Mahi Ngātahi o ngā Hunga Whai Pānga te huarahi matua i mahi ngātahi ai te hunga whai pānga me te hapori whānui i te kaupapa. I āta arotake, i āta whiriwhiri māriri anō te rōpū i ngā rauemi whāiti nā tētehi rōpū mātanga ā-waho i ahu mai i ētehi tūmomo pekanga mātauranga. I [te Panonitanga Tuatahi o te Mahere e Marohitia nei](#), i whai hoki te Rōpū Mahi Ngātahi o ngā Hunga Whai Pānga i ngā whakaaro o ē rātou rāngai me te hapori, ā, nā rātou ngā kōrero o te Upoko 3.11 i whakatakoto ki te hunga whakatau.

### Te Whakawhiti Kōrero

[Kei roto i te Rārangī Whakawhiti Kōrero 1 o te RMA ngā here kia mātua whakawhiti kōrero me ētehi hunga, pērā i ngā rūrunga ā-iwi, i te wā e whakaritea ana te Whakataurangitanga. Kua oti ngā whakawhitinga kōrero me ngā hunga e pāngia ana, tae atu ki ngā rūrunga ā-iwi e hāngai ana, ā, kua āta arohia ngā take i ara ake ai i aua whakawhitinga kōrero e te Kaunihera ā-Rohe o Waikato i te whakaritenga o Te Whakataurangitanga Tuatahi. Nā ngā whakawhitinga kōrero i hua ai Te Whakataurangitanga i te Panonitanga Tuatahi o te Mahere e Marohitia nei.](#)

### Te Koununga Wai me te Tauākī Kaupapa Here ā-Motu mō te Whakahaere Wai Māori

Kua herea ngā kaunihera ā-rohe e te Tauākī Kaupapa Here ā-Motu mō te Whakahaere Wai Māori 2016 ki te whakarite whāinga wai Māori<sup>^</sup> me te whakatakoto tāpuitanga<sup>^</sup>, whāinga<sup>^</sup> rānei (he tāpuitanga te whāinga me whakatutuki i roto i te wā i tohua ai). Me mātua whakaū ngā kaunihera ā-rohe kāore e nui rawa te tohanga<sup>^</sup> o te rawa wai, me whakatika rānei e rātou tērā tohanga mehemea kua whērā kē.

E whakaaturia mai ana i ngā hua o te aroturuki ā-kounga wai, ahakoa ngā rerekētanga i ngā wāhi katoa o ngā riu o ngā awa o Waikato me Waipā, he kino tonu ngā pānga ki ngā hōpua wai nā ngā rukenga ā-hauota, ā-pūtūtae-whetū, ā-waiparapara, ā-tukumate ora poto anō hoki. I whakatau te Rōpū Mahi Ngātahi o ngā Hunga Whai Pānga, he nui rawa te tohanga<sup>^</sup> i te horopaki o te kounga wai. Kāore e taea e ngā hōpua wai o ngā riu o ngā awa o Waikato me Waipā te whakaputa ētehi atu rukenga ā-hauota, ā-pūtūtae-whetū, ā-waiparapara, ā-tukumate ora poto anō hoki, me te kore e puta o ngā pānga kino ki ngā uara o te hapori. Me whakaiti ngā tāhawahawatanga roha me ngā tāhawahawatanga i ngā pū tuwha e tutuki ai ngā whāinga ā-tau me ngā whāinga tauroa mō te wai Māori, o te Upoko 3.11.

Ka tohutohu te Tauākī Kaupapa Here ā-Motu mō te Whakahaere Wai Māori i te Kaunihera ā-Rohe o Waikato ki te whakarite whāinga wai Māori e whakamana ana i ngā whāinga o te Tauākī Kaupapa Here ā-Motu mō te Whakahaere Wai Māori, e whakamārama ana anō hoki i te āhua o te wai e hiahia ana e ngā hapori ā-rohe o Waikato hei ngā tau e heke mai ana.

Ko tētehi wāhanga o te tukanga o te Tauākī Kaupapa Here ā-Motu mō te Whakahaere Wai Māori i whāia ai hei whakarite i te Upoko 3.11, ko te tautuhi i ngā wae whakahaere wai māori me ngā uara o ia wae, kātahi ka kōwhiria ngā āhuatanga o te kounga wai<sup>^</sup> e hāngai ana me ngā āhuatanga<sup>^</sup> ka taea te aroturuki i roto i te wā. Mā ngā whāinga wai Māori<sup>^</sup> me ngā tāpuitanga<sup>^</sup>, ngā whāinga<sup>^</sup> rānei e whakatau ngā here e tutuki ai ngā āhuatanga<sup>^</sup>. Kei raro i te Tauākī Kaupapa Here ā-Motu mō te Whakahaere Wai Māori, ko te tāpuitanga<sup>^</sup> te taumata o te whakamahinga o ngā rawa e wātea ana, kia āhei ai te whakatutukitanga o tētehi whāinga wai Māori.

I tautuhi te Rōpū Mahi Ngātahi o ngā Hunga Whai Pānga i te whakamahinga rawa ka pā ki te whakatutukitanga o ngā whāinga wai Māori<sup>^</sup>, ki ngā hiahia tauroa mō te kounga wai me te whakatutukitanga o te Ture Whaimana. E takoto ana i te Upoko 3.11 ngā kaupapa here me ngā tikanga e here ana i ngā mahi i runga i te whenua me te rukenga ki te whenua, ki te wai rānei.

#### **Ka pā ki ngā whakaturanga maha te whakatutukitanga o Te Ture Whaimana**

Kua kōwhiri te Rōpū Mahi Ngātahi o ngā Hunga Whai Pānga i te 80 tau hei pae wā ki te whakatutuki i ngā whāinga kounga wai o Te Ture Whaimana. He pae wā tēnei ka pā ki ngā whakaturanga maha, ā, he nui ake hoki te tūmanako i ngā pae o raro ā-motu kua whakatakotoria i te Tauākī Kaupapa Here ā-Motu mō te Whakahaere Wai Māori, nā te mea e whai ana tēnei ki te whakatutuki i ngā paerewa teitei ake kia pai ai tā te tangata kaukau ki roto i te wai, kia pai ai hoki te kohi kai i ngā wāhi katoa o ngā awa o Waikato me Waipā, mai i ngā mātāpuna ki ngā pūaha, me ngā riu. E ai ki ngā pārongo e wātea ana ināianei, kua whakatau te Rōpū Mahi Ngātahi o ngā Hunga Whai Pānga ka nui te utu, ka uua hoki te whakatutukitanga katoatanga o Te Ture Whaimana i mua i te tau 2096. Kua kitea te 'āputa auahatanga' i te pae wā o te 80 tau, arā e whakatutuki katoatia ai te kounga wai me whai hangarau, me whai tikanga rānei kāore anō kia hua ake, kāore anō rānei e taea, i ngā āhuatanga ā-ōhanga. Hei āpiti atu, e mōhiotia ana ināianei, e tutuki ai te whakaoranga o te kounga wai me whakarerekē te whakamahinga o ētehi whenua nui tonu, he āhua nui, he tino nui rānei te rukenga o ērā whenua kia iti ake te rukenga (hei tauira, mā te whakatupu rākau).

Kua whai te Rōpū Mahi Ngātahi o ngā Hunga Whai Pānga i tētehi huarahi wāwāhi nā te nui o ngā panonitanga me whai kia whakaorangia mai anō, kia tiakina hoki te kounga wai i te roanga o te pae wā o te 80 tau. Nā tēnei huarahi i wāhia ai ngā whakatikahanga me puta mai, ko te tuatahi o ngā whakatikahanga he whakarite, he whakatinana anō hoki i ngā tūmomo tūmahi me mahi rawa i roto i te tekau tau, e tutuki ai te tekau ōrau o ngā panonitanga, i te kounga wai ināianei ki te kounga wai tauroa hei te tau 2096. E kitea ana i tēnei huarahi wāwāhi he raru pea ka pā ki te pāpori i te nui o ngā panonitanga ā-whakamahinga whenua i roto i te wā poto, ā, he nui te mahi, he nui hoki te utu ki te hunga whakamahi rawa, ki te ahumahi, ki te Kaunihera ā-rohe o Waikato hoki ki te whakarite i te tukanga panonitanga i te wāhanga tuatahi. Me whai tukanga whakatinana hou, me whai tohungatanga, me whakatū hui whiriwhiri kaupapa hei taunaki i te wāhanga tuatahi. Mā te huarahi wāwāhi e whai wā ai kia puta mai ngā hangarau me ngā tikanga auaha e tika ana kia puta hei whakatutuki i ngā whāinga<sup>^</sup> me ngā tāpuitanga<sup>^</sup> i roto i ngā mahere ā-rohe ka whai ake.

Nā te nui o te panonitanga me puta rawa e tutuki ai ngā tāpuitanga<sup>^</sup> i roto i te 80 tau, he whāinga nui tonu te whakatutuki i te wāhanga tuatahi o ngā whāinga wai Māori tauroa o tēnei Mahere. Nā konei, kāore pea e kitea i roto i te wā poto te pānga o ngā tūmahi me ngā panonitanga i runga i te whenua ki te kounga wai i roto i ngā hōpua wai. I whēnei ai, nā te roa o te wā e memeha haere ai te kukūnga o ngā tāhawahawatanga i roto i te wai, whai i muri mai i te whakaritenga o ngā mahi whakangāwari i ngā pānga, otirā nā te roa o te wā e heke ai te hauota i te oneone ki ngā wai o te whenua, tae atu ki te wai ka rere ki ngā kōawāwa. Nā konei, ka roa pea te wā kātahi ka kitea i roto i te wai te pānga o ngā tūmahi o

nāiane kua whakaritea kia iti iho ai te hauota (ka rerekē te roa o te wā i ngā wāhi katoa o te riu). I runga hoki i tērā, he 'utanga hauota' kāore anō kia kitea i te wai e puta tonu mai ana nā te whakamahinga whenua i mua.

I runga i te huarahi e whāia ana i te Upoko 3.11 hei whakaiti i te ngaronga o ngā tāhawahawatanga i ngā pāmu kararehe, me:

- aukati i ngā kararehe i ngā hōpua wai hei tūmahi whakangāwari totoa
- whai Mahere Taiao ā-Pāmu (tae atu ki ngā kaiwhakatupu huawhenua ā-arumoni) e whakaū ana i ngā tikanga whakahaere pai ā-ahumahi, e tautuhi ana anō hoki i ētehi atu tūmahi whakangāwari hei whakaiti i ngā rukenga roha i mua i ētehi rā ka āta tohua, ka aroturukihia ai
- whakarite tauine tohu hauota ā-whenua mā te whakatauiria i ngā ngaronga whakamōmona i ia whenua, kāore tētehi whenua e āhei ki te hipa i tana tohu hei ngā tau e heke mai ana, ā, me whakaiti rawa ngā kairuke kaha rawa i ngā ngaronga whakamōmona
- whakarite tētehi pūnaha whakamanatanga mō te hunga ka āwhina i ngā kaupāmu ki te whakarite i ā rātou Mahere Taiao ā-Pāmu, ki te whakapūmau anō hoki i ngā kaupapa ā-ahumahi ahuwhenua
- whakawhanake te Kaunihera ā-rohe o Waikato i ētehi huarahi kāore e herea ana ki te anga ā-ture kia āhei ai te arotake i ngā tūponotanga ngaronga tāhawahawatanga i ngā riu o ngā kautawa, ka whakatinana hoki i ngā mahi whakangāwari pānga kāore e herea ki ngā rohenga o ngā pāmu, hei tautuhi i ngā urupare, iti katoa te utu.

He nui ngā whakatau kua mana kē me ngā ture kei roto i tēnei Mahere, ka hāngai tonu ki ngā rukenga pū tuwha.

Me panoni rawa ngā kairuke i ngā pū tuwha nō ngā whakahaere ā-rohe, nō ngā ahumahi anō hoki i ā rātou rukenga kia hāngai ki Te Ture Whaimana, ki ngā whāinga hoki mō te kounga wai, ki ngā tāpuitanga<sup>^</sup> o ngā riu kōawāwa me ngā whāinga<sup>^</sup> kua whakaritea. Ka whēnei hei te paunga o ngā here ā-whakaaetanga o tēnei wā.

He nui ngā tūmomo whakataunga kei roto i tēnei Mahere e hāngai ana ki ngā mahinga ngahere. Ka riro tonu mā ēnei whakataunga ngā mahinga ngahere e whakahaere, engari ka tāpirihia atu ētehi atu here e pā ana ki te whakarite mahere hauhake me te whakamōhio i te Kaunihera ā-Rohe o Waikato ki ngā tūmahi hauhake.

Hei ngā tau e tū tata mai ana, ka herea te panonitanga ā-whakamahinga whenua, whēnei i te huringa o te ngahere hei pāmu kararehe, i te huringa rānei o te pāmu whakatupu kararehe hei pāmu miraka kau. Kua whakaritea kia āhua ngāwari ake ngā here mō te whakamahinga o ngā whenua Māori kāore anō kia whanake nā ngā raruraru ā-hītori me ngā raruraru ā-ture. Nā te mea kua pā ēnei raruraru ki te hononga i waenganui i te tangata whenua me ō rātou whenua tūpuna, me ngā pānga ā-ahurea, ā-ōhanga i puta i tērā, e whai ana te Upoko 3.11 ki te whakamana, ki te whakarite hoki i ēnei hononga. Mō tēnei wā ēnei here i runga i ngā panonitanga ā-whakamahinga whenua, kia whakatakotoria rā anōtia tētehi wāhanga tuarua i tētehi panonitanga ā-mahere o anamata, e herea ai ngā kairuke ki te whakaiti anō i ngā rukenga waiparapara, whakamōmona, tukumate ora poto anō hoki i ngā rukenga pū tuwha me ngā mahi i runga i te whenua. Ka aro tēnei wāhanga tuarua ki te pai o te whenua me te pānga o te whakamahinga whenua ki te kounga wai, i runga i te āhua o te whenua me te āhua o ngā wai taketake. Kei te Upoko 3.11 ngā tikanga whēnei i ngā rangahau me ngā pārongo me whakawhanake ake hei taunaki i tēnei.

### **Te arotake i te kokenga ki te whakatutuki i Te Ture Whaimana o Te Awa o Waikato**

Ko te whāinga matua o te Upoko 3.11, he here i ngā kaiwhakamahi rawa kia tīmata rātou ki te whakaiti i ngā rukenga tāhawahawatanga, koia nei te wāhanga tuatahi e tutuki ai Te Ture Whaimana, ka whakahaerehia ētehi tūmahi i runga pāmu, ka arotakehia anō hoki ngā rukenga pū tuwha ka tata ana ki te wā e whakahoungia ai ngā whakaaetanga rawa. Mā te huarahi wāwāhi e taunga haere ai te tangata me ngā hapori, i runga i te mārāma he whakaitinga atu anō ka whakaritea e ngā mahere ā-rohe ka whai ake.

Me arotake pokapoka Te Ture Whaimana kei roto i ngā Ture e toru mō ngā Awa e te Te Manatū Whakahaere i Te Awa o Waikato, ākuanei pea māna e panoni aua tuhinga kia whakaurua atu he tāpuitanga, he tikanga anō hoki.

E here ana Te Ture Penapena Rawa i ngā kaunihera ā-rohe kia tīmata tā rātou arotake i ā rātou mahere ā-rohe kia pau te tekau tau e whakahaerehia ana aua mahere. Kia oti tēnei hei ngā tau e heke mai ana, me whai i muri i te wāhanga tuatahi kei roto i te Upoko 3.11 o tēnei Mahere ētehi atu panonitanga hei whakaiti i ngā rukenga roha me ngā rukenga i ngā pū tuwha.

I te wā e whāia ana tēnei Mahere, ka mātai te Kaunihera ā-rohe o Waikato i te kokenga o ngā tūmahi e kawea ana i runga i te whenua hei whakatutuki i Te Ture Whaimana. Hei āpiti atu, ka whakamahia ngā rangahau me ngā kohinga pārongo i te arotakenga o tēnei Mahere, hei ārahi i ngā tohanga ā-whenua o ngā rukenga tāhawahawatanga hei ngā tau e heke mai ana.

### 3.11.1 Values and uses for the Waikato and Waipā Rivers/Ngā Uara me ngā Whakamahinga o ngā Awa o Waikato me Waipā

The National Policy Statement – Freshwater Management Policy CA2 requires certain steps to be taken in the process of setting limits<sup>6</sup>. These include establishing the values<sup>6</sup> that are relevant in a FMU<sup>6</sup>, identifying the attributes<sup>6</sup> that correspond to those values<sup>6</sup>, and setting objectives based on desired attribute states<sup>6</sup>. This section describes values and uses for the Waikato and Waipā Rivers, to provide background to the objectives and limits<sup>6</sup> in later sections.

This section describes the values and uses for the Waikato and Waipā Rivers. The values and uses reflect the Vision and Strategy Te Ture Whaimana for the Waikato River. The values and uses set out below apply to all FMU's unless explicitly stated, and provide background to the freshwater objectives<sup>7</sup>, and the attributes and attribute states outlined in Table 3.11-1.

#### Vision and Strategy for the Waikato River/Te Ture Whaimana o Te Awa o Waikato<sup>8</sup>

*“Our vision is for a future where a healthy Waikato River sustains abundant life and prosperous communities who, in turn, are all responsible for restoring and protecting the health and wellbeing of the Waikato River, and all it embraces, for generations to come.”<sup>9</sup>*

The values below have been prepared and are supported by the Collaborative Stakeholder Group.

<sup>7</sup> Wairakei Pastoral Ltd PC1-11260, DoC PC1-1831

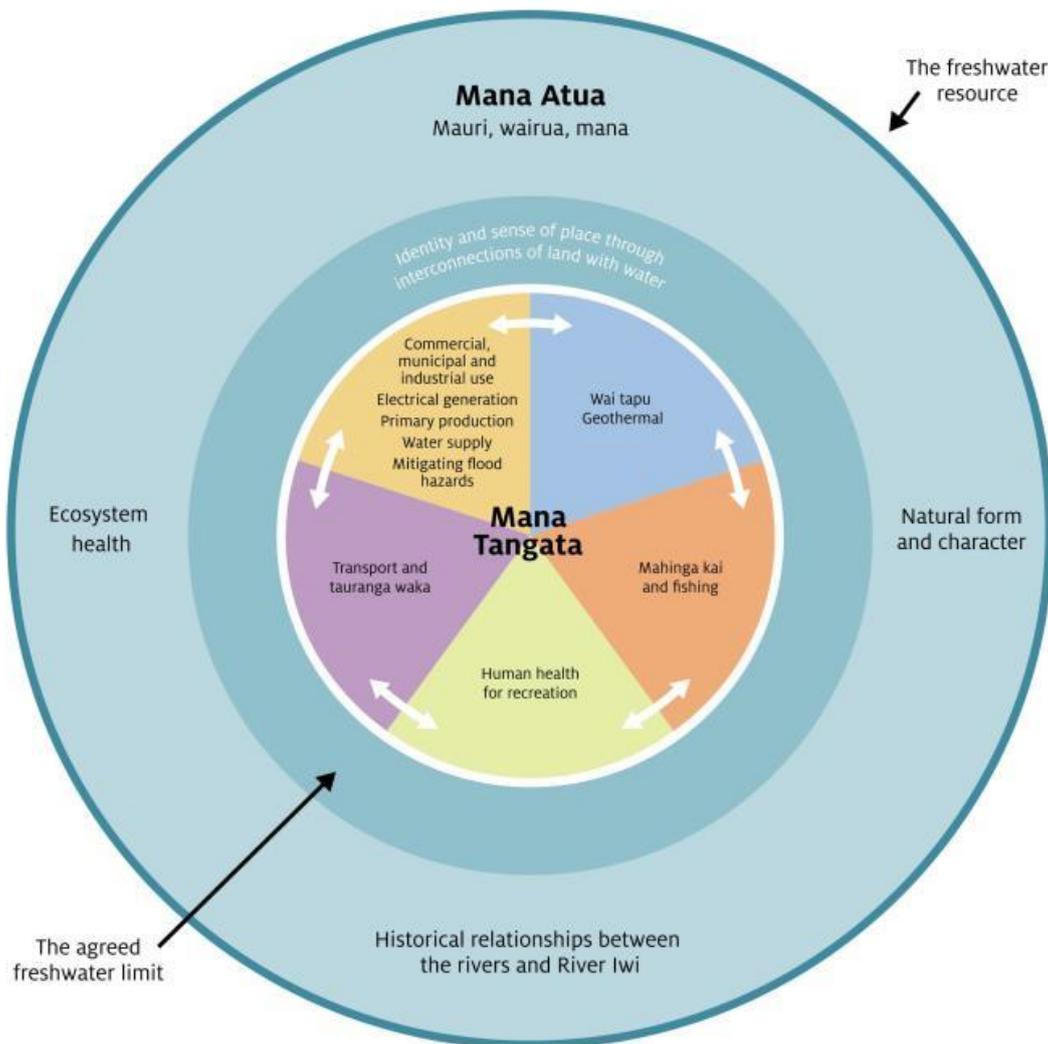
<sup>8</sup> The Nga Wai o Maniapoto (Waipā River) Act 2012 extended Te Ture Whaimana o te Awa o Waikato to also cover the Waipā River and its catchment

<sup>9</sup> The Vision and Strategy is intended by Parliament to be the primary direction setting document for the Waikato River and activities within its catchment affecting the Waikato River. Values and uses are intrinsic to, and embedded in the Vision and Strategy.

## Te Mana o te Wai: Mana Atua, Mana Tangata

Values can be thought of in terms of Mana Atua and Mana Tangata, which represent Te Mana o te Wai<sup>10</sup>. Mana Atua represents the intrinsic values of water including the mauri (the principle of life force), wairua (the principle of spiritual dimension) and inherent mana (the principle of prestige, authority) of the water and its ecosystems in their natural state. Mana Tangata refers to values of water arising from its use by people for economic, social, spiritual and cultural purposes. Mana Atua and Mana Tangata values encompass past, present and future.

A strong sense of identity and connection with land and water (hononga ki te wai, hononga ki te whenua) is apparent through the Vision and Strategy Te Ture Whaimana and the many values associated with the rivers. This is represented in the figure below as a unifying value that provides an interface between the Mana Atua and Mana Tangata values.



Note: New diagram from Variation 1 to be inserted.

<sup>10</sup> The National Policy Statement for Freshwater Management 2014 states that the aggregation of a range of community and tangata whenua values, and the ability of fresh water to provide for them over time, recognises the national significance of fresh water and Te Mana o te Wai.

## Hononga ki te wai, hononga ki te whenua - Identity and sense of place through the interconnections of land with water

- The rivers contribute to a sense of community and sustaining community wellbeing.
- The rivers are an important part of whānau/family life, holding nostalgic feelings and memories and having deep cultural and historical significance.
- For River Iwi and other iwi, respect for the springs, rivers, lakes and wetlands and springs lies at the heart of the spiritual and physical wellbeing of iwi and their tribal identity and culture. The river, springs, rivers, lakes and wetlands and springs are ~~is~~ not separate from the people but part of the people, “Ko au te awa, ko te awa ko au” (I am the river and the river is me).
- Whanaungatanga is at the heart of iwi relationships with springs, rivers, lakes and wetlands and springs. Te taura tāngata is the cord of kinship that binds iwi to springs, rivers, lakes and wetlands and springs. It is a braid that is tightly woven, tying in all its strands. It is unbroken and infinite, forming the base for kaitiakitanga and the intergenerational role that iwi have as kaitiaki.
- The rivers are a shared responsibility, needing collective stewardship: kaitiakitanga – working together to restore the rivers. There is also an important intergenerational equity concept within kaitiakitanga.
- Mahitahi (collaborative work) encourages us all to work together to achieve common goals.

### 3.11.1.1 Mana Atua – Intrinsic values

Intrinsic values – Ancestry and History<sup>11</sup>

Ko te whakapapa o ngā iwi ki ōna awa tūpuna Ko ngā hononga tūpuna me ngā hononga o mua i waenga i ngā iwi o te awa me ētehi atu iwi me ngā awa, ngā repo me ngā puna / Ancestral and Historical relationships connections between the springs, rivers, lakes and wetlands, springs and River Iwi and other iwi

Ko ngā kōrero tūpuna me ngā Kōrero o Mua o neherā / Ancestry and History

<p><u>Each River Iwi and other iwi have</u> <del>has</del> their own unique and intergenerational relationship with the <u>springs, rivers, lakes and wetlands and springs.</u></p>	<ul style="list-style-type: none"> <li>▪ The <u>Rivers, Springs, rivers, lakes and wetlands and springs</u> have always been seen as taonga (treasures) to all River Iwi <u>and other iwi</u>.</li> <li>▪ The <u>Rivers, Springs, rivers, lakes and wetlands and springs</u> have always given River Iwi <u>and other iwi</u> a strong sense of identity and connection with the land and water.</li> <li>▪ <u>Rivers, Springs, rivers, lakes and wetlands and springs</u> were used holistically; River Iwi <u>and other iwi</u> understood the functional relationships with and between all parts of the <u>springs, rivers, lakes and wetlands and springs</u>, spiritually and physically <u>as kaitiaki</u>.</li> <li>▪ <u>Tribal taniwha and tupua dwell in the rivers which are also the location of continued spiritual and cultural traditions and practices maintained over the many centuries.</u></li> <li>▪ <u>Iwi tupuna inhabited a rohe that teemed with life in the <u>springs, rivers, lakes and wetlands and springs</u>. These resources were subject to access and use rights as an essential part of kaitiakitanga.</u></li> <li>▪ Iwi strive to maintain and restore these relationships despite the modification and destruction that has occurred through different types of development <u>along affecting the <u>springs, rivers, lakes and wetlands and springs</u>.</u></li> </ul>
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Intrinsic values – Ecosystem health

Ko te hauora me te mauri o te wai / The health and mauri of water

Ecosystem health

<sup>11</sup> Watercare V1PC1-888

<p>The Waikato and <b>Waipa</b> catchments support resilient freshwater ecosystems and healthy freshwater populations of indigenous plants and animals.</p>	<ul style="list-style-type: none"> <li>▪ Clean fresh water restores and protects aquatic native vegetation to provide habitat and food for native aquatic species and for human activities or needs, including swimming and drinking.</li> <li>▪ Clean fresh water restores and protects macroinvertebrate communities for their intrinsic value and as a food source for native fish, native birds and introduced game species.</li> <li>▪ Clean fresh water supports native freshwater fish species.</li> <li>▪ Wetlands and floodplains provide water purification, refuge, feeding and breeding habitat for aquatic species, habitat for water fowl and other ecosystem services such as flood attenuation.</li> <li>▪ Fresh water contributes to unique habitats including peat lakes, shallow riverine lakes and karst formations which all support unique biodiversity.</li> <li>▪ Rivers and adjacent riparian margins have value as ecological corridors.</li> </ul>
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**Intrinsic values – Natural form and character**

**Ko te hauora me te mauri o te taiao / The health and mauri of the environment**

Natural form and character

<p>Retain the integrity of the <b>lakes</b>, rivers, <b>lakes</b> and wetlands within the landscape and its aesthetic features and natural qualities for people to enjoy.</p>	<ul style="list-style-type: none"> <li>▪ The <b>Lakes</b>, rivers, <b>lakes</b> and wetlands<sup>12</sup> have amenity and naturalness values, including native vegetation, undeveloped stretches, and significant sites.</li> <li>▪ People are able to enjoy the natural environment; it contributes to their health and wellbeing.</li> <li>▪ The rivers are an ecological and cultural corridor.</li> <li>▪ The <b>lakes</b>, rivers, <b>lakes</b> and wetlands as a whole living entity.</li> </ul>
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**3.11.1.2 Mana Tangata – Use values**

**Use values – Wai tapu**

**Ko ngā wai tapu me ngā wai kino / Sacred and harmful waters**

Wai tapu and wai kino

<p>Area of water body set aside for spiritual activities that support spiritual, cultural and physical wellbeing <u>or have properties that require additional caution or care.</u></p>	<ul style="list-style-type: none"> <li>▪ <u>The <b>Lakes</b>, rivers, <b>lakes</b> and wetlands are a place for sacred rituals, wairua, healing, spiritual nurturing and cleansing.</u></li> <li>▪ <u>The <b>Lakes</b>, rivers, <b>lakes</b> and wetlands provide for cultural and heritage practices and cultural wellbeing, particularly at significant sites.</u></li> <li>▪ <u>The <b>Lakes</b>, rivers, <b>lakes</b> and wetlands <u>have different states of wai tapu and wai kino that are adhered to and respected.</u></u></li> </ul>
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**Use values – Geothermal**

**Ko ngā Ngāwhā / Geothermal**

Geothermal

<p>A valued resource that is naturally gifted to sustain certain activities (meeting spiritual and physical needs).</p>	<ul style="list-style-type: none"> <li>▪ Geothermal areas and their various resources were prized by tūpuna (ancestors) for their many uses and are still valued and used today.</li> <li>▪ Geothermal areas of the river have natural form and character, and unique flora found only in the geothermal environment.</li> <li>▪ Geothermal areas are a special microclimate.</li> </ul>
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<sup>12</sup> DoC PC1-8136, 8189, 8152, 8532, 8533, 8535, 8540

~~Use values – Mahinga kai~~

**Ko ngā wāhi mahinga kai / Food gathering, places of food**

Mahinga kai

<p>The ability to access the Waikato and <del>Waipa</del> <del>Waipā</del> <del>Rivers</del> <del>springs</del>, rivers, lakes, and wetlands and their tributaries to gather sufficient quantities of kai (food) that is safe to eat and meets the social and spiritual needs of their stakeholders.</p>	<ul style="list-style-type: none"> <li>▪ <del>The Lakes</del> <del>Springs</del>, rivers, <del>lakes</del> and wetlands provide for freshwater native species, native vegetation, and habitat for native animals.</li> <li>▪ <del>The Lakes</del> <del>Springs</del>, rivers, <del>lakes</del> and wetlands provide for freshwater game and introduced kai species.</li> <li>▪ <del>The Lakes</del> <del>Springs</del>, rivers, <del>lakes</del> and wetlands provide for cultural wellbeing, knowledge transfer, intergenerational harvest, obligations of manaakitanga (to give hospitality to, respect, generosity and care for others) and cultural opportunities, particularly at significant sites.</li> <li>▪ The rivers should be safe to take food from, both fisheries and kai.</li> <li>▪ <del>The Lakes</del> <del>Springs</del>, rivers, <del>lakes</del> and wetlands support aquatic life, healthy biodiversity, ecosystem services, flora and fauna and biodiversity benefits for all.</li> <li>▪ The rivers are a corridor.</li> <li>▪ <del>The Lakes</del> <del>Springs</del>, rivers, <del>lakes</del> and wetlands provide resources available for use which could be managed in a sustainable way.</li> <li>▪ <del>The rivers provide for recreation needs and for social wellbeing.</del><sup>13</sup></li> </ul>
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~~Use values – Human health for recreation~~

**Ko te hauora me te mauri o ngā tāngata / The health and mauri of the people**

Human health for recreation

<p><del>The Lakes and</del> rivers are a place to swim and undertake recreation activities in an environment that poses minimal risk to health.</p>	<ul style="list-style-type: none"> <li>▪ <del>The Lakes and</del> rivers provide for recreational use, social needs and social wellbeing, are widely used by the community, and are a place to relax, play, exercise and have an active lifestyle.</li> <li>▪ An important value for the <del>lakes and</del> rivers is cleanliness; the <del>lakes and</del> rivers should be safe for people to swim in.</li> <li>▪ The <del>lakes and</del> rivers provide resources available for use which could be managed in a sustainable way.</li> </ul>
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~~Use values – Transport and tauranga waka~~

**He urungi / Navigation**

Transport and tauranga waka

<p>All communities can use the <del>lakes and</del> rivers to pilot their vehicles and waka and navigate to their destinations.</p>	<ul style="list-style-type: none"> <li>▪ <del>The Lakes and</del> rivers provide for recreational use (navigation), and sporting opportunities.</li> <li>▪ <del>The Lakes and</del> rivers are a corridor, mode of transport and mode of communication.</li> <li>▪ <del>The Lakes and</del> rivers provide for culture and heritage, cultural wellbeing, and social wellbeing, particularly at significant sites.</li> </ul>
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~~Use values – Primary production~~

**Ko ngā mahi māra me ngā mahi ahu matua / Cultivation and primary production**

Primary production

<sup>13</sup> Federated Farmers V1PC1-106

<p>The rivers support regionally and nationally significant primary production in the catchment (agricultural, horticultural, forestry). These industries contribute to the economic, social and cultural wellbeing of people and communities, and are the major component of wealth creation within the region. These industries and associated primary production also support other industries and communities within rural and urban settings.</p>	<ul style="list-style-type: none"> <li>▪ The rivers support a wide variety of primary production in the catchment, including dairy, meat, wool, horticulture and forestry.</li> <li>▪ Due to the economies of scale of these industries, other service sectors, such as agritech, aviation and manufacturing, are able to operate.</li> <li>▪ These industries combined contribute significantly to regional and national GDP, exports, food production and employment.</li> <li>▪ The rivers and the surrounding land offer unique opportunities for many communities and industries to operate, contributing to the lifestyle and sense of community, pride and culture in rural <u>and urban</u><sup>14</sup> Waikato.</li> </ul>
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**Water supply**

**Ko ngā hapori wai Māori / Municipal and domestic water supply**

Water supply

<p>The rivers provide for community water supply, municipal supply <u>and</u>, drinkable water supply <u>and</u> health.<sup>15</sup></p>	<ul style="list-style-type: none"> <li>▪ The catchments’ surface and subsurface water is of a quality that can be effectively treated to meet appropriate health standards for both potable and non-potable uses.</li> </ul>
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~~Use values – Commercial, municipal and industrial use~~

**Ko ngā āu putea / Economic or commercial development**

Commercial, municipal and industrial use

<p>The <u>springs</u>, rivers, lakes, and wetlands provide economic opportunities to people, businesses and industries.</p>	<p>Fresh water is used for industrial and municipal processes, which rely on the assimilative capacity for discharges to surface water bodies. In addition:</p> <ul style="list-style-type: none"> <li>▪ The <u>LakesSprings</u>, rivers, <u>lakes</u> and wetlands provide for economic wellbeing, financial and economic contribution, individual businesses and the community and the vibrancy of small towns. They are working <u>lakesprings</u>, rivers, <u>lakes</u> and wetlands; they create wealth.</li> <li>▪ Those industries are important to the monetary economy of Waikato region, enabling a positive brand to promote to overseas markets.</li> <li>▪ The <u>LakesSprings</u>, rivers, <u>lakes</u> and wetlands provide for domestic and international tourism. Promotion of a clean, green image attracts international and domestic visitors.</li> <li>▪ The <u>LakesSprings</u>, rivers, <u>lakes</u> and wetlands provide assimilative capacity for wastewater disposal, flood and stormwater, and ecosystem services through community schemes or on site disposal.</li> </ul>
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~~Use values – Electricity generation~~

Electricity generation

<sup>14</sup> Hamilton CC PC1-10067

<sup>15</sup> Federated Farmers V1PC1-117

<p>The river provides for reliable, renewable hydro and geothermal energy sources and thermal generation, securing national self-reliance and resilience.</p> <p>New Zealand’s social and economic wellbeing are dependent on a secure, cost-effective electricity supply system. Renewable energy contributes to our international competitive advantage. Electricity also contributes to the health and safety of people and communities.</p>	<ul style="list-style-type: none"> <li>▪ Waikato hydro scheme extends over 186km, comprising Lake Taupō storage, dams, lakes, and power stations. Tongariro Power scheme adds 20 per cent to natural inflows to Lake Taupō.</li> <li>▪ Huntly Power Station’s role in the New Zealand electricity system is pivotal, particularly when weather dependent renewable generation is not available. Fresh water is used for cooling and process water.</li> <li>▪ Geothermal power stations located on multiple geothermal systems use fresh water for cooling, process water and drilling.</li> </ul>
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**Use values – Mitigating flood hazards**

Mitigating flood hazards

<p>Flood management systems protect land used and inhabited by people <u>and</u> livestock.<sup>16</sup></p>	<ul style="list-style-type: none"> <li>▪ River engineering, including stopbanks and diversions, protect land and infrastructure from damage by flooding.</li> </ul>
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**3.11.2 Objectives/Ngā Whāinga**

**Objective 1: Long-term restoration and protection of water quality for each sub-catchment and Freshwater Management Unit/Te Whāinga 1: Te whakaoranga tauroa me te tiakanga tauroa o te kounga wai ki ia riu kōawaawa me te Wae Whakahaere i te Wai Māori**

By 2096 at the latest<sup>17</sup>, a reduction in the discharges of nitrogen, phosphorus, sediment and microbial pathogens to land and water results in achievement of the restoration and protection of the Waikato and Waipā Rivers, such that of the 80-year water quality attribute targets states<sup>18</sup> in Table 3.11-1 are met<sup>19</sup>.

**Objective 2: Social, economic, spiritual and cultural wellbeing and prosperity is maintained in the long term/Te Whāinga 2: Ka whakaūngia te oranga ā-pāpori, ā-ōhanga, ā-ahurea hoki i ngā tauroa**

Waikato and Waipā communities and their economy benefit from the restoration and protection of water quality in the Waikato and Waipā<sup>20</sup> River catchments, which enables the people and communities, in particular the River Iwi, to continue to provide for their social, economic, spiritual and cultural wellbeing and prosperity.

**Objective 3: Short-term improvements in water quality in the first stage of restoration and protection of water quality for each sub-catchment and Freshwater Management Unit/Te Whāinga**

<sup>16</sup> Hamilton CC PC1-10167

<sup>17</sup> Tangata Whenua – Waikato and Waipā River Iwi PC1-3245

<sup>18</sup> Fonterra PC1-10455

<sup>19</sup> Watercare PC1-8450; Beef and Lamb PC1-11154

<sup>20</sup> Mercury NZ Ltd PC1-9506

### 3: Ngā whakapainga taupoto o te kounga wai i te wāhanga tuatahi o te whakaoranga me te tiakanga o te kounga wai i ia riu kōawāwa me te Wae Whakahaere Wai Māori<sup>21</sup>

Actions put in place and implemented by 2026 to reduce diffuse and point source<sup>22</sup> discharges of nitrogen, phosphorus, sediment and microbial pathogens, are sufficient to achieve the short-term ~~water quality attribute states~~ **freshwater objectives** in Table 3.11-1,<sup>23</sup> being ten percent of the required change between current water quality and the 80-year water quality ~~attribute targets~~ **states** in Table 3.11-1. A ten-percent change towards the long term water quality improvements is indicated by the short term water quality attribute targets in Table 3.11-1.

#### **Objective 4: People and community resilience/Te Whāinga 4: Te manawa piharau o te tangata me te hapori**

A staged approach to change enables people and communities to undertake adaptive management to continue to provide for their social, economic and cultural wellbeing in the short term while:

- a. ~~considering the values and uses when taking action to achieve the attribute targets for the Waikato and Waipā Rivers in Table 3.11-1; and~~
- b. ~~recognising that further contaminant reductions will be required by subsequent regional plans and signalling anticipated future management approaches that will be needed to meet Objective 1.~~

OR

#### **Objective 4: People and community resilience/Te Whāinga 4: Te manawa piharau o te tangata me te hapori**

A staged approach to ~~reducing contaminant losses~~ **discharges of contaminants** change<sup>24</sup> enables people and communities to undertake adaptive management to continue to provide for their social, economic and cultural wellbeing in the short term while:

- a. ~~considering the values and uses when~~<sup>25</sup> taking action to achieve the ~~attribute targets~~ **freshwater objectives and long-term water quality** states<sup>26</sup> for the Waikato and ~~Waipā~~ Rivers in Table 3.11-1; and
- b. ~~recognising that further contaminant reductions will be required by subsequent regional plans and signalling anticipated future management approaches that will be needed in order~~<sup>27</sup> **required** to meet Objective 1<sup>28</sup>.

#### **Objective 5: Mana Tangata – protecting and restoring tangata whenua values/Te Whāinga 5: Te Mana Tangata – te tiaki me te whakaora i ngā uara o te tangata whenua**

Tangata whenua values are integrated into the co-management of the rivers and other water bodies within the catchment such that:

- a. tangata whenua have the ability to:
  - i. manage their own lands and resources, by exercising mana whakahaere, for the benefit of their people; and
  - ii. actively sustain a relationship with ancestral land and with the rivers and other water bodies in the catchment; and
- b. new impediments to the flexibility of the use of tangata whenua ancestral lands are minimised; and
- c. improvement in the rivers' water quality and the exercise of kaitiakitanga increase the spiritual and physical wellbeing of iwi and their tribal and cultural identity.

#### **Objective 6: Whangamarino Wetland/Te Whāinga 6: Ngā Repo o Whangamarino**

- a. ~~Nitrogen, phosphorus, sediment and microbial pathogen loads in the catchment of Whangamarino Wetland are reduced in the short term, to make progress towards the long term restoration of Whangamarino Wetland; and~~
- b. ~~The management of contaminant loads entering Whangamarino Wetland is consistent with the achievement of the water quality attribute targets in Table 3.11-1.~~

<sup>21</sup> Watercare PC1-8450

<sup>22</sup> DoC PC1-10540

<sup>23</sup> Southern Pastures Ltd Partnership PC1-11095

<sup>24</sup> Rotorua Lakes DC PC1-2468

<sup>25</sup> Southern Pastures Ltd Partnership PC1-11096 and Ata Rangi PC1-6113

<sup>26</sup> Fonterra PC1-10451

<sup>27</sup> Southern Pastures Ltd Partnership PC1-11096 and Ata Rangi PC1-6113

<sup>28</sup> Rotorua Lakes DC PC1-2468

OR

### **Objective 6: Whangamarino Wetland/Te Whāinga 6: Ngā Repo o Whangamarino**

- a. Nitrogen, phosphorus, sediment and microbial pathogen loads in the catchment of Whangamarino Wetland are reduced in the short term, to make progress towards the long-term restoration of Whangamarino Wetland; and
- b. The management of contaminant loads entering Whangamarino Wetland is consistent with the achievement of the water quality attribute targets in Table 3.11-1.

### **Principal Reasons for Adopting Objectives 1-6/Ngā Take Matua me Whai ngā Whāinga 1 ki te 6**

#### **Reasons for adopting Objective 1**

**Objective 1** sets long term limits for water quality consistent with the Vision and Strategy. Objective 1 sets aspirational 80-year water quality targets, which result in improvements in water quality from the current state monitored in 2010-2014. The water quality attributes listed in Table 3.11-1 that will be achieved by 2096 will be used to characterise the water quality of the different FMUs when the effectiveness of the objective is assessed.<sup>29</sup> Objective 1 sets the overall context for what is to be achieved in terms of water quality improvements. There is not any hierarchy of Objectives 1 to 6<sup>30</sup>

#### **Reasons for adopting Objective 2**

**Objective 2** sets the long term outcome for people and communities, recognising that restoration and protection of water quality will continue to support communities and the economy. The full achievement of the Table 11-1 2096 water quality attribute targets may require a potentially significant departure from how businesses and communities currently function, and it is important to minimise social disruption during this transition.<sup>31</sup>

#### **Reasons for adopting Objective 3**

**Objective 3** sets short term goals for a 10-year period, to show the first step toward full achievement of water quality consistent with the Vision and Strategy.

The effort required to make the first step may not be fully reflected in water quality improvements that are measureable in the water in 10 years. For this reason, the achievement of the objective will rely on measurement and monitoring of actions taken on the land to reduce pressures on water quality.

Point source discharges are currently managed through existing resource consents, and further action required to improve the quality of these discharges will occur on a case by case basis at the time of consent renewal, guided by the targets and limits set in Objective 1.<sup>32</sup>

#### **Reasons for adopting Objective 4**

**Objective 4** provides for a staged approach to long term achievement of the Vision and Strategy. It acknowledges that in order to maintain the social, cultural and economic wellbeing of communities during the 80-year journey, the first stage (the short term 10-year period) must ensure that overall costs to people can be sustained.

In the future, a property level allocation of contaminant discharges may be required. Chapter 3.11 sets out the framework for collecting the required information so that the most appropriate approach can be identified. Land use type or intensity at July 2016 will not be the basis for any future allocation of property level contaminant discharges. Therefore, consideration is needed of how to manage impacts in the transition.

<sup>29</sup> Watercare PC1-8450; Beef and Lamb PC1-111541

<sup>30</sup> Oji Ltd PC1-6392

<sup>31</sup> Forest and Bird PC1-8220

<sup>32</sup> Watercare PC1-8450

~~Objective 4 seeks to minimise social disruption in the short term, while encouraging preparation for possible future requirements.~~

#### **Reasons for adopting Objective 5**

~~Objective 5 seeks to ensure that this Plan recognises and provides for the relationship of tangata whenua with ancestral lands, by ensuring the other provisions of Chapter 3.11 do not provide a further impediment to tangata whenua making optimal use of their land. Historic impediments included customary tenure in the nineteenth century, public works, rating law, Te Ture Whenua Māori Act, and confiscation. Some impediments or their effects continue currently, including issues of governance, fragmentation and compliance with central and local government regulations such as regional and district plans, or the emissions trading scheme. Land relevant to this objective is land returned through Treaty of Waitangi settlement, and land under Māori title that has multiple owners.~~

#### **Reasons for adopting Objective 6**

~~Objective 6 seeks to recognise the significant value of Whangamarino Wetland, a Ramsar site of international importance, and the complexity of this wetland system. It seeks to recognise that the bog ecosystems (which are particularly sensitive to discharges of contaminants) need protection over time. The effort required to restore Whangamarino Wetland over 80 years is considerable and as a minimum needs to halt and begin to reverse the decline in water quality in the first 10 years. This objective describes how wetland restoration needs to be supported by restoration of the Lower Waikato Freshwater Management Unit sub-catchments that flow into Whangamarino Wetland.~~

### 3.11.3 Policies/Ngā Kaupapa Here

#### **Policy 1: ~~Manage and Diffuse discharge management s of nitrogen, phosphorus, sediment and microbial pathogens~~/Te Kaupapa Here 1: Te whakahaere i ngā rukenga roha o te hauota, o te pūtūtae-whetū, o te waiparapara me te tukumate ora poto**

~~Manage and Reduce~~ ~~Manage and require reductions in~~<sup>33</sup> catchment-wide and<sup>34</sup> sub-catchment-wide diffuse<sup>35</sup> discharges of nitrogen, phosphorus, sediment and microbial pathogens, by:

- a1. Requiring all farming activities to operate at Good Farming Practice, or better; and<sup>36</sup>
- a2. Establishing, ~~where possible~~, a Nitrogen Reference Point for all properties ~~or enterprises~~; and<sup>37</sup>
  - a. Enabling ~~farming~~ activities with a low level of contaminant discharge to water bodies ~~provided those discharges do not increase~~<sup>38</sup>; and
  - b. Requiring farming activities with moderate to high levels of contaminant discharge to water bodies to reduce their discharges proportionate to the amount of (2016) discharge and the water quality improvements required in the sub-catchment<sup>39</sup>; and
- b1. Calculating the 75<sup>th</sup> percentile and 50<sup>th</sup> percentile nitrogen leaching values and requiring farmers with a Nitrogen Reference Point greater than the 75<sup>th</sup> percentile to reduce nitrogen loss to below the 75<sup>th</sup> percentile and farmers with a Nitrogen Reference Point between the 50<sup>th</sup> and 75<sup>th</sup> percentile to demonstrate ~~real~~ clear and enduring reductions of nitrogen leaching, with resource consents specifying an amount of reduction or changes to practices required to take place; and<sup>40</sup>
- b2. Where Good Farming Practices are not adopted, to specify controls in a resource consent that ensures contaminant losses will be reducing;<sup>41</sup>
- b3. Except as provided for in Policies [1(a) and] 16, generally granting only those land use and discharge consent applications that demonstrate clear and enduring reductions in diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens; and<sup>42</sup>
- b4. Except as provided for in Policies [1(a) and] Policy 16, generally not granting land use consent applications that involve a change in the use of the land, or an increase in the intensity of the use of land, unless the application demonstrates clear and enduring reductions in diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens ~~will be achieved~~; and<sup>43</sup>
- c. Progressively excluding cattle, horses, deer and pigs from rivers, streams, drains, wetlands and lakes.

#### **Policy 2: ~~Farm Environment Plans-Tailored approach to reducing diffuse discharges from farming activities~~/Te Kaupapa Here 2: He huarahi ka āta whakahāngaihia hei whakaiti i ngā rukenga roha i ngā mahinga pāmu**

~~Manage and Reduce~~ ~~Manage and require reductions in~~<sup>44</sup> catchment-wide and<sup>45</sup> sub-catchment-wide<sup>46</sup> diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens from farming activities on properties ~~and enterprises~~, through Farm Environment Plans<sup>47</sup> that:

- a1. Set out clear, specific and timeframed ~~actions and~~ minimum standards ~~to achieve and maintain~~ for Good Farming Practice ~~or better~~; and<sup>48</sup>
- a2. Set out clear, specific and timeframed actions and minimum standards to demonstrate that the relevant reductions in nitrogen and other contaminant losses in Policy 1 are met, or will be met, and maintained; and

<sup>33</sup> DoC PC1-10643

<sup>34</sup> WRC V1PC1-1497

<sup>35</sup> Fert NZ PC1-9707, Federated Farmers V1PC1-162

<sup>36</sup> Dairy NZ PC1-10196

<sup>37</sup> Hort NZ PC1-10051, Hira Bhana and Co Ltd PC1-4020 (shifted from Pol 2 with modifications)

<sup>38</sup> Beef and Lamb PC1-12576

<sup>39</sup> Beef and Lamb PC1-12711 (shifted from Pol 2 with modifications)

<sup>40</sup> C and G Tierney PC1-7717, Sinclair Family Trust PC1-6180, Federated Farmers V1PC1-357

<sup>41</sup> Consequential to DairyNZ PC1-10196

<sup>42</sup> DoC PC1-71759

<sup>43</sup> DoC PC1-71759

<sup>44</sup> DoC PC1-10643

<sup>45</sup> WRC V1PC1-1497

<sup>46</sup> Consequential to WRC V1PC1-1497

<sup>47</sup> Federated Farmers V1PC1-172

<sup>48</sup> Ballance PC1-6862, FANZ PC1-9712

- a.3.** ~~Take~~ Taking a tailored, risk based approach to define mitigation actions on the land that will reduce diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens, ~~with the mitigation actions to be specified in a Farm Environment Plan either associated with a resource consent, or in specific requirements established by participation in a Certified Industry Scheme<sup>49</sup>; and~~
- b. ~~Undergo~~ Requiring the same level of rigour in developing, monitoring and auditing of mitigation actions on the land that is ~~set out in each~~ Farm Environment Plan, whether the consent holder is a member of a Certified Sector Scheme or not it is established with a resource consent or through Certified Industry Schemes<sup>50</sup>; and
- b2. Are flexible and able to be updated so that continuous improvement, new technologies and mitigation practices can be adopted, such that diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens further reduce over time,<sup>51</sup> and
- b3.** Identify the information that is required to be recorded to support an accounting system for each Freshwater Management Unit for the diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens.
- c. ~~Establishing a Nitrogen Reference Point for the property or enterprise; and<sup>52</sup>~~
- d. ~~Requiring the degree of reduction in diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens to be proportionate to the amount of current discharge (those discharging more are expected to make greater reductions), and proportionate to the scale of water quality improvement required in the sub-catchment; and<sup>53</sup>~~
- e. ~~Requiring stock exclusion to be completed within 3 years following the dates by which a Farm Environment Plan must be provided to the Council, or in any case no later than 1 July 2026.<sup>54</sup>~~

### **Policy 3: Tailored approach to Reducing diffuse discharges from commercial vegetable production systems/Te Kaupapa Here 3: He huarahi ka āta whakahāngaihia hei whakaiti i ngā rukenga roha i ngā pūnaha arumoni hei whakatupu hua whenua**

~~Provide for commercial vegetable production while reducing~~ Manage and require reductions in diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens ~~by: from commercial vegetable production through a tailored, property or enterprise-specific approach where:~~

- a. ~~Enabling commercial vegetable production activities on a property or properties.~~ Flexibility is provided including the flexibility to undertake crop rotations on changing parcels of land for commercial vegetable production, within sub-catchments, while reducing average contaminant discharges over time adopting sector-based initiatives and other mitigation measures to progressively reduce losses of nitrogen, phosphorus, sediment and microbial pathogens; and
- b. ~~The maximum area in production for a property or enterprise is established and capped utilising commercial vegetable production data from the 10 years up to 2016; and~~
- c. ~~Establishes~~ Establishing baselines for each property from the baseline period using following, for properties used for commercial vegetable production, using data from each of year in the 5 year up year period 1 July 2011 to 30 June 2016 for;
- (i) the total, maximum area of land in commercial vegetable production; and
- (ii) the maximum areas of land and their locations per sub-catchment; and
- (iii) the nitrogen and phosphorus surpluses (ie total applied nutrient inputs, less crop uptake) for each commercial vegetable production crop; and
- (iv) sediment control measures; Establishing a Nitrogen Reference Point for each property or enterprise; and
- d. A 10% decrease in the diffuse discharge of nitrogen and Enabling commercial vegetable production that clearly demonstrates a tailored reduction in the diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens as measured against the baselines identified in b above of all contaminants through adherence to Good Farming Practice, Farm Environment Plans and relevant minimum standards; is achieved across the sector through the implementation of Best or Good Management Practices; and
- e. Identified mitigation actions are set out and implemented within timeframes specified in either a Farm Environment Plan and associated resource consent, or in specific requirements established by participation in a Certified Industry Scheme.
- f. Commercial vegetable production enterprises that reduce nitrogen, phosphorus, sediment and microbial pathogens are enabled; and
- g. The degree of reduction in diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens is proportionate to the amount of current discharge (those discharging more are expected to make greater reductions), and the scale of water quality improvement required in the sub-catchment.

<sup>49</sup> South Waikato District Council PC1-12522

<sup>50</sup> Huirimu Farms Ltd PC1-5909, Ata Rangi PC1-6244, Southern Pastures Limited Partnership PC1-11197

<sup>51</sup> Federated Farmers V1PC1 -175

<sup>52</sup> Hort NZ PC1-10051, Hira Bhana and Co Ltd PC1-4020 (shifted to Pol 1 with modifications)

<sup>53</sup> Beef and Lamb PC1-12711 (shifted to Pol 1 with modifications)

<sup>54</sup> G and J Jeffries PC1-12802

- h. Providing for resource consents for enterprises to encompass multiple properties within a single sub-catchment, provided that:
- (i) a to d above are met; and
  - (ii) There is clear accounting against contaminant baselines across the multiple properties, including on any land that is no longer used for commercial vegetable production, such that sub-catchment-wide diffuse discharges progressively decrease.<sup>55</sup>

### **Policy 3A: Certified Sector Schemes**

Waikato Regional Council will support the development of Certified Sector Schemes as groups or organisations responsible for preparing and monitoring the implementation of Farm Environment Plans by:

- a. Setting out minimum standards for Certified Sector Schemes in Schedule 2; and
- b. Establishing a process for approving Certified Sector Schemes based on their ability to meet the minimum standards, including entering into a contractual agreement with each Certified Sector Scheme to meet and maintain those standards; and
- c. Requiring independent audit of the performance of Certified Sector Schemes in preparing and monitoring the implementation of Farm Environment Plans for their members.<sup>56</sup>

### **Policy 4: Future diffuse discharge reductions-Enabling activities with lower discharges to continue or to be established while signalling further change may be required in future/Te Kaupapa Here 4: Te tuku kia haere tonu, kia whakatūria rānei ngā tūmahi he iti iho ngā rukenga, me te tohu ake ākuanei pea me panoni anō hei ngā tau e heke mai ana**

Manage sub-catchment wide diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens, and enable existing and new low discharging activities to continue provided that cumulatively the achievement of Objective 3 is not compromised. Activities and uses currently defined as low dischargers may in the future need to To recognise that future regional plan changes or regional plans are likely to require all farming activities to make further reductions in the take mitigation actions that will reduce diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens in order for Objective 1 to be met.<sup>57</sup>

To only grant resource consents that authorise farming activities for a longer duration that will enable further reductions in contaminant losses to be implemented through replacement resource consents rather (more than by way of a review of consent conditions; unless 10 years) where the application demonstrates clear and enduring ongoing reductions of contaminant losses beyond those imposed in response to that the short/long term water quality attribute states in Table 3.11-1 and the property is not in a Priority 1 sub-catchment are currently being met.<sup>58</sup>

### **Policy 5: Staged approach/Te Kaupapa Here 5: He huarahi wāwāhi**

To recognise that:

- a. All farmers, businesses, urban and communities<sup>59</sup> rural land use activities will need to contribute to achieving the water quality attribute states<sup>60</sup> in Table 3.11-1; and
- b. Changes in practices and activities need to start immediately<sup>61</sup>; and
- b1. Development of management, recording and reporting systems will need to be progressively implemented over time to ensure effective changes are made as system knowledge and industry resourcing allows; and
- c. The rate of change will need to be staged over the coming decades<sup>62</sup> 80 years to minimise social, economic, <sup>62</sup> spiritual and cultural disruption and enable innovation and new practices to develop; and
- d. Responding to the reasonably foreseeable effects of climate change will mean that different regulatory and non-regulatory responses may be needed in future.<sup>63</sup>

<sup>55</sup> Federated Farmers PC1-10817, Federated Farmers V1PC1-176, Balle Bros PC1-11407, Charion Investment Trust PC1-7691, DoC PC1-10653, Hira Bhana PC1-4145, Hort NZ PC1-10052

<sup>56</sup> Huirimu Farms Ltd PC1-5909, Ata Rangi PC1-6244, Waipapa Farms Ltd and Carlyle Holdings Ltd PC1-4704

<sup>57</sup> C Barker PC1-3748

<sup>58</sup> Federated Farmers PC1-12754, FANZ PC1-11176

<sup>59</sup> M & R Johnston PC1-8099, K Stokes PC1-5248

<sup>60</sup> Winstone Aggregates PC1-3607

<sup>61</sup> Forest and Bird PC1-8257

<sup>62</sup> Charion Investment Trust PC1-7748

<sup>63</sup> WRC PC1-2985

Recognise that achieving the water quality attribute targets set out in Table 11-1 will need to be staged over 80 years, to minimise social disruption and allow for enable innovation and new practices to develop, while making a start on reducing discharges of nitrogen, phosphorus, sediment and microbial pathogens, and preparing for further reductions that will be required in subsequent regional plans.

### **Policy 6: Restricting land use change/Te Kaupapa Here 6: Te here i te panonitanga ā-whakamahinga whenua**

Except as provided for in Policy 16, land use change consent applications that demonstrate an increase in the diffuse discharge of nitrogen, phosphorus, sediment or microbial pathogens will generally not be granted.

Land use change consent applications that demonstrate clear and enduring decreases in existing diffuse discharges of nitrogen, phosphorus, sediment or microbial pathogens will generally be granted.<sup>64</sup>

### **Policy 7: Preparing for future management regime (including allocation)/Te Kaupapa Here 7: Kia takatū ki ngā tohanga hei ngā tau e heke mai ana**

Prepare for further diffuse discharge reductions and any future management regime (including allocation of diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens) in subsequent regional plans by collecting information and undertaking research to support this. This includes collecting information about current discharges, developing appropriate modelling tools to estimate contaminant discharges, and researching the spatial variability of land use and contaminant losses and the effect of contaminant discharges in different parts of the catchment, to assist in preparing any future management regime.

Any future management regime (including allocation) should consider the following principles:

- a. Allowance for flexibility of development of tangata whenua ancestral land; and
- b. Minimise social disruption and costs in the transition to any new approach; and
- c. New data and knowledge relevant to contaminant discharges and allocation of contaminant loadings.<sup>65</sup>

### **Policy 8: Prioritised implementation/Te Kaupapa Here 8: Te raupapa o te whakatinanatanga**

Prioritise the management of diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens land and water resources by implementing Policies 2, 3 and 9, and<sup>66</sup> in accordance with the prioritisation of areas set out in Table 3.11-2, commercial vegetable production activities<sup>67</sup> [OPTION and dairy farming<sup>68</sup>], and the catchments of lakes.<sup>69, 70</sup> Priority areas include:

- a. Sub-catchments where there is a greater gap between the water quality targets in Objective 1 (Table 3.11-1) and current water quality; and
- b. Lakes Freshwater Management Units; and
- c. Whangamarino Wetland.

In addition to the priority sub-catchments listed in Table 3.11-2, the 75th percentile nitrogen leaching value dischargers will also be prioritised for Farm Environment Plans.<sup>71</sup>

### **Policy 9: Sub-catchment (including edge of field) mitigation planning, co-ordination and funding/Te Kaupapa Here 9: Te whakarite mahi-whakangāwari, mahi-ngātahi me te pūtea mō te riu kōawāwa (tae atu ki ngā taitapa)**

Take a prioritised and integrated approach to sub-catchment water quality management by undertaking sub-catchment planning, and use this planning to support actions including edge of field mitigation measures. Support measures that efficiently and effectively contribute to water quality improvements. This approach includes:

<sup>64</sup> Federated Farmers V1PC1-194

<sup>65</sup> Jack Farms PC1-8026, H and S Brooks PC1-84, Sieling Farms PC1-5465

<sup>66</sup> Ravensdown PC1-10119

<sup>67</sup> J.Reeves & A.Taylor PC1-8537

<sup>68</sup> Fonterra PC1-10489

<sup>69</sup> DoC PC1-10670

<sup>70</sup> DoC PC1-10670

<sup>71</sup> Fonterra PC1-10489 (consequential to option to add dairy farming)

- a. Engaging early with tangata whenua and with landowners, communities, local authorities<sup>72</sup> and potential funding partners in sub-catchments in line with the priority areas listed in Table 3.11-2; and
- b. Assessing the reasons for current water quality and sources of contaminant discharge, at various scales in a sub-catchment; and
- c. Encouraging cost-effective mitigations where they have the biggest effect on improving water quality; and
- d. Allowing, where multiple farming enterprises contribute to a mitigation, for the resultant reduction in diffuse discharges to be apportioned to each enterprise in accordance with their respective contribution to the mitigation and their respective responsibility for the ongoing management of the mitigation, provided that the reduction can be confidently secured for the duration of any resource consent<sup>73</sup>; and,
- e. Using sub-catchment monitoring information to measure progress toward the freshwater objectives across the whole of each FMU.<sup>74</sup>

**Policy 10: Provide for point source discharges of regional significance/Te Kaupapa Here 10: Te whakataui i ngā rukenga i ngā pū tuwha e noho tāpua ana ki te rohe**

When deciding resource consent applications for point source discharges of nitrogen, phosphorus, sediment and microbial pathogens to water or onto or into land, provide for have regard to the benefits of:

- a. Continued operation of regionally significant infrastructure; and
- b. Continued operation of regionally significant industry.

**Policy 11: Application of Best Practicable Option and mitigation or offset of effects to point source discharges/Te Kaupapa Here 11: Te whakahāngai i te Kōwhiringa ka Tino Taea me ngā mahi whakangāwari pānga; te karo rānei i ngā pānga ki ngā rukenga i ngā pū tuwha**

Require any person undertaking a point source discharge of nitrogen, phosphorus, sediment or microbial pathogens to water or onto or into land in the Waikato and Waipā River catchments to, as a minimum,<sup>75</sup> adopt the Best Practicable Option\* to avoid or mitigate the adverse effects of the discharge, at the time a resource consent application is decided<sup>76</sup>.

Where it is not practicable to avoid or mitigate all any<sup>77</sup> adverse effects, cannot be reasonably avoided, they should be mitigated, and where they cannot be reasonably mitigated, it is encouraged that<sup>78</sup> an offset measure may be proposed in an alternative location or locations to the point source discharge, for the purpose of ensuring positive effects on the environment to lessen any residual adverse effects of the discharge(s) that will or may result from allowing the activity provided that the:

- a. Primary discharge does not result in any significant or<sup>79</sup> toxic adverse effect at the point source discharge location; and
- b. Offset measure is for the same contaminant; and
- c. Offset measure occurs preferably upstream within the same sub-catchment in which the primary discharge occurs and if this is not practicable, then upstream within the same Freshwater Management Unit<sup>^</sup> or a Freshwater Management Unit<sup>^</sup> located upstream, and
- d. Offset measure remains in place for the duration of the consent and is secured by consent condition or another legally binding mechanism,<sup>80</sup> and
- e. Offset measure provides for a net decrease in the amount of the relevant contaminant in the receiving environment.

**Policy 12: Additional considerations for Considering point source discharges in relation to water quality targets/Te Kaupapa Here 12: He take anō hei whakaaro ake mō ngā rukenga i ngā pū tuwha e pā ana ki ngā whāinga ā-kounga wai**

<sup>72</sup> Matamata Piako District Council PC1-3503, Waikato District Council PC1-10223

<sup>73</sup> DoC PC1-10671

<sup>74</sup> Federated Farmers V1PC1-234

<sup>75</sup> BT Mining PC1-9924

<sup>76</sup> Tangata Whenua – Waikato and Waipā River Iwi PC1-3349

<sup>77</sup> DoC PC1-10694

<sup>78</sup> DoC PC1-10694

<sup>79</sup> Fish & Game PC1-10887

<sup>80</sup> GBC Winstone PC1-2947

When deciding a resource consent application, consider<sup>81</sup> the contribution made by a point source discharge to the nitrogen, phosphorus, sediment and microbial pathogen sub-catchment, catchment and Freshwater Management Unit loads and the impact of that contribution on the likely<sup>82</sup> achievement of the short-term water quality attribute states<sup>^</sup> targets<sup>^</sup> freshwater objectives in Table 3.11-1 Objective 3 or the progression towards the 80-year water quality attribute states<sup>^</sup> targets<sup>^</sup> in Objective 4 Table 3.11-1<sup>83</sup>, taking into account:

- a. The relative proportion of nitrogen, phosphorus, sediment or microbial pathogens that the particular point source discharge contributes to the catchment load; and
- b. Past ~~technology~~ upgrades undertaken to ~~model, monitor and~~<sup>84</sup> reduce the discharge of nitrogen, phosphorus, sediment or microbial pathogens within the previous consent term; and
- c. ~~The ability~~ Whether it is appropriate to stage future mitigation actions to allow investment costs to be spread over time and to<sup>85</sup> meet the water quality attribute states<sup>^</sup> targets<sup>^</sup> specified above; and
- d. ~~The diminishing return on investment in treatment plant upgrades in respect of any resultant reduction in nitrogen, phosphorus, sediment or microbial pathogens when treatment plant processes are already achieving a high level of contaminant reduction through the application of the Best Practicable Option\*.~~<sup>86</sup>

### Policy 13: Point sources consent duration/Te Kaupapa Here 13: Te roa o te tukanga tono whakaaetanga mō te pū tuwha

When determining an appropriate duration for any point source discharge<sup>87</sup> consent granted, consider the following matters:

- a. The appropriateness of a longer consent duration (more than 10 years) A consent term exceeding 25 years, where the applicant demonstrates that the discharge is consistent with achieving the 80-year water quality attribute states set out in Table 3.11-1 there are currently being met the approaches set out in Policies 11 and 12 will be met<sup>88</sup>; and
- b. The magnitude and significance of the investment made or proposed to be made in contaminant reduction measures and any resultant improvements in the receiving water quality; and
- c. The need to provide appropriate certainty of investment where contaminant reduction measures are proposed (including investment in treatment plant upgrades or land based application technology).

### Policy 14: Lakes Freshwater Management Units/Te Kaupapa Here 14: Ngā Wae Whakahaere Wai Māori i ngā Roto

Restore and protect lakes by 2096 through the implementation of a tailored lake-by-lake approach, guided by Lake Catchment Plans prepared over the next 10 years, which will include collecting and using data and information to support improving the management of land use<sup>89</sup> activities in within the lakes Freshwater Management Units<sup>^</sup>.

### Policy 15: Whangamarino Wetland/Te Kaupapa Here 15: Ngā Repo o Whangamarino

Protect and make progress towards restoration of Whangamarino Wetland by reducing the diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens in the sub-catchments that flow into the wetland to:

- a. Reduce and minimise further loss of the bog ecosystem; and
- b. Provide increasing availability of mahinga kai; and
- c. Support implementation of any catchment plan prepared in future by Waikato Regional Council that covers Whangamarino Wetland.

### Policy 16: Flexibility for development of land returned under Te Tiriti o Waitangi settlements and multiple owned Māori land/Te Kaupapa Here 16: Te hangore o te tukanga mō te

<sup>81</sup> Hamilton CC PC1-10843

<sup>82</sup> Tangata Whenua – Waikato and Waipa/Waipā River Iwi PC1-3353

<sup>83</sup> Fonterra PC1-10609

<sup>84</sup> Hamilton CC PC1-10843

<sup>85</sup> Fish & Game PC1-10888

<sup>86</sup> Tangata Whenua – Waikato and Waipa/Waipā River Iwi PC1-3353

<sup>87</sup> Mercury PC1-9577

<sup>88</sup> Forest & Bird PC1-8325

<sup>89</sup> Tangata Whenua – Waikato and Waipa/Waipā River Iwi PC1-3404

## **whakawhanaketanga o ngā whenua e whakahokia ai i raro i ngā whakataunga kokoraho o Te Tiriti o Waitangi me ngā whenua Māori kei raro i te mana whakahaere o te takitini**

For the purposes of considering land use change applications under Rule 3.11.5.7, land use change that enables the development of tangata whenua ancestral lands shall be managed in a way that recognises and provides for:

- a. The relationship of tangata whenua with their ancestral lands; and
- b. The exercise of kaitiakitanga; and
- c. The creation of positive economic, social and cultural benefits for tangata whenua now and into the future;

Taking into account:

- i. Best management practice actions for nitrogen, phosphorus, sediment and microbial pathogens for the proposed new type of land use; and
- ii. The suitability of the land for development into the proposed new type of land use, reflecting the principles for future allocation as contained in Policy 7, including the risk of contaminant discharge from that land and the sensitivity of the receiving water body; and
- iii. The short term water quality attribute states targets<sup>90</sup> to be achieved in Objective 3.

### **Policy 17: Considering the wider context of ~~the Vision and Strategy~~ Te Ture Whaimana/Te Kaupapa Here 17: Te whakaaro ake ki te horopaki whānui o Te Ture Whaimana**

When applying policies and methods in Chapter 3.11, seek opportunities to advance ~~those matters in the Vision and Strategy~~ objectives and strategies within of Te Ture Whaimana and the values<sup>^</sup> for the Waikato and ~~Waipa~~ Waipā Rivers ~~that fall outside the scope of Chapter 3.11, but could be considered secondary benefits of methods carried out under this Chapter~~<sup>91</sup>, including, but not limited to:

Opportunities to enhance biodiversity, wetland values<sup>^</sup> and the functioning of ecosystems; and  
Opportunities to enhance access and recreational values<sup>^</sup> associated with the rivers.

<sup>90</sup> Fonterra PC1-10451

<sup>91</sup> DoC PC1-10746 and Fish and Game PC1-10906

### 3.11.4 Implementation methods/Ngā tikanga whakatinana

#### 3.11.4.1 Working with others/Te mahi tahi me ētehi atu

Waikato Regional Council will work with stakeholders including Waikato River iwi partners, Waikato River Authority, Waikato River Restoration Strategy partners, Department of Conservation, territorial authorities, industry and sector bodies, to implement Chapter 3.11 including all the following methods in 3.11.4. This will include coordinating priorities, funding and physical works, promoting awareness and providing education, to assist in giving effect to the *Vision and Strategy for the Waikato River/Te Ture Whaimana o Te Awa o Waikato* for the Waikato and Waipā Rivers.

#### 3.11.4.2 Certified Industry Scheme/Te kaupapa ā ahumahi kua whai tohu

Waikato Regional Council will develop an industry certification process for industry bodies as per the standards outlined in Schedule 2. The **Certified Industry Scheme** will include formal agreements between parties. Agreements will include:

- a. Provision for management of the **Certified Industry Schemes**;
- b. Oversight, and monitoring of **Farm Environment Plans**;
- c. Information sharing;
- d. Aggregate reporting on **Certified Industry Scheme** implementation; and
- e. Consistency across the various **Certified Industry Schemes**

#### 3.11.4.3 Farm Environment Plan/Ngā Mahere Taiao ā-Pāmu

Waikato Regional Council will prepare parameters and minimum requirements for the development of a certification process for professionals to develop, certify and monitor **Farm Environment Plans** in a consistent approach across the region. A **Farm Environment Plan** will be prepared by a certified person as per the requirements outlined in Schedule 1, and will assess the risk of **diffuse discharges** of nitrogen, phosphorus, sediment and **microbial pathogens** and specify actions to reduce those risks in order to bring about reductions in the discharges of those contaminants. Waikato Regional Council will develop guidance for risk assessments, auditing and compiling **Farm Environment Plans**.

Waikato Regional Council will take a risk based approach to monitoring **Farm Environment Plans**, starting with more frequent monitoring and then moving to monitoring based on risk assessment. Robust third party audit (independent of the farmer and **Certified Farm Environment Planner**) and monitoring will be required.

#### 3.11.4.4 Lakes and Whangamarino Wetland/Ngā Roto me ngā Repo o Wangamarino

Waikato Regional Council, working with others stakeholders, will:

- a. Review the areas demarcated as Lakes Freshwater Management Unit when an assessment of the groundwater contribution to each Lake is determined and compared with the surface water catchment.
- a.b. Build on the Shallow Lakes Management Plan by developing/prioritising the development of Lake Catchment Plans and investigate lake-specific options to improve water quality and ecosystem health, and manage pest species. In many instances, this may require an adaptive management approach.
- b.c. Prepare and implement Lake Catchment Plans with community involvement which include:
  - i. A vision for the lake developed in consultation with relevant stakeholders (including the community).
  - ii. Description of the desired state of lake and recognition of the challenges (e.g. costs) and opportunities (e.g. benefits) in achieving it.
  - iii. An evidence based description of the problem (i.e. what is the gap between the current state and desired state) that recognises the presence of multiple stressors and uncertainty in responses and time frames.
  - iv. Community engagement in defining actions that will move the lake towards its desired state.
  - v. Responsibility for achieving the agreed actions and expected timeframes, developed in consultation with those who will be undertaking the work.
  - vi. A monitoring regime that will provide evidence of the implementation of the defined actions and any changes in the state of the lake.
- c.d. ~~As a priority, undertake the development and implementation of the Lake Waikare and Whangamarino Wetland Catchment Management Plan using the process set out in b).~~
- d.e. ~~Work towards managing the presence of pest weeds and fish in the shallow lakes and connected lowland rivers area, including Whangamarino Wetland.~~
- e.f. ~~Support research and testing of restoration tools and options to maintain and enhance the health of shallow lakes and Whangamarino Wetland (e.g. lake modelling, lake bed sediment treatments, constructed wetlands, floating wetlands, silt traps, pest fish management, and farm system management tools).~~
- f.g. ~~Support lake and Whangamarino Wetland restoration programmes including, but not limited to, advice, funding, and project management. Restoration programmes may have a wider scope than water quality, including hydrological restoration, revegetation and biodiversity restoration.~~

~~g. h. Develop a set of 10-year water quality attribute targets for each lake Freshwater Management Unit.~~

#### **3.11.4.5 Sub-catchment scale planning/Te whakamāherehere mō to whānuitanga o ngā riu kōawaawa**

Waikato Regional Council will work with ~~others~~ relevant stakeholders to develop **sub-catchment** scale plans (where a catchment plan does not already exist) where ~~it has been shown to be required~~ developing a plan would result in achieving the 10-year freshwater objectives in Table 3.11-1 more efficiently. **Sub-catchment** scale planning will:

- a. Identify the causes of current water quality decline, identify cost-effective measures to bring about reductions in contaminant discharges, and coordinate the reductions required at a **property, enterprise and sub-catchment** scale (including recommendations for funding where there is a public benefit identified).
- b. Align works and services to reduce nitrogen, phosphorus, sediment and **microbial pathogen** discharges including riparian management, targeted reforestation, constructed wetlands, sediment traps and sediment detention bunds.
- c. Assess and determine effective and efficient placement of constructed wetlands at a **sub-catchment** scale to improve water quality.
- d. Support research that addresses the management of wetlands, including development of techniques to monitor ecological change and forecasting evolution of wetland characteristics resulting from existing land use in the wetland catchments.
- e. Integrate the regulatory requirements to fence waterways with the requirements for effective drainage scheme management.
- f. Coordinate funding of mitigation work by those contributing to water quality degradation, in proportion to that contribution.
- g. Utilise public funds to support **edge of field mitigations** where those mitigations provide significant public benefit.

#### **3.11.4.6 Funding and implementation/Te pūtea me te whakatinanatanga**

Waikato Regional Council will:

- a. ~~Provide staff resources and leadership within the organisation for the implementation of Chapter 3.11.~~
- b. ~~Seek to secure funding for the implementation of Chapter 3.11 through the annual plan and long term plan processes.~~

#### **3.11.4.7 Information needs to support any future allocation/Ngā pārongo e hiahiatia ana hei taunaki i ngā tohanga o anamata**

Gather information and commission appropriate scientific research to inform any future framework for the allocation of diffuse discharges including:

- a. ~~Implementing processes that will support the setting of property or enterprise level diffuse discharge limits in the future.~~
- b. ~~Researching:~~
  - i. ~~The quantum of contaminants that can be discharged at a sub-catchment and Freshwater Management Unit scale while meeting the Table 3.11-1 water quality attribute targets.~~
  - ii. ~~Methods to categorise and define 'land suitability'.~~
  - iii. ~~Tools for measuring or modelling discharges from individual properties, enterprises and sub-catchments, and how this can be related to the Table 3.11-1 water quality attribute targets.~~

#### **3.11.4.8 Reviewing Chapter 3.11 and developing an allocation framework for the next Regional Plan/Te arotake i te Upoko 3.11, te whakarite hoki i tētahi anga toha mō te Mahere ā Rohe e whai ake ana**

Waikato Regional Council will:

- a. ~~Develop discharge allocation frameworks for individual **properties** and **enterprises** based on information collected under Method 3.11.4.7, taking into account the best available data, knowledge and technology at the time; and~~
- b. ~~Use this to inform future changes to the Waikato Regional Plan to manage discharges of nitrogen, phosphorus, sediment and **microbial pathogens** at a **property** or **enterprise** level to meet the targets in the Objectives.~~

#### **3.11.4.9 Managing the effects of urban development/Te whakahaere i ngā pānga o te whanaketanga ā tāone**

Waikato Regional Council will:

- a. ~~Continue to work with territorial authorities to implement the Waikato Regional Policy Statement set of principles that guide future development of the built environment which anticipates and addresses cumulative effects over the long term.~~

- b. When undertaking sub-catchment scale planning under Method 3.11.4.5 in urban sub-catchments engage with urban communities to raise awareness of water quality issues, and to identify and implement effective solutions for the urban context.

#### 3.11.4.10 Accounting system and monitoring/Te pūnaha kaute me te aroturuki

Waikato Regional Council will establish and operate a publicly available accounting system and monitoring in each Freshwater Management Unit<sup>^</sup>, including:

- a. Collecting information on nitrogen, phosphorus, sediment and **microbial pathogen** levels in the respective fresh water bodies in each Freshwater Management Unit<sup>^</sup> from:
  - i. Council's existing river monitoring network; and
  - ii. **Sub-catchments** that are currently unrepresented in the existing monitoring network; and
  - iii. Lake Freshwater Management Units<sup>^</sup>.
- b. Using the information collected to establish the baseline data for compiling a monitoring plan and to assess progress towards achieving the Table 11-1 water quality attribute<sup>^</sup> targets<sup>^</sup>; and
- c. Using state of the environment monitoring data including biological monitoring tools such as the Macroinvertebrate Community Index to provide the basis for identifying and reporting on long-term trends; and
- d. An information and accounting system for the **diffuse discharges** from **properties** and **enterprises** that supports the management of nitrogen, phosphorus, sediment and **microbial pathogens diffuse discharges** at an **enterprise** or **property** scale.

#### ~~3.11.4.11 Monitoring and evaluation of the implementation of Chapter 3.11/Te aroturuki me te arotake i te whakatinanatanga o te Upoko 3.11~~

Waikato Regional Council will:

- a. Review and report on the progress towards and achievement of the 80-year water quality objectives of Chapter 3.11.
- b. Research and identify methods to measure actions at a **sub-catchment, property** and **enterprise** level, and their contribution to reductions in the discharge of contaminants.
- c. Monitor the achievement of the values<sup>^</sup> for the Waikato and Waipā Rivers and the uses made of those rivers.
- d. Collate data on the number of land-use resource consents issued under the rules of this chapter, the number of **Farm Environment Plans** completed, compliance with the actions listed in **Farm Environment Plans, Nitrogen Reference Points** for **properties** and **enterprises**, and nitrogen discharge data reported under **Farm Environment Plans**.
- e. Work with industry to collate information on the functioning and success of any **Certified Industry Scheme**.

#### 3.11.4.12 Support research and dissemination of best practice guidelines to reduce diffuse discharges/Te taunaki i te rangahautanga me te tuaritanga o ngā aratohu mō ngā mahi tino whai take hei whakaiti i ngā rukenga roha

Waikato Regional Council will:

- a. Develop and disseminate **best management practice** guidelines for reducing the **diffuse discharges** of nitrogen, phosphorus, sediment and **microbial pathogens**; and
- b. Support research into methods for reducing **diffuse discharges** of contaminants to water.<sup>92</sup>

<sup>92</sup> Fish and Game PC1-10910, J and A Gaston PC1-1083

### 3.11.5 Rules/Ngā Ture

Delete all references to “enterprise” from the rules.<sup>93</sup>

Insert Commercial Vegetable Production into the change of use of land conditions of Rules 3.11.5.1A, 3.11.5.2A (if included), 3.11.5.3 (if included), and 3.11.5.4, such that it reads:

- X. There has been less than a cumulative net total of 4.1 hectares of change in the use of land from that which was occurring at 22 October 2016 within a property from:
1. Woody vegetation to farming activities; or
  2. Any farming activity other than dairy farming to dairy farming; or
  3. Any farming activity to Commercial Vegetable Production<sup>94</sup>

Insert No commercial vegetable production occurs as a condition of Rule 3.11.5.4.

#### ~~3.11.5.1 Permitted Activity Rule – Small and Low Intensity farming activities/Te Ture mō ngā Mahi e Whakaaetia ana – Ngā mahi iti, ngā mahi pāiti hoki i runga pāmu~~

##### ~~Rule 3.11.5.1 – Permitted Activity Rule – Small and Low Intensity farming activities~~

~~The use of land for farming activities (excluding commercial vegetable production) and the associated diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens onto or into land in circumstances which may result in those contaminants entering water is a permitted activity subject to the following conditions:~~

- ~~1. The property is registered with the Waikato Regional Council in conformance with Schedule A; and~~
- ~~2. Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C; and~~

~~Either:~~

- ~~3. The property area is less than or equal to 4.1 hectares; and~~
- ~~4. The farming activities do not form part of an enterprise being undertaken on more than one property; or~~

~~The property area Where the property area is greater than 4.1 hectares:~~

- ~~5. For grazed land, the stocking rate of the land is less than 6 stock units per hectare; and~~
- ~~6. No arable cropping occurs; and~~
- ~~7. The farming activities do not form part of an enterprise being undertaken on more than one property.<sup>95,96</sup>~~

#### 3.11.5.1A Interim Permitted Activity Rule – Farming

##### Rule 3.11.5.1A – Interim Permitted Activity Rule – Farming

The use of land for farming, which is not a permitted activity under Rule 3.11.5.2, and the associated diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens onto or into land in circumstances which may result in those contaminants entering water is a permitted activity until:

1. The later of 1 September 2021 or 6 months after this Plan becomes operative, for properties in Priority 1 sub-catchments listed in Table 3.11-2, and all properties with a Nitrogen Reference Point greater than the 75th percentile nitrogen leaching value; and
  2. The later of 1 March 2025 or 1 year after this Plan becomes operative for properties in Priority 2 sub-catchments listed in Table 3.11-2;<sup>97</sup> and
  3. 1 January 2026 for properties in Priority 3 sub-catchments listed in Table 3.11-2;
- subject to the following conditions:

1. The property is registered with the Council in conformance with Schedule A; and
2. Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C; and

<sup>93</sup> P Brodie PC1-2889, Waitomo DC PC1-10312, G Kilgour PC1-1884

<sup>94</sup> Fonterra V1PC1-757, Waipā DC PC1-3249, Waitomo DC PC1-10312

<sup>95</sup> Fonterra V1PC1-757, Waipā DC PC1-3249, Waitomo DC PC1-10312

<sup>96</sup> H Oatway PC1-6524

<sup>97</sup> Beef + Lamb V1PC1-1719, J Craig PC1-9675, Drummon Dairy Holdings Ltd PC1-5652, K and A Reese PC1-7784

3. No commercial vegetable production occurs; and
4. A Nitrogen Reference Point is produced for the property in conformance with Schedule B; and
5. Full electronic access to Overseer or any other software or system that models or records diffuse contaminant losses for the farming land use authorised by this rule is granted to the Council; and<sup>98</sup>
6. There has been less than a cumulative net total of 4.1 hectares of change in the use of land from that which was occurring at 22 October 2016 within a property or enterprise from:
  1. Woody vegetation to farming activities; or
  2. Any farming activity other than dairy farming to dairy farming; or
  3. Any farming activity to Commercial Vegetable Production<sup>99</sup>

### 3.11.5.2 Permitted Activity Rule – ~~Other~~ Low intensity farming activities/Te Ture mō ngā Mahi e Whakaaetia ana – Ētehi atu mahi i runga pāmu

#### Rule 3.11.5.2 - Permitted Activity Rule – ~~Other~~ Low intensity farming activities

The use of land for farming activities ~~(excluding commercial vegetable production)~~ and the associated diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens onto or into land in circumstances which may result in those contaminants entering water ~~where the property area is greater than 4.1 hectares, and has more than 6 stock units per hectare or is used for arable cropping,~~<sup>100</sup> is a permitted activity subject to the following conditions:

- A. For all properties:
1. The property is registered with the Waikato Regional Council in conformance with Schedule A; and
  2. Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C ~~and Conditions 3(e) and 4(e) of this Rule; and~~
- ~~2A. The farming activities do not form part of an enterprise; and~~  
~~2B2A. No commercial vegetable production occurs; and~~  
~~2C2B. No dairy farming or grazing of dairy cattle occurs; and~~  
~~2D2C. No feedlots or sacrifice paddocks are used on the property; and~~  
~~2E2D. No more than 5% of the land used for farming is used for cropping, including winter forage crops; and~~<sup>101</sup>
- B3. ~~Where~~ The property area is less than or equal to 20 hectares; or:
- a. ~~The farming activities do not form part of an enterprise being undertaken on more than one property; and~~
  - b. ~~Where the land is:~~
    - i. ~~used for grazing livestock, the stocking rate of the land is no greater than the stocking rate of the land at 22 October 2016; or~~
    - ii. ~~not used for grazing livestock, the land use has the same or lower diffuse discharges of nitrogen, phosphorus, sediment or microbial pathogens as the land use at 22 October 2016; and~~
  - c. ~~Upon request, the landowner shall obtain and provide to the Council independent verification from a Certified Farm Environment Planner that the use of land is compliant with either (b)(i) or (b)(ii) above; and~~
  - d. ~~Upon request from the Council, a description of the current land use activities shall be provided to the Council; and~~
  - e. ~~Where the property or enterprise contains any of the water bodies listed in Schedule C, new fences installed after 22 October 2016 must be located to ensure cattle, horses, deer and pigs cannot be within three metres of the bed of the water body (excluding constructed wetlands and drains).~~<sup>102</sup>
- C4. ~~Where~~ The property or enterprise area is greater than 20 hectares, and either:
1. The stocking rate of the land is less than 6 stock units per hectare; or
  2. The only farming activity occurring on the property is the raising, training or housing of horses; or<sup>103</sup>
  3. The stocking rate of the land is greater than 6 stock units but less than 10 stock units per hectare; and<sup>104</sup>
    - a. A Nitrogen Reference Point is produced for the property or enterprise in conformance with Schedule B; and
    - b. The diffuse discharge of nitrogen from the property or enterprise does not exceed either:
      - i. the Nitrogen Reference Point; or
      - ii. 15kg nitrogen/hectare/year;

<sup>98</sup> WRC V1PC1-218

<sup>99</sup> Fonterra V1PC1-757, ~~Waipa Waipā~~ DC PC1-3249, Waitomo DC PC1-10312

<sup>100</sup> Fonterra V1PC1-757, ~~Waipa Waipā~~ DC PC1-3249, Waitomo DC PC1-10312

<sup>101</sup> J Alcock and J Easton PC1-9217, L Ashton PC1-7032, G Gleeson PC1-6410

<sup>102</sup> P Hurley PC1-1088, Federated Farmers V1PC1-338

<sup>103</sup> G Kilgour PC1-1906, R Cave PC1-3900

<sup>104</sup> P Keeling PC1-5497, Fonterra V1PC1-765

- ~~whichever is the lesser, over the whole property or enterprise when assessed in accordance with Schedule B; and<sup>105</sup>~~
- ~~c. No part of the property or enterprise over 15 degrees slope is cultivated; and or~~
- ~~c1. No part of the property over XX degrees of slope is<sup>106</sup> grazed; and~~
- ~~d. No winter forage crops are grazed in situ; and~~
- ~~e. Where the property or enterprise contains any of the water bodies listed in Schedule C:~~
- ~~i. There shall be no cultivation within 5 metres of the bed of the water body; and~~
- ~~ii. New fences installed after 22 October 2016 must be located to ensure cattle, horses, deer and pigs cannot be within three metres of the bed of the water body (excluding constructed wetlands and drains); and<sup>107</sup>~~
- ~~f5. For all properties greater than 4.1 hectares, fFrom ~~31 March 2019~~ 30 November 2020, in addition to the requirements of Schedule A, the following information ~~is~~ must be provided to the Waikato Regional Council by 1 September each year:~~
- ~~a. The monthly average Annual stock numbers of each stock class from 1 July to 30 June in the following year; and~~
- ~~b. Tonnes and type of Annual fertiliser applied from 1 July to 30 June in the following year ~~use~~; and~~
- ~~c. Tonnes of and type of Annual brought in animal feed brought onto the property in the previous 12 months; and<sup>108</sup>~~
- ~~g. Full electronic access to Overseer or any other software or system that models or records diffuse contaminant losses for the farming land use authorised by this rule is granted to the Council; and<sup>109</sup>~~
- ~~h. Upon request, the landowner shall obtain and provide to the Council independent verification from a Certified Farm Environment Planner that the use of land is compliant with the conditions of this Rule within 20 working days of the request (unless otherwise agreed in writing by Council).<sup>110</sup>~~

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<sup>105</sup> Fonterra V1PC1-765, Balle Bros Group PC1-11423, Hill Country Farmers Group PC1-7845

<sup>106</sup> Hill Country Farmers PC1-7845

<sup>107</sup> G Holmes PC1-4693, Huirimu Farms Ltd PC1-5908, A McGovern PC1-8319

<sup>108</sup> Consequential to Ballance PC1-6570, FANZ PC1-10642

<sup>109</sup> WRC V1PC1-218

<sup>110</sup> Shifted from within the rule ((3)(c)).

## OPTION

### 3.11.5.2A Controlled Activity Rule – Medium intensity farming/

#### Rule 3.11.5.2A - Controlled Activity Rule – Medium intensity farming

The use of land for farming and the associated diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens onto or into land in the circumstances which may result in those contaminants entering water, which is not a permitted activity under Rules 3.11.5.1A to 3.11.5.2, is a controlled activity subject to the following conditions:

1. The property is registered with the Council in conformance with Schedule A; and
2. A Nitrogen Reference Point is produced for the property in conformance with Schedule B; and
3. Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C; and
4. The farming activities do not form part of an enterprise. No commercial vegetable production occurs; and
5. No commercial vegetable production occurs; and
65. Full electronic access to Overseer or any other software or system that models or records diffuse contaminant losses for the farming land use authorised by this rule is granted to the Council; and
7. A 6. An outline (Table of Contents) of a Farm Environment Plan has been prepared in conformance with Schedule 1 and has been informed and approved by a Certified Farm Environment Planner, and is provided to the Council at the time the resource consent application is lodged; and
87. Either:
  - a. The Nitrogen Reference Point is not exceeded; or
  - b. The stocking rate of the land is no greater than 18 stock units per hectare and has not increased above the stocking rate during the Reference Period in Schedule B; and
68. There has been less than a cumulative net total of 4.1 hectares of change in the use of land from that which was occurring at 22 October 2016 within a property or enterprise from:
  1. Woody vegetation to farming activities; or
  2. Any farming activity other than dairy farming to dairy farming; or
  3. Any farming activity to Commercial Vegetable Production

Waikato Regional Council reserves control over the following matters:

- i. The content, compliance with and auditing of an outline (Table of Contents) of the Farm Environment Plan, to reflect the specific nature of the farm and achieve the Principles and Objectives of Schedule 1.
- ii. The date a final audited Farm Environment Plan is to be provided to the Council.
- iii. The actions and timeframes to achieve Good Farming Practices or better in order to reduce the diffuse discharge of nitrogen, phosphorus, sediment or microbial pathogens to water or to land where they may enter water.
- iiii. For enterprises, the procedures and limitations, including Nitrogen Reference Points, to be applied to land that enters or leaves the enterprise.
- ivv. Where the Nitrogen Reference Point exceeds the 75th percentile nitrogen leaching value, actions, timeframes and other measures to ensure the diffuse discharge of nitrogen is reduced so that it does not exceed the 75th percentile nitrogen leaching value by 1 July 2026.
- v. vi. Where the Nitrogen Reference Point exceeds the 50th percentile and is less than the 75th percentile nitrogen leaching value, demonstrate methods for clear and enduring reductions of nitrogen leaching, with anticipated reductions set, and practices to achieve those reductions and timeframes detailed.
- vii. The term of the resource consent.
- viii. The timeframe and circumstances under which the consent conditions may be reviewed, including the review of conditions requiring implementation of specific on-farm mitigation measures to ensure they reflect changes to Good Farming Practices that may occur over time.
- ix. Procedures for reviewing, auditing compliance with, amending and re-approving the Farm Environment Plan.

## OPTION

**3.11.5.3 Permitted Restricted Discretionary Activity Rule – Farming activities with a Farm Environment Plan under a Certified Industry Sector Scheme/Te Ture mō ngā Mahi e Whakaaetia ana – Ngā mahi i runga pāmu kua whai Mahere Taiao ā Pāmu i raro i te Kaupapa ā Ahumahi kua Whai Tohu**

### **Rule 3.11.5.3 – Permitted Restricted Discretionary Activity Rule – Farming activities with a Farm Environment Plan under a Certified Industry Sector Scheme**

Except as provided for in Rule 3.11.5.1 and Rule 3.11.5.2 the use of land for farming activities (excluding commercial vegetable production) where the land use is registered to a Certified Industry Sector Scheme, and the associated diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens onto or into land in circumstances which may result in those contaminants entering water is a permitted restricted discretionary activity subject to the following conditions:

1. The property is registered with the Waikato Regional Council in conformance with Schedule A; and
2. A Nitrogen Reference Point is produced for the property or enterprise in conformance with Schedule B; and
3. Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C; and
4. The Certified Industry Sector Scheme meets the criteria set out in Schedule 2 and has been approved by the Chief Executive Officer of the Waikato Regional Council as meeting the standards set out in Schedule 2; and
5. A Farm Environment Plan which has been prepared in accordance with Schedule 1 and has been approved by a Certified Farm Environment Planner, and is provided to the Waikato Regional Council at the time the resource consent application is lodged; and as follows:
  - a. By 1 July 2020 1 March 2022 for properties or enterprises within Priority 1 sub-catchments listed in Table 3.11-2, and all properties or enterprises with a Nitrogen Reference Point greater than the 75th percentile nitrogen leaching value;
  - b. By 1 July 2023 1 March 2025 for properties or enterprises within Priority 2 sub-catchments listed in Table 3.11-2;
  - c. By 1 July 2026 for properties or enterprises within Priority 3 sub-catchments listed in Table 3.11-2; and
- 5a. Full electronic access to Overseer or any other software or system that records farm data and models or records diffuse contaminant losses for the farming land use authorised by this rule is granted to the Waikato Regional Council; and
- 5b. There have been less than a cumulative net total of 4.1 hectares of change in the use of land from that which was occurring at 22 October 2016 within a property or enterprise from:
  1. Woody vegetation to farming activities; or
  2. Any farming activity other than dairy farming to dairy farming; or
  3. Any farming activity to Commercial Vegetable Production
6. The use of land shall be undertaken in accordance with the actions and timeframes specified in the Farm Environment Plan; and
7. The Farm Environment Plan provided under Condition 5 may be amended in accordance with the procedure set out in Schedule 1 and the use of land shall thereafter be undertaken in accordance with the amended plan; and
8. A copy of the Farm Environment Plan amended in accordance with condition (7) shall be provided to the Waikato Regional Council within 30 working days of the date of its amendment.

Waikato Regional Council restricts its discretion to the following matters:

- i. The content, compliance with and auditing of the Farm Environment Plan.
- ii. The actions and timeframes to achieve Good Farming Practices or better in order to reduce the diffuse discharge of nitrogen, phosphorus, sediment or microbial pathogens to water or to land where they may enter water.
- iii. The effects, including cumulatively, of diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens, particularly where the activity may lead to an increase in the discharge of one or more contaminants.
- iv. For enterprises, the procedures and limitations, including Nitrogen Reference Points, to be applied to land that enters or leaves the enterprise.
- v. Where the Nitrogen Reference Point exceeds the 50<sup>th</sup> percentile and is less than the 75<sup>th</sup> percentile nitrogen leaching value, actions, timeframes demonstrate clear and other measures to ensure the diffuse discharge during reductions of nitrogen is reduced so that it does not exceed the 75<sup>th</sup> percentile nitrogen leaching value by 1 July 2026, with anticipated reductions set.
- vi. The term of the resource consent.
- vii. The timeframe and circumstances under which the consent conditions may be reviewed.
- viii. Procedures for reviewing, amending practices to achieve those reductions and re-approving the Farm Environment Plan.
- ix. Timeframes detailed. iix

### 3.11.5.4 ~~Controlled~~ Restricted Discretionary Activity Rule – Farming activities with a Farm Environment Plan ~~not under a Certified Industry Scheme~~/Te Ture mō ngā Mahi ka āta Whakahaerehia – Ngā mahi i runga pāmu kua whai Mahere Taiao ā-Pāmu kāore i raro i te Kaupapa ā-Ahumahi kua Whai Tohu

#### Rule 3.11.5.4 – ~~Controlled~~ Restricted Discretionary Activity Rule – Farming activities with a Farm Environment Plan ~~not under a Certified Industry Scheme~~

Except as provided for in Rule 3.11.5.1 and Rule 3.11.5.2, ~~the use of land for farming and the associated diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens onto or into land in the circumstances which may result in those contaminants entering water~~ activities (excluding commercial vegetable production) where that land use is not registered to a Certified Industry Scheme, and the associated diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens onto or into land in circumstances which may result in those contaminants entering water, which is not a permitted activity under Rules 3.11.5.1A to 3.11.5.2, is a Restricted Discretionary permitted<sup>111</sup> activity until:

1. ~~1 January 2020 1 September 2021~~ for properties or enterprises in Priority 1 sub-catchments listed in Table 3.11-2
2. ~~1 January 2023 1 September 2024~~ for properties or enterprises in Priority 2 sub-catchments listed in Table 3.11-2;
3. 1 January 2026 for properties or enterprises in Priority 3 sub-catchments listed in Table 3.11-2;<sup>112</sup>

subject to the following conditions:

1. The property is registered with the Waikato Regional Council in conformance with Schedule A; and
2. A Nitrogen Reference Point is produced for the property ~~or enterprise~~ in conformance with Schedule B; and
3. ~~No commercial vegetable production occurs; and~~
4. ~~A An outline (Table of Contents) of a Farm Environment Plan has been, prepared in conformance with Schedule 1 and has been informed and approved by a Certified Farm Environment Planner, or prepared under a Certified Sector Scheme, and is provided to the Council at the time the resource consent application is lodged; and~~<sup>113</sup>
5. Cattle, horses, deer and pigs are excluded from water bodies in accordance with Schedule C; and<sup>114</sup>
6. Full electronic access to Overseer or any other software or system that models or records diffuse contaminant losses for the farming land use authorised by this rule is granted to the Waikato Regional Council; and<sup>115</sup>
7. ~~There have been less than a cumulative net total of 4.1 hectares of change in the use of land from that which was occurring at 22 October 2016 within a property or enterprise from:~~
  1. ~~Woody vegetation to farming activities; or~~
  2. ~~Any farming activity other than dairy farming to dairy farming; or~~
  3. ~~Any farming activity to Commercial Vegetable Production~~<sup>116</sup>

After the dates set out in 1), 2) and 3) above the use of land shall be a controlled activity (requiring resource consent), subject to the following standards and terms:

- a. ~~A Farm Environment Plan has been prepared in conformance with Schedule 1 and has been approved by a Certified Farm Environment Planner, and is provided to the Waikato Regional Council at the time the resource consent application is lodged by the dates specified in I-III below; and~~
- b. ~~The property is registered with the Waikato Regional Council in conformance with Schedule A; and~~
- c. ~~A Nitrogen Reference Point is produced for the property or enterprise in conformance with Schedule B and is provided to the Waikato Regional Council at the time the resource consent application is lodged; and~~
- d. ~~Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C.~~

Waikato Regional Council restricts its discretion to the following matters: Matters of Control

Waikato Regional Council reserves control over the following matters:

- i. ~~The content, compliance with and auditing of an outline (Table of Contents) of the Farm Environment Plan, to reflect the specific nature of a farm and achieve the Principles and Objectives of Schedule 1.~~
- ii. ~~The date a final audited Farm Environment Plan is to be provided to the Council.~~
- iii. ~~The actions and timeframes to achieve Good Farming Practices or better in order to undertake mitigation actions that maintain or reduce the diffuse discharge of nitrogen, phosphorus, sediment or microbial pathogens to water or to land where they may enter water.~~
- ia. ~~The effects, including cumulatively, of diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens, particularly where the activity may lead to an increase in the discharge of one or more contaminants.~~

<sup>111</sup> H G and S J Brooks PC1-86, Denzie, B PC1-3617

<sup>112</sup> Fonterra V1PC1-757, Waipā/Waipā DC PC1-3249, Waitomo DC PC1-10312

<sup>113</sup> Previously part of rule (condition a) with addition of Certified Sector Schemes.

<sup>114</sup> Previously part of rule (condition d)

<sup>115</sup> WRC V1PC1-218

<sup>116</sup> Fonterra PC1-10644

- ~~ii.b. For enterprises, the procedures and limitations, including Nitrogen Reference Points, to be applied to land that enters or leaves the enterprise.~~
- ~~iii.iv. The actions, timeframes and other measures to ensure that the diffuse discharge of nitrogen from the property or enterprise, as measured by the five-year rolling average annual nitrogen loss as determined by the use of the current version of OVERSEER®, does not increase beyond the property or enterprise's Nitrogen Reference Point, unless other suitable mitigations are specified.~~
- ~~iv.v. Where the Nitrogen Reference Point exceeds the 75th percentile nitrogen leaching value, actions, timeframes and other measures to ensure the diffuse discharge of nitrogen is reduced so that it does not exceed the 75th percentile nitrogen leaching value by 1 July 2026.~~
- ~~v.vi. The term of the resource consent.~~
- ~~vi.vii. The monitoring, record keeping, reporting and information provision requirements for the holder of the resource consent to demonstrate and/or monitor compliance with the Farm Environment Plan.~~
- ~~vii.viii. The timeframe and circumstances under which the consent conditions may be reviewed or the Farm Environment Plan shall be amended.~~
- ~~viii.ix. Procedures for reviewing, auditing compliance with, amending and re-approving the Farm Environment Plan.~~
- ~~ix.x. Information to be provided to show that the property is being managed in a way that would not cause an increase in loss of contaminants, which may include annual Overseer modelling for the property or enterprise, or information on matters such as stocking rate, fertiliser application, imported feed and cropping~~
- ~~xi. Where the Nitrogen Reference Point exceeds the 50<sup>th</sup> percentile and is less than the 75<sup>th</sup> percentile nitrogen leaching value, demonstrate methods for clear and enduring reductions of nitrogen leaching, with anticipated reductions set, and practices to achieve those reductions and timeframes detailed.~~
- ~~xii. The timeframe and circumstances under which the consent conditions may be reviewed, including the review of conditions requiring implementation of specific on-farm mitigation measures to ensure they reflect changes to Good Farming Practices that may occur over time.~~

**Dates:**

- ~~I. For Priority 1 sub-catchments, and properties with a Nitrogen Reference Point of greater than 75th percentile nitrogen leaching value, by 1 July 2020~~
- ~~II. For Priority 2 sub-catchments, by 1 July 2023~~
- ~~III. For Priority 3 sub-catchments, by 1 July 2026~~

**Notification:**

~~Consent applications will be considered without notification, and without the need to obtain written approval of affected persons.<sup>117</sup>~~

### 3.11.5.5 ~~Controlled~~ Restricted Discretionary Activity Rule – Existing commercial vegetable production/Te Ture mō ngā Mahi ka āta Whakahaerehia – Te whakatupu hua whenua ā-arumoni o te wā nei

#### Rule 3.11.5.5 - ~~Controlled~~ Restricted Discretionary Activity Rule – Existing commercial vegetable production

The use of land for commercial vegetable production ~~and the associated diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens onto or into land in the circumstances which may result in those contaminants entering water and the associated diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens onto or into land in~~ circumstances which may result in those contaminants entering water, is a permitted activity until 1 January 2020, from which date it shall be a controlled restricted discretionary activity (requiring resource consent) subject to the following conditions standards and terms:

- a. ~~The~~Each property ~~is to be~~ registered with the Waikato Regional Council in conformance with Schedule A; and
- b. ~~A Nitrogen Reference Point is produced for the property or enterprise in conformance with Schedule B and provided to the Waikato Regional Council at the time the resource consent application is lodged; and~~
- c. Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C; and
- d. ~~The land use is registered to a Certified Industry Scheme; and~~
- e. ~~The following information, relating to the land used by the applicant for commercial vegetable production each year in the period 1 July 2011 to 30 June 2016, is provided to the Council:~~
  - i. ~~The total, maximum area (hectares) of land used for commercial vegetable production; and~~
  - ii. ~~The maximum areas (hectares) of land and their locations, per sublocated within each sub-catchment referreferred to in Table 3.11-2;~~ and

<sup>117</sup> Forest and Bird PC1-8208

iii. quantification of nitrogen and phosphorus surpluses for each commercial vegetable production crop and a description of sediment control measures; and

~~The areas of land, and their locations broken down by sub-catchments [refer to Table 3.11-2], that were used for commercial vegetable production within the property or enterprise each year in the period 1 July 2006 to 30 June 2016, together with the maximum area of land used for commercial vegetable production within that period, shall be provided to the Council; and~~

- f. The total area of land for which consent is sought for commercial vegetable production must not exceed the maximum land area of the property or ~~properties~~ enterprise that was used for commercial vegetable production during the period 1 July ~~2006~~ 2011 to 30 June 2016; and
- ~~g. Where new land is proposed to be used for commercial vegetable production, an equivalent area of land must be removed from commercial vegetable production in order to comply with standard and term f.; and~~
- h. A Farm Environment Plan for the property or enterprise prepared in conformance with Schedule 1 and approved by a Certified Farm Environment Planner is provided to the Waikato Regional Council at the time the resource consent application is lodged ~~that, at a minimum, shows:~~
- ~~i. Good Farming Practice;~~
  - ~~ii. Adherence to any relevant minimum standards; and~~
  - ~~iii. That losses of nitrogen, phosphorus and sediment that do not exceed the maximum annual losses that were occurring during the 5 years up to 2016; and~~
- i. Full electronic access to Overseer or any other software or system that models or records diffuse contaminant losses for the farming land use authorised by this rule is granted to the Waikato Regional Council<sup>118</sup>

Waikato Regional Council restricts its discretion to the following matters: ~~Matters of Control~~

~~Waikato Regional Council reserves control over the following matters:~~

- ~~i. The content, compliance with and auditing of the Farm Environment Plan.~~
- ~~ii. The maximum total and per-sub-catchment area of land to be used for commercial vegetable production.~~
- ~~iii. The actions and timeframes to achieve Good Farming Practices or better and any relevant minimum standards to avoid exceeding baseline losses- identified under Condition h.iii. above. for undertaking mitigation actions that maintain or reduce the diffuse discharge of nitrogen, phosphorus or sediment to water or to land where those contaminants may enter water, including provisions to manage the effects of land being retired from commercial vegetable production and provisions to achieve Policy 3(d).~~
- ~~iv. The actions and timeframes to ensure that the diffuse discharge of nitrogen does not increase beyond the Nitrogen Reference Point for the property or enterprise.~~
- ~~v. The term of the resource consent.~~
- ~~vi. The monitoring, record keeping, reporting, contaminant accounting and information provision requirements for the holder of the resource consent to demonstrate and/or monitor compliance with any resource consent and the Farm Environment Plan.~~
- ~~vii. The time frame and circumstances under which the consent conditions may be reviewed, including the review of conditions requiring implementation of specific on-farm mitigation measures to ensure they reflect changes to Good Farming Practices that may occur over time.~~
- ~~viii. Procedures for reviewing, auditing compliance with, amending and re-certifying the Farm Environment Plan.~~
- ~~ix. The procedures and limitations, including Nitrogen Reference Points, to be applied to land that leaves the commercial vegetable growing activities.~~

**Notification:**

Consent applications will be considered without notification, and without the need to obtain written approval of affected persons.

**Advisory note:** Under section 20A(2) of the RMA a consent must be applied for within 6 months of 1 January 2020, namely by 1 July 2020.<sup>119</sup>

<sup>118</sup> WRC V1PC1-218

<sup>119</sup> J L and R J Ashby V1PC1-866, Balle Bros Group PC1-11426, G and J Jeffries PC1-7240, K McLaughlin PC1-6018, Moerangi Trust PC1-4279, PLUG PC1-11178

### ~~3.11.5.6 Restricted Discretionary Activity Rule – The use of land for farming activities/Te Ture mō ngā kōwhiringa mahi e herea ana – te whakamahinga o te whenua mō ngā mahinga pāmu~~

#### ~~Rule 3.11.5.6 – Restricted Discretionary Activity Rule – The use of land for farming activities~~

~~The use of land for farming activities that does not comply with the conditions, standard or terms of Rules 3.11.5.1 to 3.11.5.5 and the associated diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens onto or into land in circumstances which may result in those contaminants entering water is a restricted discretionary activity (requiring resource consent)~~

~~Waikato Regional Council restricts its discretion over the following matters:~~

- ~~i. Cumulative effects on water quality of the catchment of the Waikato and Waipa/Waipā Rivers.~~
- ~~ii. The diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens.~~
- ~~iii. The need for and the content of a Farm Environment Plan.~~
- ~~iv. The term of the resource consent.~~
- ~~v. The monitoring, record keeping, reporting and information provision requirements for the holder of the resource consent.~~
- ~~vi. The time frame and circumstances under which the consent conditions may be reviewed.~~
- ~~vii. The matters addressed by Schedules A, B and C.~~

#### **Notification:**

~~Consent applications will be considered without notification, and without the need to obtain written approval of affected persons.~~

### 3.11.5.6A Discretionary Activity Rule

#### Rule 3.11.5.6A - Discretionary Activity Rule

The use of land for farming and the associated diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens onto or into land in the circumstances which may result in those contaminants entering water that does not meet one or more of ~~conditions (1) to (5a) of Rule 3.11.5.3 or~~ conditions (1) to (6) of Rule 3.11.5.4 is a Discretionary activity.<sup>120</sup>

### **3.11.5.7 Non-Complying Activity Rule – Land Use Change/Te Ture mō ngā mahi kāore e whai i ngā ture – Te Panonitanga ā-Whakamahinga Whenua**

#### **Rule 3.11.5.7 - Non-Complying Activity Rule – Land Use Change**

The use of land for farming that does not meet ~~condition (5b6) of Rule 3.11.5.32A or~~ condition (7) of Rule 3.11.5.4 is a non-complying activity until 10 years from the date on which this Plan became operative.<sup>121</sup>

Notwithstanding any other rule in this Plan, any of the following changes in the use of land from that which was occurring at 22 October 2016 within a property or enterprise located in the Waikato and Waipa/Waipā catchments, where prior to 1 July 2026 the change exceeds a total of 4.1 hectares:

1. Woody vegetation to farming activities; or
2. Any livestock grazing other than dairy farming to dairy farming; or
3. Arable cropping to dairy farming; or
4. Any land use to commercial vegetable production except as provided for under standard and term g. of Rule 3.11.5.5 is a non-complying activity (requiring resource consent) until 1 July 2026.

#### **Notification:**

<sup>120</sup> Fonterra PC1-10506

<sup>121</sup> Fonterra V1PC1-757, Waipa/Waipā DC PC1-3249, Waitomo DC PC1-10312

Consent applications will be considered without notification, and without the need to obtain written approval of affected persons, subject to the Council being satisfied that the loss of contaminants from the proposed land use will be lower than that from the existing land use.]<sup>122</sup>

### 3.11.5.8 Permitted Activity Rule – Authorised Diffuse Discharges

The diffuse discharge of nitrogen, phosphorus, sediment and or microbial contaminants from farming onto or into land in circumstances that may result in a contaminant entering water that would otherwise contravene section 15(1) of the RMA is a permitted activity, provided the following conditions are met:

1. the land use activity associated with the discharge is authorised under Rules 3.11.5.1 to 3.11.5.7; and
2. the discharge of a contaminant is managed to ensure that after reasonable mixing it does not give rise to any of the following effects on receiving waters:
  - (a) any conspicuous oil or grease films, scums or foams, or floatable or suspended materials; or
  - (b) any conspicuous change in the colour or visual clarity; or
  - (c) the rendering of fresh water unsuitable for consumption by farm animals; or
  - (d) any significant adverse effects on aquatic life.<sup>123</sup>

### 3.11.5.9 Non-Complying Activity Rule – Unauthorised Diffuse Discharges

The diffuse discharge of nitrogen, phosphorus, sediment and or microbial contaminants from farming onto or into land in circumstances that may result in a contaminant entering water that would otherwise contravene section 15(1) of the RMA that does not meet one or more of the conditions of Rule 3.11.5.8 is a non-complying activity.<sup>124</sup>

<sup>122</sup> Forest and Bird PC1-8214

<sup>123</sup> Ata Rangi PC1 11127, Southern Pastures Limited Partnership PC1 11070

<sup>124</sup> Ata Rangi PC1 11127, Southern Pastures Limited Partnership PC1 11070

**Schedule A - Registration with Waikato Regional Council/Te Āpitiwhanga A – Te rēhita me te Kaunihera ā-Rohe o Waikato**

Properties with an area greater than ~~2 hectares~~ 4.1 hectares<sup>125</sup> (excluding urban properties) must be registered with the Waikato Regional Council in the following manner:

1. Registration must occur between ~~1 September 2018~~ 1 May 2020 and ~~31 March 2019~~ 30 November 2020.
2. Registration information set out in clause 5, and where relevant in clause 6, below must be provided.
3. Proof of registration must be provided ~~to the Waikato Regional Council within 7 working days of a request by to the Waikato Regional Council being made (unless otherwise agreed in writing by Council) if requested by the Council.~~<sup>126</sup>
4. Registration information must be updated by the new owner of a property within 30 working days of the new owner taking possession of the property, or otherwise at the request of the Waikato Regional Council.
5. All ~~property~~ owners must provide:
  - a. The following information in respect of the ~~land~~ property<sup>127</sup> owner, and the person responsible for using the land (if different from the ~~land~~ property owner):
    - i. Full name.
    - ii. Trading name (if applicable, where the owner is a company or other entity).
    - iii. Full postal and email address.
    - iv. Telephone contact details.
  - b. Legal description ~~of the property as per the~~ and certificate(s) of title references (computer freehold registers) for all of the land in the property.<sup>128</sup>
  - c. Physical address of the property.
  - d. A description of the land use activity or activities undertaken on the property as at 22 October 2016, including the land area of each activity.
  - e. The total land area of the property.
  - f. Where the land is used for grazing, and no NRP is required under this Plan,<sup>129</sup> the annual average and maximum<sup>130</sup> stocking rate of animals grazed on the land.
  - g. Where details of a property are not known, generic data will be supplied by the Waikato Regional Council reflective of farm time, topography and known or assumed management.
  - g. If the property forms part of an enterprise, the name of that enterprise.<sup>131</sup>
6. Properties that graze livestock must also provide a map showing:
  - a. ~~The~~ the location of:
    - i. Property boundaries; and
    - ii. Water bodies listed in Schedule C for stock exclusion within the property boundary and fences adjacent to those water bodies; and
    - iii. Livestock crossing points over those water bodies and a description of any livestock crossing structures.

<sup>125</sup> WRC PC1-3536

<sup>126</sup> WRC PC1-3536

<sup>127</sup> WRC PC1-3536

<sup>128</sup> Waipā Waipā DC PC1-3225

<sup>129</sup> WRC V1PC1-216

<sup>130</sup> J Liefing PC1-7166

<sup>131</sup> Waipā Waipā DC PC1-3225

**Schedule B - Nitrogen Reference Point/Te Āpitianga B – Te tohu ā-hauota**

A property or enterprise with a cumulative area greater than 20 hectares (or any property or enterprise used for commercial vegetable production) must have a Nitrogen Reference Point calculated as follows:

- a. The Nitrogen Reference Point must be calculated by a Certified Farm Nutrient Advisor ~~to determine~~ by modelling the amount of nitrogen being leached from the property or enterprise during the relevant reference period specified in clause f), except for any land use change approved under Rules 3.11.5.6 or 3.11.5.7 where the Nitrogen Reference Point shall be determined through the Rule 3.11.5.6 or 3.11.5.7 consent process.
- b. The Nitrogen Reference Point shall be the highest modelled annual nitrogen leaching loss that occurred during a single year (being 12 consecutive months) within the reference period specified in clause f), except for commercial vegetable production in which case the Nitrogen Reference Point shall be the average annual nitrogen leaching loss during the reference period.
- c. The Nitrogen Reference Point must be calculated using the ~~current~~ most recent version of the OVERSEER® Model as the default model (~~or any other models may be approved for use~~ by the Chief Executive of the Waikato Regional Council, if justified on a case by case basis). The Nitrogen Reference Point must be updated using the initial reference data whenever a new version of the OVERSEER® Model, or any other approved model used to prepare the Nitrogen Reference Point, is released.
- d. The Nitrogen Reference Point data shall comprise the ~~data used by electronic output file from~~ the OVERSEER® or other approved model to calculate the Nitrogen Reference Point, and where the OVERSEER® Model is used, it must be calculated using the OVERSEER® Best Practice Data Input Standards ~~2016~~ or replacement technical guidance that relate to the version of the OVERSEER® model being used, with the exceptions and inclusions set out in ~~Schedule B Table 1 a~~ Waikato Regional Council Nitrogen Reference Point Guide. Where another approved model is used, it will conform to the data input standards as approved by the Chief Executive of the Waikato Regional Council.
- e. The Nitrogen Reference Point Analysis (inputs and outputs) and the Nitrogen Reference Point data must be ~~provided~~ published to Waikato Regional Council within the period ~~1 September 2018 1 May 2020~~ to 31 March 2019 30 November 2020.
- f. The ~~Nitrogen Reference Period~~ reference period is the ~~two financial years covering 1 July 2014/2015 and 2015/ to 30 June 2016~~, except for commercial vegetable production in which case the reference period is 1 July ~~2006~~ 2011 to 30 June 2016.

g. Unless specified by condition of a resource consent, the NRP shall be updated:

- i. Annually for properties with a NRP exceeding the FMU 75th percentile;
- ii. Every 2 years for properties with a NRP exceeding the FMU 50th and less than the 75th percentile; and
- iii. Every 5 years for properties with a NRP less than the FMU 50th percentile.

Where details of a property are not known, generic data will be supplied by the Waikato Regional Council reflective of farm time, topography and known or assumed management. Should such circumstances exist, following the first year after the generic data approach has been used, the NRP shall be recalculated and the resulting NRP provided to the Waikato Regional Council.

~~g-h.~~ The following records (where relevant to the ~~land use undertaken on the property or enterprise~~ calculation and compliance auditing of the Nitrogen Reference Point) must be retained for the life of the plan and/or relevant consent, whichever is longer, and provided to Waikato Regional Council at its request:

- i. ~~Stock numbers as recorded in annual accounts together with stock sale and purchase invoices~~ Records of stock numbers and stock classes, births and deaths, stock movements on and off the property, grazing records and transport records;
- ii. ~~Dairy production data~~ Total annual milk solids as stated in the milk supply statement;
- iii. ~~Invoices for fertiliser applied to the land~~ Records of fertiliser type and amount, including annual accounts, and any records of fertiliser application rates and placement;
- iv. Quantity and type of invoices for feed supplements sold or purchased and used on the property;
- v. Water use records for irrigation (to be averaged over 3 years or longer) in order to determine irrigation application rates (mm/ha/month per irrigated block) and areas irrigated;
- vi. Crops grown on the land property (area and yield), quantities of each crop consumed on the property, and quantities sold off farm; and
- vii. Horticulture crop diaries and NZGAP records; and
- viii. The Nitrogen Reference Point Data as defined in Schedule B clause d; and
- ix. Soil test data – including anion storage capacity; and
- x. A map which shows property boundaries, block management areas, retired/non-productive areas and areas used for effluent irrigation.

Advice note: For the avoidance of doubt, financial information contained within the above records may be redacted (blacked out) prior does not need to it being provided to the Waikato Regional Council.

Table 1: Data input methodology for ensuring consistency of Nitrogen Reference Point data using the OVERSEER® Model<sup>132</sup>

OVERSEER®Parameter	Setting that must be used	Explanatory note
Farm model  Pastoral and horticulture	To cover the entire enterprise including riparian, retired, forestry, and yards and races. The model is to include non-contiguous properties that are part of the enterprise that are in the same sub-catchment. If the farm (for example where dairy animals are grazed or wintered) is part of another farming business such as a drystock farm, the losses from those animals will be represented in the drystock farm's Overseer model.	To capture the "whole farm" in one Overseer® file, where possible, to truly represent nitrogen losses from farm in the catchment area.
Location  Pastoral and horticulture	Select Waikato Region	This setting has an effect on climate settings and some animal characteristics and is required to ensure consistency.
Animal distribution — relative productivity pastoral only	Use "no differences between blocks" with the following exceptions: ▪ Grazed pines or other woody vegetation. In this case use "Relative yield" and set the grazed pine blocks to 0.4 (40%). ▪ Where the farm has a mixture of irrigated and non irrigated areas. In this case use "Relative yield" and set the irrigated area to 1 (100%), and the non irrigated areas to 0.75 (75%).	
Wetlands	Entered as Riparian Blocks	As per the 2016 OVERSEER® Best Practice Data Input Standards.
Stock number entry	Based on specific stock numbers only	To ensure consistency and accuracy of stock number inputs.
Animal weights	Only use OVERSEER® defaults — do not enter in weights and use the age at start setting where available (national averages).	Accurate animal weights are difficult to obtain and prove.
Block climate data	Only use the Climate Station tool For contiguous blocks use the coordinates from the location of the dairy shed or the middle of the farm area (for non dairy). For non contiguous blocks use individual blocks' climate station coordinates.	
Soil description	Use Soil Order — obtained from S-Map or where S-Map is unavailable from LRI 1:50,000 data or a soil map of the farm.	To ensure consistency between areas of the region that have S-Map data and those that don't.
Missing data	In the absence of Nitrogen Referencing information being provided the Waikato Regional Council will use appropriate default numbers for any necessary inputs to the OVERSEER® model (such default numbers will generally be around 75%	Some farms will not be able to supply data, therefore a default must be established.

<sup>132</sup> Ballance PC1-6570, FANZ PC1-10642, Beef and Lamb PC1-11506, Fonterra PC1-10517

	of normal Freshwater Management Unit (average values for those inputs).	
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**Schedule C - Stock exclusion/Te Āpitianga C – Te aukatinga o ngā kararehe**

Except as provided by Exclusions I. ~~and II. and III.~~, cattle, horses, deer and pigs ~~stock~~<sup>133</sup> must be excluded from the water bodies listed in 6. i. to iv. below as follows:

1. The water bodies on land with a slope of up to X degrees<sup>134</sup> must be fenced to exclude cattle, horses, deer and pigs, unless those animals are prevented from entering the bed of the water body by a stock proof natural or constructed<sup>135</sup> barrier formed by topography or vegetation.

**Advice note:** Clause 1 does not authorise the construction of fences or other barriers in the bed of a river or lake, or in a wetland.

2. New temporary, permanent or virtual<sup>136</sup> fences installed after 22 October 2016 must be located to ensure cattle, horses, deer and pigs will be excluded from the bed of the water body. The fences must be located at a distance of not less than ~~cannot be within one metre of the water body (excluding constructed wetlands).~~
  - a. 1 metre from the outer edge of the bed for land with a slope of less than 15 degrees; and
  - b. 3 metres from the outer edge of the bed for land with a slope between 15 and 25 degrees; and
  - c. 10 metres from the outer edge of the bed for artificial or modified watercourses that are the full responsibility of a territorial authority or Waikato Regional Council for maintenance purposes.<sup>137</sup>
3. ~~Livestock~~ Cattle, horses, deer and pigs<sup>138</sup> must not ~~be permitted to~~<sup>139</sup> enter onto or pass across the bed of the water body, except when using a livestock crossing structure [OPTION TO ADD or when they are being supervised and actively driven across a water body in one continuous movement provided no more than one crossing per week occurs].

**Advice note:** Clause 3 does not authorise the construction of stock crossing structures in the bed of a river or lake, or in a wetland.<sup>140</sup>

4. For land use authorised under Rules 3.11.5.1 or 3.11.5.2, clauses 1 and 2 must be complied with:
  - a. By 1 July 2023 for properties ~~and enterprises~~ within Priority 1 sub-catchments listed in Table 3.11-2.
  - b. By 1 July 2026 for properties ~~and enterprises~~ within Priority 2 and Priority 3 sub-catchments listed in Table 3.11-2.
5. For land use authorised under Rules [3.11.5.3,] 3.11.5.4 or 3.11.5.5, clauses 1 and 2 must be complied with by the date and in the manner specified in the property's ~~or enterprise's~~ Farm Environment Plan, which shall be within 3 years following the dates by which a Farm Environment Plan must be provided to the Council, or in any case no later than 1 July 2026.
6. Water bodies from which cattle, horses, deer and pigs must be excluded:
  - a. The bed of a river (including any stream and modified river or stream) or artificial watercourse that is permanently or intermittently flowing [OPTION TO ADD and where the bed is predominantly unvegetated and comprises exposed fine sediment, sand, gravel, boulders or similar material or aquatic vegetation]; and
  - b. The bed of any lake; and
  - c. Any wetland, including a constructed wetland.
    - i. ~~Any river that continually contains surface water.~~
    - ii. ~~Any drain that continually contains surface water.~~
    - iii. ~~Any wetland, including a constructed wetland.~~
    - iv. ~~Any lake.~~<sup>141</sup>

Exclusions:

The following situations are excluded from clauses 1, 2 and ~~23~~:

- I. Where the entry onto or passing across the bed of the water body is by horses that are being ridden or led.
- ~~II. Where the entry onto or passing across the bed of the water body is by a feral animal.~~<sup>142</sup>
- III. Constructed ponds or constructed wetlands in which deer or pigs wallow that are located at least 10m away from the bed of a water body and which are not connected by an overland flow path to a water body.

<sup>133</sup> Dairy Goat Co-Operative (N.Z) Ltd PC1-4135

<sup>134</sup> Beef and Lamb PC1-11507

<sup>135</sup> Fish and Game PC1-11022

<sup>136</sup> Ashby, J L and R J V1PC1-879, Beef and Lamb V1PC1-1724

<sup>137</sup> Cl. 16 to ensure consistency with Rule 4.2.18.1 of the WRP

<sup>138</sup> Dairy Goat Co-Operative (N.Z) Ltd PC1-4135, A and S Dudin PC1-4910, A and M Goddard PC1-2341

<sup>139</sup> Fonterra V1PC1-757, **Waipa Waipā** DC PC1-3249, Waitomo DC PC1-10312

<sup>140</sup> Beef and Lamb PC1-11507

<sup>141</sup> DoC PC1-11055

<sup>142</sup> G Kilgour PC1-1923, A McGovern PC1-8327, Waipapa Farms Ltd and Carlyle Holdings Ltd PC1-4716

## Schedule 1 - Requirements for Farm Environment Plans/Te Āpitiwhanga 1: Ngā Herenga i ngā Mahere Taiao ā-Pāmu

The Farm Environment Plan (FEP) will be prepared in accordance with Parts A, and B below, reviewed in accordance with Part C, and changed in accordance with Part D.

This schedule applies in part or full to all farming activities depending on the level of farm intensity (Medium or High as defined in Rules 3.11.5.2A and Rule 3.11.5.3 respectively – noting that Low intensity farms do not required FEP in accordance with Rule 3.11.5.2).

- **Medium Intensity Farm** FEPs are required to satisfy Part B 1, 2, 3 and 5. Low intensity farms identify the key mitigation considerations for each of these areas.
- **Higher Intensity Farm** FEPs are required to satisfy Part B 1, 2, 4 and 5, which benchmarks against GFP in each of the key GFP management areas.

The definition for farm intensity is primarily stocking rate based, being:

Medium intensity: have an annual average stocking rate of less than 18 SU per ha. Contaminants of greatest risk are sediment and phosphorus and are reflected in FEP requirements below.

High intensity: (with the greatest risk potentially focusing on nitrogen and pathogens) have an annual average stocking rate of greater than 18 SU per ha. Contaminants of greatest risk, are nitrogen and pathogens and are reflected in FEP requirements below.

*[Note: While stocking rate has been used above to define medium vs high intensity farms (and as per the rule criteria) stocking rate can change over time. While it would be inconsistent with the rules, other classification systems could be used to define of high and medium intensity farms, such as slope (which is used in the NPS) or land use. These alternatives are not favoured due to either their fixed nature that does not reflect potential of changing farm practices and overtime, or the rapid change in effects based on a land use criteria].*

### **PART A – PROVISION OF FEP (all Farms)**

An FEP must be submitted to Waikato Regional Council (the council) using either:

1. A council digital FEP tool including the matters set out in Part B below to the extent relevant; OR
2. An industry prepared FEP that:
  - a) includes the following minimum components:
    - i. the matters set out in Parts B below to the extent relevant; and
    - ii. performance measures that are capable of being reviewed as set out in Part C below
  - b) has been approved by the Chief Executive of Waikato Regional Council as meeting the criteria in (a) and capable of providing FEPs in a digital format, consistent with the council data exchange specifications.

The Waikato Regional Council data exchange specifications will be developed in consultation with the farming industry and set out the standards and detail of the data exchange process to be used by external industry parties in the provision of FEPs.

### **PART B – FEP CONTENT**

The FEP shall contain as a minimum:

1. The property or enterprise details:
  - a) Full name, address and contact details (including email addresses and telephone numbers) of the person responsible for the land use activities;
  - b) Legal description of the land and any relevant farm identifiers such as dairy supply number.
2. A map(s) or aerial photos at a scale that clearly shows:
  - a) The boundaries of the property or land areas being farmed;
  - b) The boundaries of the main land management units or land uses on the property or within the farm enterprise;
  - c) The location of any Schedule C waterbodies;
  - d) The location of riparian vegetation and fences adjacent to water bodies;
  - e) The location on any waterways where stock have access or there are stock crossings;
  - f) The location of any critical source areas and hotspots for contaminant loss to groundwater or surface water; and
  - g) The location(s) of any required actions to support the achievement of the objectives and principles listed in section 3.

#### **Medium Intensity Farm**

3. For medium intensity farms an assessment of whether farming practices are consistent with each of the following objectives and, principles; and targets, including:
- a. A description of those farming practices that will continue to be undertaken in a manner consistent with the whole farm objectives and principles;
  - A description of those farming practices that are not consistent with the objectives or principles, and a description of the time bound actions or practices that will be adopted to ensure the objectives or principles are met; and
  - Where appropriate a description of the timing and actions to meet the relevant objectives, principles and/or targets.

**3a – Management area: Whole farm**

**Objective 1**

To manage farming activities according to good farming practice, and in a way that minimises the loss of contaminants from the farm.

**Principles**

- Identify the characteristics of the farm system, the risks that the farm system poses to water quality, and the good farming practices that minimise the losses of sediment, and phosphorus, and to a lesser extent microbial pathogens, phosphorus and nitrogen.
- Maintain accurate and auditable records of annual farm inputs, outputs and management practices.
- Manage farming operations to minimise losses of sediment, microbial pathogens, phosphorus and nitrogen to water, and maintain or enhance soil structure.
- Appropriately manage all Land Use Capability Class 7 and Class 8 areas to ensure appropriate soil conservation measures are in place.

**Targets:**

- High risk areas identified.
- Accurate farm records are kept of annual farm inputs, outputs and management practices.
- Management practices are in place to minimise losses of sediment and phosphorus, and maintain or enhance soil structure.
- Actions that can minimize losses of microbial pathogens and nitrogen to water have been identified.
- Prepare and apply a land use and grazing management policy for specific areas on the farm in order to maintain and improve the physical and biological condition of soils appropriate for the vegetation cover used.

**High Intensity Farm**

- For high intensity farms an assessment of the risk associated with the farming activities on the property with respect to key GFP Management Areas, and the priority of those identified risks, having regard to sub-catchment targets in Table 3.11-1 and the priority of lakes within the sub-catchment. As a minimum, the risk assessment shall include (where relevant to the particular land use):\
  - a description of how each of the objectives, principles and targets for the GFP Management Area, where relevant to that property, will be met and the specific actions that will be implemented to attain the targets;
  - provide a timeframe within which actions identified for each GFP Management Area to achieve the objectives and targets will be completed and to what standard they will be completed; and
  - description of the records required to be kept for measuring performance and attainment of the targets and objectives. Detail should be commensurate with the scale of the environmental effects and risks and be suitable for audit.

**GFP Management Areas are:**

- Whole Farm
- Nutrient management
- Waterways (riparian areas, drains, rivers, lakes, wetlands)
- Land and Soil
- Collected Animal Effluent
- Water and Irrigation
- Mahinga Kai

**4a – Management area: Whole farm**

### **Objective 1**

To manage farming activities according to good farming practice, and in a way that minimises the loss of contaminants from the farm.

#### **Principles**

1. Identify the characteristics of the farm system, the risks that the farm system poses (point and diffuse sources) to water quality, and the GFPs that minimise the losses of particularly nitrogen and microbial pathogens, but also phosphorus and sediment.
2. Manage farming operations to minimise losses of nitrogen, microbial pathogens, phosphorus and sediment to water, while maintaining or enhancing soil structure.
3. Maintain accurate and auditable records of annual farm inputs, outputs and management practices.

#### **Targets:**

1. High risk areas are identified for particularly nitrogen and microbial pathogens, but also phosphorus and sediment.
2. Management practices are in place to minimise losses of nitrogen and microbial pathogens, but also phosphorus and sediment.
3. Accurate farm records are kept of annual farm inputs, outputs and management practices.

### **4b – Management Area: Nutrient management**

#### **Objective 2**

To minimise nutrient losses to water while maximising nutrient use efficiency.

#### **Principles**

1. Monitor soil phosphorus levels and maintain them at or below the agronomic optimum for the farm system.
2. Manage the amount and timing of fertiliser inputs, taking account of all sources of nitrogen and phosphorus, to match plant requirements and minimise risk of losses.
3. Store and load fertiliser to minimise risk of spillage, leaching and loss into waterbodies.
4. Ensure equipment for spreading fertilisers is well maintained and calibrated.
5. Store, transport and distribute feed to minimise wastage, leachate and soil damage.

#### **Targets:**

1. Representative whole farm soil testing is undertaken at a minimum every 3 years.
2. A nutrient budget is prepared and available nitrogen loss mitigation measures are implemented.
3. All fertiliser recommendations are prepared by an appropriately qualified person.
4. A fertiliser plan is prepared and used relating to the form of fertiliser applied, rate of application, placement of fertiliser and timing of application of fertiliser inputs to match the predicted plant requirements and minimise nutrient losses.
5. For cultivated crops, adopt the use of improved fertiliser products which have proved effective and available, such as formulated prills, coatings and slow release formulations.
6. Keep documentation for proof of fertiliser placement according to recommended instruction.

#### **Objective 3**

To farm in accordance with the nitrogen management requirements of PC1

#### **Principle**

*Either, where the property's NRP is ≤75<sup>th</sup> percentile:*

1. Farm in a manner that does not result in farm nitrogen losses exceeding the farm's NRP;

*Or, where the property's NRP is > than the 75<sup>th</sup> percentile*

2. Farm in a manner that does not result in farm nitrogen losses exceeding the 75<sup>th</sup> percentile for the FMU; or

#### **Targets:**

1. Nitrogen losses from farming activities are at or below the:
  - a. five-year rolling average annual nitrogen loss does not increase beyond the property or enterprise's NRP, and
  - b. consented nitrogen loss limits.
2. Where farms have a NRP > than the 75<sup>th</sup> percentile, actions, timeframes and other measures to ensure the diffuse discharge of nitrogen is reduced so that it does not exceed the 75<sup>th</sup> percentile NRP by [1 July 2026], except in the case of Rule 3.11.5.5.

### **4c – Management Area: Waterways (riparian areas, drains, rivers, lakes, wetlands)**

#### **Objective 4**

To minimise losses of sediment, microbial pathogens, phosphorus and nitrogen to waterways.

**Principles**

1. Identify risk of overland flow of phosphorus, sediment and microbial pathogens on the property and implement measures to minimise losses of these to waterbodies.
2. Locate and manage farm tracks, gateways, water troughs, self-feeding areas, stock camps, wallows and other sources of run-off to minimise risks to water quality.
3. Wetlands, riparian areas and the margins of surface waterbodies are managed to avoid damage to the bed and margins of the water body, and to avoid the direct input of nutrients, sediment, and microbial pathogens; and
4. Riparian margin settling and filtering areas will be provided for that consider the minimum continuous width that reflects the adjacent land slope and the flow/level of the water body.

**Targets:**

1. The farm map identifies the slope of land adjacent to waterbodies.
2. Setbacks and vegetated riparian margins of the specified width are maintained to minimise nutrient, sediment and microbial pathogen losses to waterbodies reflective of the surrounding slope. Particularly, where practicable the provision of minimum grazing setbacks from water bodies for stock exclusion should be used, including:
  - a. 1 metre for land with a slope of less than 15°; and
  - b. 3 metres for land with a slope between 15° and 25°.
3. Farm tracks, races, livestock crossings, gateways, water troughs, self-feeding areas, stock camps, wallows and other farming activities that are potential sources of sediment, nutrient and microbial pathogen loss are located on the farm map and evidence of management is provided that demonstrates practices to minimise the risks to surface water quality and that appropriate measures to minimise these discharges from these areas (e.g. cut-off drains, and shaping) are implemented.
4. An assessment is completed 3 yearly, and incorporated into the FEP, to identify opportunities to minimise losses to riparian areas through appropriate stocking policy, stock exclusion and/or measures to detain floodwaters and settle out or otherwise remove sediment, nitrogen, phosphorus and microbial pathogens (e.g. detention bunds, sediment traps, natural and constructed wetlands).

**Objective 5**

To exclude stock from waterbodies and minimise stock damage to the beds and margins of wetlands and riparian areas.

**Principles**

1. Exclude stock from waterbodies to the extent that it is compatible with ~~land form~~ landform, stock class and stock intensity. Where exclusion is not possible, mitigate impacts on waterways.
2. Exclude stock in a manner consistent with the requirements of schedule C.

**3d Targets:**

1. Records show stock are excluded from waterbodies in accordance with Schedule C, regional council rules or any granted resource consent.
2. Fencing and livestock crossing structures to achieve compliance with Schedule C are provided, and for areas with a slope exceeding 25o and where stream fencing is impracticable, alternative mitigation are measures are provided.

**4d – Management Area: Land and soil**

**Objective 6**

To minimise contaminant losses to waterways from soil disturbance and erosion.

**Principles**

1. Manage periods of exposed soil between crops/pasture to reduce risk of erosion, overland flow and leaching.
2. Manage or retire erosion-prone land to minimise soil losses through appropriate measures and practices.
3. Select appropriate paddocks for growing crops and intensive grazing, recognising and mitigating possible nitrogen and phosphorus, faecal, and sediment loss from critical source areas, by the identification of actively eroding areas, erosion prone areas, and areas of bare soil and applying appropriate measures for erosion and sediment control and re-vegetation.
4. Manage grazing and crops to minimise losses from critical source areas.
5. ~~3e~~ Appropriately manage all Land Use Capability Class 8 and all Class 7 to ensure intensive soil conservation measures are in place.
6. The physical and biological condition of soils is maintained or improved in order to minimise the movement of sediment, phosphorus and other contaminants to waterways.

**Targets:**

1. Records show farming activities are managed so to minimize erosion;
2. Records show the extent that farming practices have been implemented that optimise infiltration of water into the soil profile and minimise run-off of sediment loss;
3. A plan has been developed that provides for, and the maintenance of, appropriate buffers between cultivated areas and water bodies (minimum 2 m setback);
4. Records show that where overland flows enters and exits the paddock in rainfall events, appropriate measures to divert overland flows from entering any cultivated paddock has been implemented;
5. Measures to trap sediment leaving cultivated paddocks in overland flows are in place;
6. The farm map identifies slopes over 15° and records are available that show how cultivation on them will be avoided; unless contaminant discharges to water bodies from that cultivation can be avoided;
7. Records show that for cultivation on slopes of less than 15° that appropriate erosion and sediment controls for each paddock that will be cultivated have been implemented;
8. Prepare and apply a land use and grazing management policy for specific areas on the farm in order to maintain and improve the physical and biological condition of soils appropriate for pasture cover on all land types; and
9. For vegetable growers, at a block level minimum scale, prepare and have an erosion and sediment control plan developed in accordance with the Erosion and Sediment Control Guidelines for Vegetable Production June 2014.

**4e – Management Area: Collected Animal Effluent**

**Objective 7**

To minimise contaminant losses to waterways from farm animal effluent and to manage the risks associated with the operation of effluent systems to ensure they are compliant 365 days of the year.

**Principles**

1. Ensure the effluent system meets industry-specific Code of Practice or equivalent standard.
2. Have sufficient storage available for farm effluent and wastewater and actively manage effluent storage levels.
3. Ensure equipment for spreading effluent and other organic manures is well maintained and calibrated.
4. Apply effluent to pasture and crops at depths, rates and times to match plant requirements and soil water holding capacity.

**3f Targets:**

1. Records show effluent systems meet industry Codes of Practice or an equivalent standard;
2. Records show effluent systems are regularly maintained and calibrated;
3. Records show the timing and rate of application of effluent and solid animal waste to land is managed so as to minimise the risk of contamination of groundwater or surface water bodies;
4. Sufficient and suitable storage is available to enable animal effluent and wash-down water to be stored when soil conditions are unsuitable for application; and
5. Staff are trained in the operation, maintenance and use of effluent storage and application systems.

**4f – Management Area: Water and irrigation**

**Objective 8**

To operate irrigation systems efficiently and ensuring that the actual use of water is monitored and is efficient.

**Principles**

1. Manage the amount and timing of irrigation inputs to meet plant demands and minimise risk of leaching and run off.
2. Contaminant loss arising from the irrigation system to groundwater or surface water will be minimised.
- 2-3. Design, check and operate irrigation systems to minimise the amount of water needed to meet production objectives.

**Targets:**

1. Records show actual water use is efficient for the intended use;
2. New irrigation systems are designed and installed in accordance with industry Codes of Practices and standards;
3. Records show the performance of irrigation systems are assessed annually and irrigation systems are maintained and operated to apply irrigation water at their optimal efficiency;
4. The timing and depth of irrigation water applied takes account of crop requirements and is justified through soil moisture monitoring or soil water budgets and climatic information; and
5. Staff are trained in the operation, maintenance and use of irrigation systems.

**4g – Management Area: Mahinga kai**

**Objective 9**

To protect and with time enhance mahinga kai values.

**Principles:**

1. Mahinga kai values of surface waterbodies on the property are recognised by achieving other objectives, principles and targets in the FEP.

**Target:**

1. Maintaining existing indigenous vegetation in accordance with relevant regional council and district council vegetation clearance rules or any granted resource consent;
  2. Identify opportunities to undertake additional plantings of indigenous vegetation, carry out and managing any additional plantings in accordance with regional council guidelines for riparian planting;
  3. Undertaking farming activities in a manner that minimises adverse effects on existing indigenous vegetation and on any additional plantings of indigenous riparian vegetation; and
  4. Managing pest plants in accordance with regional council rules.
4. The FEP shall include for each objective and principle and target in section 3 and 4 above:
- a) Detail and content that reflects the scale of environmental risk posed by the activity;
  - b) A defined and auditable description of the actions and practices to be undertaken to farm in accordance with the objectives and principles in Part B;
  - c) The records and evidence that must be kept that demonstrate performance and the achievement of an objective or principle listed in Part B.

**PART C – FEP REVIEW REQUIREMENTS**

The FEP, or its outline required at the time of application, shall be reviewed by a Certified Farm Environment Planner for consistency with this schedule:

1. Prior to lodging a landuse consent application with the Council under rule 3.11.5.2A, 3.11.5.3 – 3.11.5.5 of PC1; and
2. Within 12 months prior to the submission date of the granting of that a final FEP as required by consent application; conditions; and
3. In accordance with the review intervals set out in the conditions of that resource consent.

The purpose of the review is to provide an expert opinion whether the farming activities on the property are being undertaken in a manner consistent with the objectives and principles set out in Part B of this schedule.

The review shall be undertaken by a Certified Farm Environment Planner who holds a reviewing endorsement (issued by WRC), and must be undertaken in accordance with the review process set out the Waikato Regional Councils FEP Independent Review manual.

Should a FEP be prepared by a CPEP, then any review and approval of the FEP is to be undertaken by a different CFEP to whom prepared the FEP.

The review shall be undertaken by re-assessing the FEP in accordance with the requirements set out in this schedule.

The results of the review shall be provided to the Waikato Regional Council, within 20 working days of the review due date for High Intensity Farms and upon request by the Waikato Regional Council for Medium Intensity Farms.

**PART D – FEP CHANGES**

Unless otherwise required by the Waikato Regional Council in accordance with any conditions of the resource consent, changes can be made to the FEP without triggering the need for review by a CFEP, provided:

1. The farming activity remains consistent with Part B of this schedule
2. The change to the FEP does not contravene any mandatory requirement of the resource consent, or any requirement of the Regional Plan that is not already authorised.
3. The nature of the change is documented in writing and made available to any CFEP undertaking a review, or to the Waikato Regional Council, on request.

A Farm Environment Plan shall be prepared in accordance with the requirements of A below. The Farm Environment Plan shall be certified as meeting the requirements of A by a Certified Farm Environment Planner.

The Farm Environment Plan shall identify all sources of sediment, nitrogen, phosphorus and microbial pathogens, and identify actions, and timeframes for those actions to be completed, in order to reduce the diffuse discharges of these contaminants.

~~The Farm Environment Plan must clearly identify how specified minimum standards will be complied with.~~

~~The requirements set out in A apply to all Farm Environment Plans, including those prepared within a Certified Industry Scheme.~~

~~This schedule applies to all farming activities, but it is acknowledged that some provisions will not be relevant to every farming activity.~~

~~A. Farm Environment Plans shall contain as a minimum:~~

~~1. The property or enterprise details:~~

- ~~(a) Full name, address and contact details (including email addresses and telephone numbers) of the person responsible for the property or enterprise.~~
- ~~(b) Trading name (if applicable, where the owner is a company or other entity).~~
- ~~(c) A list of land parcels which constitute the property or enterprise:
  - ~~(i) the physical address and ownership of each parcel of land (if different from the person responsible for the property or enterprise) and any relevant farm identifiers such as the dairy supply number, Agribase identification number, valuation reference; and~~
  - ~~(ii) The legal description of each parcel of land.~~~~

~~2. An assessment of the risk of diffuse discharge of sediment, nitrogen, phosphorus and microbial pathogens associated with the farming activities on the property, and the priority of those identified risks, having regard to sub-catchment targets in Table 3.11 1 and the priority of lakes within the sub-catchment. As a minimum, the risk assessment shall include (where relevant to the particular land use):~~

- ~~(a) A description of where and how stock shall be excluded from water bodies for stock exclusion including:
  - ~~(i) the provision of fencing and livestock crossing structures to achieve compliance with Schedule C; and~~
  - ~~(ii) for areas with a slope exceeding 25o and where stream fencing is impracticable, the provision of alternative mitigation measures.~~~~
- ~~(b) A description of setbacks and riparian management, including:
  - ~~(i) The management of water body margins including how damage to the bed and margins of water bodies, and the direct input of contaminants will be avoided, and how riparian margin settling and filtering will be provided for; and~~
  - ~~(ii) Where practicable the provision of minimum grazing setbacks from water bodies for stock exclusion of 1 metre for land with a slope of less than 15° and 3 metres for land with a slope between 15° and 25°; and~~
  - ~~(iii) The provision of minimum cultivation setbacks of 5 metres.~~~~
- ~~(c) A description of the critical source areas from which sediment, nitrogen, phosphorus and microbial pathogens are lost, including:
  - ~~(i) the identification of intermittent waterways, overland flow paths and areas prone to flooding and ponding, and an assessment of opportunities to minimise losses from these areas through appropriate stocking policy, stock exclusion and/or measures to detain floodwaters and settle out or otherwise remove sediment, nitrogen, phosphorus and microbial pathogens (e.g. detention bunds, sediment traps, natural and constructed wetlands); and~~
  - ~~(ii) the identification of actively eroding areas, erosion prone areas, and areas of bare soil and appropriate measures for erosion and sediment control and re-vegetation; and~~
  - ~~(iii) an assessment of the risk of diffuse discharge of sediment, nitrogen, phosphorus and microbial pathogens from tracks and races and livestock crossing structures to waterways, and the identification of appropriate measures to minimise these discharges (e.g. cut-off drains, and shaping); and~~~~

- ~~(iv) the identification of areas where effluent accumulates including yards, races, livestock crossing structures, underpasses, stock camps, and feed-out areas, and appropriate measures to minimise the risk of diffuse discharges of contaminants from these areas to groundwater or surface water; and~~
  - ~~(v) the identification of other 'hotspots' such as fertiliser, silage, compost, or effluent storage facilities, wash-water facilities, offal or refuse disposal pits, and feeding or stock holding areas, and the appropriate measures to minimise the risk of diffuse discharges of contaminants from these areas to groundwater or surface water.~~
  - ~~(d) An assessment of appropriate land use and grazing management for specific areas on the farm in order to maintain and improve the physical and biological condition of soils and minimise the diffuse discharge of sediment, nitrogen, phosphorus and microbial pathogens to water bodies, including:
    - ~~(i) matching land use to land capability; and~~
    - ~~(ii) identifying areas not suitable for grazing; and~~
    - ~~(iii) stocking policy to maintain soil condition and pasture cover; and~~
    - ~~(iv) the appropriate location and management of winter forage crops; and~~
    - ~~(v) suitable management practices for strip grazing.~~~~
  - ~~(e) A description of nutrient management practices including a nutrient budget for the farm enterprise calculated using the model OVERSEER<sup>®</sup> in accordance with the OVERSEER<sup>®</sup> use protocols, or using any other model or method approved by the Chief Executive Officer of Waikato Regional Council.~~
  - ~~(f) A description of cultivation management, including:
    - ~~(i) The identification of slopes over 15° and how cultivation on them will be avoided; unless contaminant discharges to water bodies from that cultivation can be avoided; and~~
    - ~~(ii) How the adverse effects of cultivation on slopes of less than 15° will be mitigated through appropriate erosion and sediment controls for each paddock that will be cultivated including by:
      - ~~(a) assessing where overland flows enters and exits the paddock in rainfall events; and~~
      - ~~(b) identifying appropriate measures to divert overland flows from entering the cultivated paddock; and~~
      - ~~(c) identifying measures to trap sediment leaving the cultivated paddock in overland flows; and~~
      - ~~(d) maintaining appropriate buffers between cultivated areas and water bodies (minimum 5m setback).~~
      - ~~(e) A description of collected animal effluent management including how the risks associated with the operation of effluent systems will be managed to minimise contaminant discharges to groundwater or surface water.~~
      - ~~(f) A description of freshwater irrigation management including how contaminant loss arising from the irrigation system to groundwater or surface water will be minimised.~~~~~~
- ~~3. A spatial risk map(s) at a scale that clearly shows:~~
- ~~(a) The boundaries of the property; and~~
  - ~~(b) The locations of the main land uses<sup>143</sup> that occur on the property; and~~
  - ~~(c) The locations of existing and future mitigation actions to manage contaminant diffuse discharges; and~~
  - ~~(d) Any relevant internal property boundaries that relate to risks and mitigation actions described in this plan; and~~
  - ~~(e) The location of continually flowing rivers, streams, and drains and permanent lakes, ponds and wetlands; and~~
  - ~~(f) The location of riparian vegetation and fences adjacent to water bodies; and~~
  - ~~(g) The location of critical source areas for contaminants, as identified in 2 (c) above.~~

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<sup>143</sup> For dairy farms this might be the OVERSEER<sup>®</sup> blocks, for drystock farms this might be Land Use Capability blocks.

4. A description of the actions that will be undertaken in response to the risks identified in the risk assessment in 2 above (having regard to their relative priority) as well as where the mandatory time-bound actions will be undertaken, and when and to what standard they will be completed.

5. A description of the following:

- (a) Actions, timeframes and other measures to ensure that the diffuse discharge of nitrogen from the property or enterprise, as measured by the five-year rolling average annual nitrogen loss as determined by the use of the current version of OVERSEER®, does not increase beyond the property or enterprise's Nitrogen Reference Point, unless other suitable mitigations are specified; or
- (b) Where the Nitrogen Reference Point exceeds the 75th percentile nitrogen leaching value, actions, timeframes and other measures to ensure the diffuse discharge of nitrogen is reduced so that it does not exceed the 75th percentile nitrogen leaching value by 1 July 2026, except in the case of Rule 3.11.5.5.

### Vegetable growing minimum standards

Farm environment plans required under Rule 3.11.5.5 shall, in addition to the matters set out above, ensure the following matters are addressed:

1	Nitrogen, Phosphorus	Annual soil testing regime, fertiliser recommendations by block and by crop
2	Nitrogen, Phosphorus	Tailored fertiliser plans by block and by crop
3	Nitrogen, Phosphorus	Both (1) and (2) prepared by an appropriately qualified person
4	Nitrogen, Phosphorus	Annual calibration of fertiliser delivering systems through an approved programme such as Spreadmark/Fertspread
5	Soil/Phosphorus	As a minimum by block: an approved erosion and sediment control plan constructed in accordance with the Erosion and Sediment Control Guidelines for Vegetable Production June 2014
6	Nitrogen, Phosphorus	Documentation available for proof of fertiliser placement according to recommended instruction
7	Nitrogen, Phosphorus	Adoption and use of improved fertiliser products proved effective and available such as formulated prills, coatings and slow release mechanisms
8	Nitrogen, Phosphorus	Evidence available to demonstrate split applications by block/crop following expert approved practice relating to: <ul style="list-style-type: none"> <li>○ form of fertiliser applied</li> <li>○ rate of application</li> <li>○ placement of fertiliser</li> <li>○ timing of application<sup>144</sup></li> </ul>

<sup>144</sup> J and A Anderson PC1-4261, Beef and Lamb PC1-11508, Federated Farmers V1PC1-766, Horticulture NZ PC1-12435, S and A Kelton PC1-7855, Maniapoto Maori Trust Board PC1-9366

## Schedule 2 - Certification of ~~Industry Sector Schemes/Te Āpiti~~hanga 2 – Te whakamana i ngā tohu o ngā Kaupapa Ahumahi

The purpose of this schedule is to set out the minimum standards for Certified Sector Schemes, ~~criteria against which applications to approve an industry scheme will be assessed.~~

~~The application~~ Applications for approval as a Certified Sector Scheme shall be lodged with the Waikato Regional Council, and ~~shall~~ include information that demonstrates how the following requirements standards are met. The Waikato Regional Council may request further information or clarification on the application as it sees fit.

Approval will be at the discretion of the Chief Executive Officer of the Waikato Regional Council subject to the Chief Executive Officer being satisfied that the scheme will meet the standards set out in sections A to D below ~~effectively deliver on the assessment criteria.~~

### **Assessment Criteria**

#### **A. Certified Industry Scheme System**

The application must demonstrate that the Certified Industry Scheme:

- ~~1. Is consistent with:~~
  - ~~(a) the achievement of the water quality targets referred to in Objective 3; and~~
  - ~~(b) the purposes of Policy 2 or 3; and~~
  - ~~(c) the requirements of Rules 3.11.5.3 and 3.11.5.5.~~
- ~~2. Has an appropriate ownership structure, governance arrangements and management.~~
- ~~3. Has documented systems, processes, and procedures to ensure:~~
  - ~~(a) Competent and consistent performance in Farm Environment Plan preparation and audit.~~
  - ~~(b) Effective internal monitoring of performance.~~
  - ~~(c) Robust data management.~~
  - ~~(d) Timely provision of suitable quality data to Waikato Regional Council.~~
  - ~~(e) Timely and appropriate reporting.~~
  - ~~(f) Corrective actions will be implemented and escalated where required, including escalation to Waikato Regional Council if internal escalation is not successful.~~
  - ~~(g) Internal quality control.~~
  - ~~(h) The responsibilities of all parties to the Certified Industry Scheme are clearly stated.~~
  - ~~(i) An accurate and up to date register of scheme membership is maintained.~~
  - ~~(j) Transparency and public accountability of Certified Industry Schemes~~
  - ~~(k) The articles of the scheme are available for public viewing.~~

#### **B. People**

The application must demonstrate that:

- ~~1. Those generating and auditing Farm Environment Plans are suitably qualified and experienced.~~
- ~~2. Auditing of Farm Environment plan requirements is independent of the Farm Environment Plan preparation and approval.~~

#### **C. Farm Environment Plans**

The application must demonstrate that Farm Environment Plans are prepared in conformance with Schedule 1.

### **A. Governance and management**

Applications must include:

1. A description of the governance arrangements of the Scheme;
2. The contractual arrangements between the Scheme and its members;
3. A description of the process for gaining and ceasing membership;
4. A description of the Scheme area, including land uses, key environmental issues, property boundaries and ownership details of members' properties;
5. A procedure for keeping records of the matters in (4) above and advising WRC of changes;
6. A draft contractual agreement with the Waikato Regional Council that will require the Scheme, on certification, to meet and maintain the standards outlined in Section A to D below.

**B. Preparation of Farm Environment Plans**

Applications must include:

1. A statement of the Scheme's capability and capacity for preparing and certifying Farm Environment Plans that meet the requirements of Schedule 1, including the qualifications and experience of any personnel employed by or otherwise contracted to the Scheme to prepare or certify Farm Environment Plans;
2. An outline of timeframes for developing Farm Environment Plans for its members.

**C. Implementation of Farm Environment Plans**

Applications must include:

1. A statement of the Scheme's capability and capacity for monitoring and assessing the implementation of Farm Environment Plans, including the qualifications and experience of any personnel employed by or otherwise contracted to the Scheme to monitor or assess implementation of Farm Environment Plans;
2. A description of the expectations and agreements around landowner and property record-keeping;
3. A strategy for identifying and managing poor performance in implementing Farm Environment Plans.

**D. Audit**

Applications must include a description of an annual audit process to be conducted by an independent body, including:

1. A process for assessing performance against agreed actions in Farm Environment Plans at an individual property level;
2. A statement of how audit results will be shared with the Scheme's members and the wider community;
3. A process for assessing the performance of any personnel employed by or otherwise contracted to the Scheme to prepare, certify, and audit the implementation of Farm Environment Plans.

A summary audit report must be submitted to the Waikato Regional Council annually.<sup>145</sup>

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<sup>145</sup> Fonterra PC1-10561, Ata Rangi PC1-6244, DOC PC1-10648, Southern Pastures Limited Partnership PC1-11197

### 3.11.1 List of Tables and Maps/Te Rārangi o ngā Ripanga me ngā Mahere

Table 3.11-1: Short term water quality limits and targets freshwater objectives and long term numerical desired water quality states<sup>146</sup> targets for the Waikato and Waipā River catchments/Ngā whāinga ā-tau taupoto, tauroa hoki mō te kōunga wai i te riu o ngā awa o Waikato me Waipā

Table 3.11-2 List of sub-catchments showing Priority 1, Priority 2, and Priority 3 sub-catchments/Te rārangi o ngā riu kōawaawa e whakaatu ana i te riu kōawaawa i te Taumata 1, i te Taumata 2, me te Taumata 3

Map 3.11-1: Map of the Waikato and Waipā River catchments, showing Freshwater Management Units

Map 3.11-2: Map of the Waikato and Waipā River catchments, showing sub-catchments

**Table 3.11-1: Short term water quality limits and targets freshwater objectives and long term numerical desired water quality states targets for the Waikato and Waipā River catchments/Ngā whāinga ā-tau taupoto, tauroa hoki mō te kōunga wai i te riu o ngā awa o Waikato me Waipā**

Within the Waikato and Waipā River catchments, these targets freshwater objectives and desired water quality states are used in decision-making processes guided by the objectives in Chapter 3.11 and for future monitoring of changes in the state of water quality within the catchments. With regard to consent applications for diffuse discharges or point source discharges of nitrogen, phosphorus, sediment and microbial pathogens, it is not intended, nor is it in the nature of water quality targets freshwater objectives and the desired water quality states<sup>147</sup>, that they be used directly as receiving water compliance limits/standards. Reference should also be made to Method 3.2.4.1.

#### Explanatory note to Table 3.11-1

The tables set out the concentrations (all attributes except clarity) or visibility distance (clarity attribute) to be maintained or achieved by actions taken in the short term and at over 80 years for rivers and tributaries, and at 80 years for lakes FMUs. Where water quality is currently high (based on 2010-2014 monitoring data), the short term targets freshwater objectives and 80-year desired water quality states targets will be the same as the current state and there is to be no decline in quality (that is, no increase in attribute concentration or decrease in clarity). Where water quality needs to improve, the water quality states values to be achieved at a site indicate a short term and long term reduction in concentration or increase in clarity compared to the current state.

For example, at Otamakokore Stream, Upper Waikato River FMU:

- the current state value for median nitrate is 0.740 mgNO<sub>3</sub>-N/L. The short term targets freshwater objectives and 80-year desired water quality states targets are set at 0.740 mgNO<sub>3</sub>-N/L to reflect that there is to be no decline in water quality
- the current state value for E.coli is 696 E.coli/100ml. The 80-year desired water quality state target is set at 540 E.coli/100ml and the short term target is set at 10% of the difference between the current state value and the 80 year desired water quality state target<sup>148</sup>.

The achievement of the attribute targets in Table 3.11-1 will be determined through analysis of 5-yearly monitoring data. The variability in water quality (such as due to seasonal and climatic events) and the variable response times of the system to implementation of mitigations may mean that the targets are not observed for every attribute at all sites in the short term.

The effect of some contaminants (particularly nitrogen) discharged from land has not yet been seen in the water. This means that in addition to reducing discharges from current use and activities, further reductions will be required to address the load to come that will contribute to nitrogen loads in the water. There are time lags between contaminants discharged from land uses and the effect in the water. For nitrogen in the Upper Waikato River particularly, this is because of the time taken for nitrogen to travel through the soil profile into groundwater and then eventually into the rivers. This means that there is some nitrogen leached from land use change that occurred decades ago that has entered groundwater, but has not yet entered the Waikato River. In some places, water quality (in terms of nitrogen) will deteriorate before it gets better. Phosphorus, sediment and microbial pathogens and diffuse discharges from land have shorter lag times, as they reach water from overland flow. However, there will be some time lags for actions taken to address these contaminants to be effective (for example tree planting for erosion control)

<sup>146</sup> GBC Winstone PC1-3627

<sup>147</sup> GBC Winstone PC1-3627

<sup>148</sup> All recommended amendments to the Explanatory Note: GBC Winstone PC1-3627





Table 3.11-1: Middle Waikato River Freshwater Management Unit.

Catchment number	Site	Attributes																									
		Annual Median Chlorophyll <i>a</i> (mg/m <sup>3</sup> )		Annual Maximum Chlorophyll <i>a</i> (mg/m <sup>3</sup> )		Annual Median Total Nitrogen (mg/m <sup>3</sup> )		Annual Median Total Phosphorus (mg/m <sup>3</sup> )		Annual Median Nitrate (mg NO <sub>3</sub> -N/L)		Annual 95 <sup>th</sup> Percentile Nitrate (mg NO <sub>3</sub> -N/L)		Annual Median Ammonia <sup>1</sup> (mg NH <sub>4</sub> -N/L)		Annual Maximum Ammonia <sup>1</sup> (mg NH <sub>4</sub> -N/L)		Median <i>E. coli</i> (cfu/100mL)		95 <sup>th</sup> percentile <i>E. coli</i> (cfu/100mL)		% <i>E. coli</i> >540/100 mL (% of samples)		% <i>E. coli</i> >260/100 mL (% of samples)		% Clarity >1.0 m (% of measurements)	
		Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year
33	Waikato River Narrows Boat Ramp	5.5	5.0	23	23	410	410	28	25	0.235	0.235	0.545	0.545	0.010	0.010	0.018	0.018	39	39	265	265	2	2	5	5	88	90
25	Waikato River Horotiu Br	6.1	5.0	23	23	441	441	35.5	31	0.260	0.260	0.550	0.550	0.007	0.007	0.029	0.029	90	90	639	540	5	5	10	10	75	90
32	Karapiro Stm Hickey Rd Bridge	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.520	0.520	1.760	1.760	0.008	0.008	0.031	0.031	279	130	4518	540	24	5	50	20	42	50
35	Mangawhero Stm Cambridge-Ohaupo Rd	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	2.100	2.100	2.720	2.720	0.042	0.042	0.074	0.074	544	130	2920	540	46	5	82	20	5	50
29	Mangaonua Stm Hoeka Rd	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	1.505	1.505	2.100	2.100	0.037	0.037	0.051	0.051	1363	130	6372	540	79	5	89	20	39	50
31	Mangaone Stm Annebrooke Rd Br	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	2.580	2.400	3.200	3.200	0.009	0.009	0.020	0.020	733	130	2052	540	64	5	85	20	40	50
30	Mangakotukutuku Stm Peacockes Rd	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.800	0.800	2.350	2.350	0.082	0.082	0.141	0.141	463	130	11777	540	42	5	88	20	5	50
28	Waitawhiriwhiri Stm Edgecumbe Street	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.880	0.880	1.265	1.265	0.256	0.240	0.346	0.346	558	130	5922	540	50	5	80	20	5	50
23	Kirikiroa Stm Tauhara Dr	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.815	0.815	1.975	1.975	0.104	0.104	0.198	0.198	526	130	3312	540	48	5	80	20	5	50

<sup>1</sup> The annual median and annual maximum ammonia have been adjusted for pH

<sup>2</sup> This Attribute is expressed as a minimum requirement. To meet the Objective, the % of water clarity measurements exceeding 1.0m must be equal to or greater than the numerical value in Table 3.11-1.

<sup>3</sup> Attribute is not applicable to the sub-catchment

Table 3.11-1: Lower Waikato River Freshwater Management Unit

Catchment number	Site	Attributes																									
		Annual Median Chlorophyll <i>a</i> (mg/m <sup>3</sup> )		Annual Maximum Chlorophyll <i>a</i> (mg/m <sup>3</sup> )		Annual Median Total Nitrogen (mg/m <sup>3</sup> )		Annual Median Total Phosphorus (mg/m <sup>3</sup> )		Annual Median Nitrate (mg NO <sub>3</sub> -N/L)		Annual 95 <sup>th</sup> Percentile Nitrate (mg NO <sub>3</sub> -N/L)		Annual Median Ammonia (mg NH <sub>4</sub> -N/L)		Annual Maximum Ammonia (mg NH <sub>4</sub> -N/L)		Median <i>E. coli</i> (cfu/100mL)		95 <sup>th</sup> percentile <i>E. coli</i> (cfu/100mL)		% <i>E. coli</i> >540/100 mL (% of samples)		% <i>E. coli</i> >260/100 mL (% of samples)		% Clarity >1.0 m (% of measurements)	
		Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year
20	Waikato River Huntly-Tainui Br	5.9	5.0	19	19	577	500	44	31	0.365	0.365	1.010	1.010	0.005	0.005	0.015	0.015	125	125	1854	540	12	5	26	20	34	50
9	Waikato River Mercer Br	10.0	5.0	30	25	646	500	51	38	0.365	0.365	0.895	0.895	0.003	0.003	0.011	0.011	80	80	1449	540	11	5	20	20	No Degradation	
4	Waikato River Tuakau Br	11.3	5.0	37	25	586	500	51	38	0.325	0.325	0.890	0.890	0.003	0.003	0.008	0.008	80	80	1494	540	11	5	18	18	10	50
22	Komakorau Stm Henry Rd	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	1.310	1.310	5.120	3.500	0.250	0.240	0.419	0.400	1003	130	3474	540	77	5	85	20	5	50
17	Mangawara Stm Rutherford Rd Br	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.765	0.765	3.350	3.350	0.111	0.111	0.185	0.185	913	130	4955	540	64	5	84	20	5	50
19	Awaroa Stm (Rotowaro) Sansons Br	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.700	0.700	1.390	1.390	0.024	0.024	0.093	0.093	274	130	1800	540	17	5	58	20	37	50
14	Matahuru Stm Waiterimu Road	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.715	0.715	1.905	1.905	0.017	0.017	0.060	0.060	553	130	6147	540	59	5	80	20	5	50
16	Whangape Stm Rangiriri-Glen Murray Rd	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.004	0.004	0.795	0.795	0.008	0.008	0.143	0.143	211	130	583	540	9	5	41	20	5	50

Table 3.11-1: Lower Waikato River Freshwater Management Unit

Catchment number	Site	Attributes																									
		Annual Median Chlorophyll <i>a</i> (mg/m <sup>3</sup> )		Annual Maximum Chlorophyll <i>a</i> (mg/m <sup>3</sup> )		Annual Median Total Nitrogen (mg/m <sup>3</sup> )		Annual Median Total Phosphorus (mg/m <sup>3</sup> )		Annual Median Nitrate (mg NO <sub>3</sub> -N/L)		Annual 95 <sup>th</sup> Percentile Nitrate (mg NO <sub>3</sub> -N/L)		Annual Median Ammonia (mg NH <sub>4</sub> -N/L)		Annual Maximum Ammonia (mg NH <sub>4</sub> -N/L)		Median <i>E. coli</i> (cfu/100mL)		95 <sup>th</sup> percentile <i>E. coli</i> (cfu/100mL)		% <i>E. coli</i> >540/100 mL (% of samples)		% <i>E. coli</i> >260/100 mL (% of samples)		% Clarity >1.0 m (% of measurements)	
		Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year
12	Waerenga Stm Maramarua Taniwha Rd <sup>151</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.820	0.820	1.420	1.420	0.005	0.005	0.023	0.023	463	130	5098	540	35	5	76	20	28	50
8	Whangamarino River Jefferies Rd Br	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.625	0.625	2.500	2.500	0.011	0.011	0.055	0.055	553	130	4712	540	52	5	80	20	10	50
2	Mangatangi River SH2 Maramarua	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.110	0.110	1.290	1.290	0.006	0.006	0.038	0.038	355	130	5567	540	28	5	77	20	12	50
1	Mangatawhiri River Lyons Rd Buckingham Br	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.013	0.013	0.400	0.400	0.003	0.003	0.011	0.011	184	130	5108	540	12	5	29	20	75	90
10	Whangamarino River Island Block Rd	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.075	0.075	0.865	0.865	0.013	0.013	0.158	0.158	175	130	654	540	16	5	37	20	5	50
3	Whakapipi Stm SH22 Br	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	3.390	2.400	5.165	3.500	0.006	0.006	0.084	0.084	301	130	1773	540	32	5	69	20	59	70
7	Ohaeroa Stm SH22 Br	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	1.525	1.525	1.915	1.915	0.003	0.003	0.015	0.015	283	130	4667	540	28	5	49	20	36	50
11	Opuatia Stm Ponganui Rd	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.740	0.740	1.081	1.081	0.005	0.005	0.016	0.016	364	130	2898	540	31	5	63	20	11	50
5	Awaroa River (Waiuku) Otaua Rd Br Moseley	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	1.410	1.410	2.500	2.500	0.022	0.022	0.144	0.144	229	130	1017	540	16	5	41	20	8	50

<sup>1</sup> The annual median and annual maximum ammonia have been adjusted for pH

<sup>2</sup> This Attribute is expressed as a minimum requirement. To meet the Objective, the % of water clarity measurements exceeding 1.0m must be equal to or greater than the numerical value in Table 3.11-1.

<sup>3</sup> Attribute is not applicable to the sub-catchment

Table 3.11-1: Waipa River Freshwater Management Unit

Catchment number	Site	Attributes																											
		Annual Median Chlorophyll <i>a</i> (mg/m <sup>3</sup> )		Annual Maximum Chlorophyll <i>a</i> (mg/m <sup>3</sup> )		Annual Median Total Nitrogen (mg/m <sup>3</sup> )		Annual Median Total Phosphorus (mg/m <sup>3</sup> )		Annual Median Nitrate (mg NO <sub>3</sub> -N/L)		Annual 95 <sup>th</sup> Percentile Nitrate (mg NO <sub>3</sub> -N/L)		Annual Median Ammonia <sup>1</sup> (mg NH <sub>4</sub> -N/L)		Annual Maximum Ammonia <sup>1</sup> (mg NH <sub>4</sub> -N/L)		Median <i>E. coli</i> (cfu/100mL)		95 <sup>th</sup> percentile <i>E. coli</i> (cfu/100mL)		% <i>E. coli</i> >540/100 mL (% of samples)		% <i>E. coli</i> >260/100 mL (% of samples)		% Clarity >1.0 m (% of measurements)			
		Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year	Short term	80 year
68	Waipa River Mangaokewa Rd	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.380	0.380	0.710	0.710	0.003	0.003	0.017	0.017	202	130	2417	540	20	5	34	20	76	90		
60	Waipa River Otewa	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.228	0.228	0.504	0.504	0.003	0.003	0.008	0.008	225	130	2037	540	20	5	41	20	68	70		
51	Waipa River SH3 Otorohanga	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.370	0.370	1.150	1.150	0.004	0.004	0.020	0.020	175	130	3289	540	17	5	34	20	58	70		
43	Waipa River Pirongia-Ngutunui Rd Br	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.565	0.565	1.532	1.500	0.008	0.008	0.023	0.023	283	130	4441	540	33	5	52	20	23	50		
34	Waipa River Whatawhata Bridge	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.673	0.673	1.578	1.500	0.009	0.009	0.026	0.026	366	130	3657	540	35	5	53	20	11	50		
26	Ohote Stm Whatawhata/Horo tiu Rd	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.495	0.495	1.385	1.385	0.023	0.023	0.052	0.052	261	130	2142	540	15	5	47	20	10	50		
36	Kaniwhaniwha Stm Wright Rd	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.350	0.350	0.995	0.995	0.007	0.007	0.022	0.022	238	130	1917	540	24	5	41	20	38	50		
38	Mangapiko Bowman Rd Stm	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	1.410	1.410	2.650	2.650	0.022	0.022	0.078	0.078	306	130	7074	540	25	5	55	20	19	50		
39	Mangaohoi Stm South Branch Maru Rd	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.230	0.230	0.415	0.415	0.003	0.003	0.008	0.008	70	70	942	540	8	5	18	18	87	90		
37	Mangauika Stm Te Awamutu Borough W/S Intake	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.210	0.210	0.286	0.286	0.002	0.002	0.003	0.003	33	33	1008	540	8	5	13	13	98	98		
40	Puniu River Bartons Corner Rd Br	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.650	0.650	1.305	1.305	0.007	0.007	0.029	0.029	139	130	2790	540	21	5	26	20	39	50		
47	Mangatutu Stm Walker Rd Br	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.380	0.380	0.908	0.908	0.003	0.003	0.012	0.012	157	130	738	540	10	5	24	20	77	90		
46	Waitomo Stm SH31 Otorohanga	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.520	0.520	0.925	0.925	0.008	0.008	0.026	0.026	292	130	1453	540	28	5	55	20	33	50		
53	Mangapu River Otorohanga	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.860	0.860	1.428	1.428	0.016	0.016	0.064	0.064	445	130	4284	540	43	5	61	20	27	50		
52	Waitomo Stm Tumutumu Rd	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.630	0.630	0.825	0.825	0.004	0.004	0.013	0.013	175	130	2241	540	19	5	36	20	45	50		
63	Mangaokewa Stm Lawrence Street Br	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	NA <sup>3</sup>	0.525	0.525	1.060	1.060	0.005	0.005	0.014	0.014	454	130	6224	540	39	5	77	20	48	50		

<sup>1</sup>The annual median and annual maximum ammonia have been adjusted for pH

<sup>2</sup> This Attribute is expressed as a minimum requirement. To meet the Objective, the % of water clarity measurements exceeding 1.0m must be equal to or greater than the numerical value in Table 3.11-1.

<sup>3</sup> Attribute is not applicable to the sub-catchment

**Table 3.11-1: Dune, Riverine, Volcanic and Peat Lakes Freshwater Management Units**

Lake FMU	Attributes								
	Annual Median Chlorophyll a (mg/m <sup>3</sup> )	Annual Maximum Chlorophyll a (mg/m <sup>3</sup> )	Annual Median Ammonia <sup>1</sup> (mg NH <sub>4</sub> -N/L)	Annual Maximum Ammonia <sup>1</sup> (mg NH <sub>4</sub> -N/L)	Annual Median Total Nitrogen (mg/m <sup>3</sup> )	Annual Median total Phosphorus (mg/m <sup>3</sup> )	95 <sup>th</sup> percentile <i>E. coli</i> ( <i>E. coli</i> /100mL)	80 <sup>th</sup> percentile cyanobacteria (biovolume mm <sup>3</sup> /L)	Clarity (m)
	80 year*	80 year*	80 year*	80 year*	80 year*	80 year*	80 year*	80 year*	80 year*
Dune	12	60	0.24	0.40	750	50	540	1.8 <sup>+</sup>	1
Riverine	12	60	0.24	0.40	800	50	540	1.8 <sup>+</sup>	1
Volcanic Zone	12	60	0.24	0.40	750	50	540	1.8 <sup>+</sup>	1
Peat	12	60	0.24	0.40 <sup>152</sup>	750	50	540	1.8 <sup>+</sup>	1

\*unless a lake is already of better water quality, in which case the water quality is to not decline

+1.8mm<sup>3</sup>/L biovolume equivalent of potentially toxic cyanobacteria or 10mm<sup>3</sup>/L total biovolume of all cyanobacteria

<sup>1</sup> The annual median and annual maximum ammonia have been adjusted for pH

<sup>2</sup> Median black disc horizontal sighting range under baseflow conditions

**Table 3.11-2: List of sub-catchments showing Priority 1, Priority 2, and Priority 3 sub-catchments/Te rārangi o ngā riu kōawaawa e whakaatu ana i te riu kōawaawa i te Taumata 1, i te Taumata 2, me te Taumata 3**

If more than fifty percent of a farm enterprise is in a particular sub-catchment, then the dates for compliance for that sub-catchment apply.

Sub-catchment identifier	Sub-catchment number	Priority
<a href="#">Mangatangi</a>	<a href="#">2</a>	<a href="#">1</a>
<a href="#">Whakapipi</a>	<a href="#">3</a>	<a href="#">1</a>
<a href="#">Whangamarino at Jefferies Rd Br</a>	<a href="#">8</a>	<a href="#">1</a>
Whangamarino at Island Block Rd	10	1
Opuatia	11	1
<a href="#">Waerenga</a>	<a href="#">12</a>	<a href="#">1</a>
Waikare	13	1
Matahuru	14	1
Whangape	16	1
Mangawara	17	1
Awaroa (Rotowaro) at Harris/Te Ohaki Br	18	1
Waikato at Huntly-Tainui Br	20	1
Kirikiroa	23	1
Waikato at Horotiu Br	25	1
Waikato at Bridge St Br	27	1
Waitawhiriwhiri	28	1
Mangakotukutuku	30	1
Mangawhero	35	1
Moakurarua	42	1
Little <a href="#">Waipa</a> <a href="#">Waipā</a>	44	1
Pokaiwhenua	45	1
Mangamingi	48	1
<a href="#">Waipa</a> <a href="#">Waipā</a> at Otorohanga	51	1
Waitomo at Tumutumu Rd	52	1
Mangapu	53	1
Mangarapa	55	1
Mangaharakeke	57	1
Mangarama	61	1
Mangaokewa	63	1
Waikato at Waipapa	64	1
Waiotapu at Homestead	65	1

Waipa/Waipā at Mangaokewa Rd	68	1
Waipapa	70	1
Torepatutahi	72	1
Waikato at Tuakau Br	4	2
Waikato at Port Waikato	6	<del>2</del> 1
Waikato at Rangiriri	15	<del>2</del> 1
Awaroa (Rotowaro) at Sansons Br	19	<del>2</del> 1
Firewood	21	2
Komakorau	22	2
Waipa/Waipā at Waingaro Rd Br	24	2
Mangaone	31	2
Waipa/Waipā at SH23 Br Whatawhata	34	<del>2</del> 1
Kaniwhaniwha	36	2
Mangapiko	38	2
Puniu at Bartons Corner Rd Br	40	2
Waipa/Waipā at Pirongia-Ngutunui Rd Br	43	2
Waitomo at SH31 Otorohanga	46	2
Whakauru	49	2
Tahunaatara	54	2
Otamakokore	59	2
Waipa/Waipā at Otewa	60	2
Kawaunui	62	2
Waikato at Whakamaru	67	2
Mangakara	69	2
Mangakino	71	2
<u>Mangatawhiri</u>	<u>1</u>	<u>3</u>
Awaroa (Waiuku)	5	3
Ohaeroa	7	3
Waikato at Mercer Br	9	3
Ohote	26	3
Mangaonua	29	3
Karapiro	32	3
Waikato at Narrows	33	<del>3</del> 1
Mangauika	37	3
Mangaohoi	39	3
Waikato at Karapiro	41	3

Mangatutu	47	3
Puniu at Wharepapa	50	3
Whirinaki	56	3
Waiotapu at Campbell	58	<del>3</del> <u>1</u>
Waikato at Ohakuri	66	3
Waikato at Ohaaki	73	<del>3</del> <u>1</u> <sup>153</sup>
Pueto	74	3

Table 3.11-2: List of sub-catchments showing Priority 1, Priority 2, and Priority 3 sub-catchments

\* ~~part sub-catchment~~

# Additions to Glossary of Terms/Ngā Āpiti hanga ki te Rārangi Kupu

## **Definition – 75th percentile nitrogen leaching value**

**75<sup>th</sup> percentile nitrogen leaching value:** The 75<sup>th</sup> percentile value (units of kg N/ha/year) of all of the Nitrogen Reference Point values for dairy farming properties and enterprises within each river (including properties within any lake Freshwater Management Unit within the relevant river Freshwater Management Unit)<sup>154</sup> Freshwater Management Unit<sup>154</sup> and which are determined by the Chief Executive of the Waikato Regional Council and published on the Waikato Regional Council website and can be based on aggregated data supplied to the Waikato Regional Council and individual farm data<sup>155</sup> received by the Waikato Regional Council by ~~30 November 2020~~ YYY.<sup>156</sup>

## **Definition – Arable cropping**

**Arable cropping:** means the following arable crops:

- i. grain cereal, legume, and pulse grain crops
  - ii. herbage seed crops
  - oilseeds
  - iii. crops grown for seed multiplication for use in New Zealand or overseas
  - iv. hybrid and open pollinated vegetable and flower seeds
- and includes maize grain, maize silage, cereal silage, and mangels.

## **Definition – Best management practice/s**

**Best management practice/s:** For the purposes of Chapter 3.11, means maximum feasible mitigation to reduce the diffuse discharge of nitrogen, phosphorus, sediment or microbial pathogens from land use activities<sup>157</sup>.

## **Definition – Certified Farm Environment Planner**

**Certified Farm Environment Planner:** is a person or entity<sup>158</sup> certified by the Chief Executive Officer of Waikato Regional Council and listed on the Waikato Regional Council website as a Certified Farm Environment Planner and has as a minimum the following qualifications and experience:

- a. ~~five~~ three<sup>159</sup> years' relevant experience in agricultural and horticultural<sup>160</sup> ~~the management of pastoral, horticulture or arable farm systems;~~ and
- b. a Certificate of Completion in Advanced Sustainable Nutrient Management in New Zealand Agriculture from Massey University or<sup>161</sup> completed an equivalent<sup>162</sup> advanced training or a tertiary qualification in sustainable nutrient management (nitrogen and phosphorus)<sup>163</sup>; and
- c. experience in soil conservation and sediment management;

and agrees to follow the procedures and guidelines set out by Waikato Regional Council and audits of the Certified Farm Environment Planner's work by Waikato Regional Council show that the Planner is preparing and/or approving Farm Environment Plans in accordance with the procedures and guidelines.<sup>164</sup>

**Note:** Certified Farm Environment Planners will be listed on the Waikato Regional Council's website.

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<sup>154</sup> Federated Farmers V1PC1-790

<sup>155</sup> DairyNZ PC1-10253

<sup>156</sup> N and C Prendergast PC1-1779, R Hathaway PC1-5399

<sup>157</sup> Federated Farmers V1PC1-791, FANZ PC1-10659

<sup>158</sup> Forest and Bird PC1-8478

<sup>159</sup> Hill Country Farmers Group PC1-8072

<sup>160</sup> NZIPIM PC1-8445

<sup>161</sup> Ballance PC1-7113, FANZ PC1-10662, Ravensdown PC1-10187, Oji PC1-8854

<sup>162</sup> Ravensdown PC1-10187, FANZ PC1-10662

<sup>163</sup> NZIPIM PC1-8445

<sup>164</sup> Forest and Bird PC1-8478

For a particular farm or enterprise, the role of a Certified Farm Environment Planner is to:

- a. Assist that farmer with the preparation of a Farm Environment Plan; or
- b. Review and certify the Farm Environment Plan with purpose of providing an expert opinion whether farm activities are being undertaken in a way that is consistent with objectives, principles and standards in Schedule 1 when required, being:
  - i. prior to lodging a land use consent application;
  - ii. within 12 months of the granting of a consent application;
  - iii. in accordance with intervals set out in the conditions of consent; and
  - iv. when there has been a change in the FEP that requires recertification.

A Certified Farm Environment Planner is not to:

- a. assist a farmer with the preparation of a FEP and then personally certify, or be part of an organisation that certifies, that same plan; or
- b. as part of the certification process, rewrite or modify the plan to assist with its certification.

A Certified Farm Environment Planner must be registered and approved by the Chief Executive of the Waikato Regional Council and abide by the requirements including professional development obligations, professional conduct and impartiality. They will be subject to having FEPs they prepared audited and moderated, as required, and should there be continual inconsistency and deficiencies in the quality of their FEPs then their registration may be revoked.

#### Definition – Certified Farm Nutrient Advisor

**Certified Farm Nutrient Advisor:** is a person or entity certified by the Chief Executive Officer of Waikato Regional Council and listed on the Waikato Regional Council website as a certified farm nutrient advisor and has the following qualifications and experience as meeting the following criteria:

- a. Is certified as a Nutrient Management Adviser under the Nutrient Management Adviser Certification Programme Ltd; or<sup>165</sup> Has completed nutrient management training to at least intermediate level, and
- b. Has completed nutrient management training to at least an advanced level<sup>166</sup>, and ~~h~~Has at least two years experience in nutrient management planning.<sup>167</sup>

and agrees to follow the procedures and guidelines set out by Waikato Regional Council and audits of the Certified Farm Nutrient Advisor's work by Waikato Regional Council show that that the Advisor is preparing robust and reliable nutrient loss reports.<sup>168</sup>

Note: Certified Farm Nutrient Advisors will be listed on the Waikato Regional Council's website.<sup>169</sup>

#### Definition – Certified Industry Scheme/s

**Certified Industry Sector<sup>170</sup> Scheme/s:** is a scheme group or organisation responsible for preparing and assisting with the implementation of Farm Environment Plans<sup>171</sup> that has been certified by the Chief Executive Officer of Waikato Regional Council and listed on the Waikato Regional Council website as meeting the standards<sup>172</sup> assessment criteria and requirements set out in Schedule 2 of Chapter 3.11.

#### Definition – Commercial vegetable production

**Commercial vegetable production:** means the following vegetables grown in New Zealand for commercial purposes:

- i. asparagus, artichokes, Asian vegetables, beans, beetroot, boxthorn, broccoflower, broccoli, broccolini, Brussels sprouts, burdock, cabbage, capsicums, carrots, cauliflower, celeriac, celery, chilli peppers, chokos, courgettes, cucumbers, eggplant, Florence fennel, garland chrysanthemum, garlic, gherkins, herbs, Indian vegetables, kohlrabi, kumara, leeks, lettuces, marrows, melons, okra, onions, parsnips, peas, potatoes, puha, pumpkin, purslane, radishes, rakkyo, rhubarb, salad leaves, salsify, scallopini, scorzonera, shallots, silverbeet, spinach, spring onions, sprouted beans and seeds, squash, swedes, sweetcorn, taro, tomatoes, turnips, ulluco, watercress, witloof, yakon, yams, zucchinis, ~~potatoes,~~ ~~tomatoes,~~ ~~asparagus,~~ ~~onions;~~ and
- ii. the hybrids of the vegetables listed in subparagraph i.

<sup>165</sup> Ballance PC1-7090, FANZ PC1-10663, Ravensdown PC1-10199

<sup>166</sup> DairyNZ PC1-10251, Genetic Technologies Ltd PC1-3290, S.J. Williams PC1-5959

<sup>167</sup> Genetic Technologies Ltd PC1-3290, NZIPIM PC1-8446

<sup>168</sup> Forest and Bird PC1-8494

<sup>169</sup> A McGovern PC1-8292

<sup>170</sup> Mercury PC1-9684

<sup>171</sup> Maniapoto Maori Trust Board PC1-9338

<sup>172</sup> Fonterra PC1-10583

**Definition – Cultivation**

**Cultivation:** For the purposes of Chapter 3.11, means preparing land for growing pasture or a crop and the planting, tending and harvesting of that pasture or crop, but excludes:

- a. direct drilling of seed.
- b. no-tillage practices.
- c. recontouring land.
- d. forestry.

**Dairy Cattle:** means cows that are or have been used for milk production, whether they are being grazed on a milking platform or not.<sup>173</sup>

**Definition – Dairy Farming**

**Dairy Farming:** means farming of dairy cows on a **milking platform** for milk production<sup>174</sup>.

**Definition – Diffuse discharge/s**

**Diffuse discharge/s:** For the purposes of Chapter 3.11, means the discharge of contaminants that results from land use activities including cropping and the grazing of livestock and includes non-point source discharges.

**Definition – Drain**

**Drain:** For the purposes of Chapter 3.11, means an artificially created open<sup>175</sup> channel designed to lower the water table and/or reduce surface flood risk but does not include any modified (e.g. straightened) natural watercourse.

**Definition – Drystock Farming**

**Drystock Farming**<sup>176</sup>: means pasture grazing beef cattle, dairy animals grazed off a **milking platform**, sheep, and deer for meat, wool, or velvet production.

**Definition – Edge of field mitigation/s**

**Edge of field mitigation/s:** mitigation actions or technologies to reduce loss of contaminants from farm land by intervening at edge of field either on or off-farm, and includes constructed wetlands, sedimentation ponds and detention bunds.

**Definition – Enterprise/s**

**Enterprise/s:** means one or more parcels of land held in single or multiple ownership to support the principle land use or land which the principle land use is reliant upon, and constitutes a single operating unit for the purposes of management. An enterprise is considered to be within a sub-catchment if more than 50% of that enterprise is within the sub-catchment.<sup>177</sup>

**Definition - Escherichia coli (E. coli)**

**Escherichia coli (E. coli)**<sup>178</sup>: is a bacterium used as an indicator that faecal contamination of the water has almost certainly occurred, so pathogens may be present in the water (Pathogen: an organism capable of causing an illness in humans).

**Definition – Farm Environment Plan/s**

<sup>173</sup> Consequential change to the relief sought by P Hurley PC1-1088, Federated Farmers V1PC1-338.

<sup>174</sup> Forest and Bird PC1-8292

<sup>175</sup> Fert NZ PC1-10668

<sup>176</sup> adapted from NIWA 2016. [https://www.niwa.co.nz/our-science/freshwater/tools/kaitiaki\\_tools/land-use/agriculture/dry-stock](https://www.niwa.co.nz/our-science/freshwater/tools/kaitiaki_tools/land-use/agriculture/dry-stock)

<sup>177</sup> Brodie PC1-2889, Waitomo District Council PC1-10312, G Kilgour PC1-1884

<sup>178</sup> Ministry of Health Drinking-water Standards for New Zealand 2005 (Revised 2008) definition pg 146

**Farm Environment Plan/s:** For the purposes of Chapter 3.11, means a plan developed in accordance with Schedule 1.

**Definition – Farming activities**

**Farm:** The property area on which the farming occurs.

**Farming activities:** For the purposes of Chapter 3.11, the grazing of animals or the growing of produce, including crops, commercial vegetable production and orchard produce, but not does not include:

- a. \_\_\_\_\_planted production forest; or
- b. \_\_\_\_\_the growing of crops on land irrigated by consented municipal wastewater discharges; or
- c. \_\_\_\_\_production or growing of produce undertaken entirely within a building; or<sup>179</sup>
- d. \_\_\_\_\_production or growing produce for consumption by the occupier of the property or their family.<sup>180</sup>

**Feedlot:** means the containment and feeding of livestock, covered or uncovered, for the purpose of finishing for meat production, and the activity precludes the maintenance of vegetative groundcover.<sup>181</sup>

**Definition – Five year rolling average**

**Five year rolling average<sup>182</sup>:** means the average of modelled nitrogen leaching losses predicted by OVERSEER<sup>®</sup> from the most recent 5 years.

**Definition – Forage crop**

**Winter<sup>183</sup> Forage crop:** means crops, annual or biennial, but excluding pasture species,<sup>184</sup> which are grown to be utilised by grazing or harvesting as a whole crop between 1 May and 30 September of each year.<sup>185</sup>

**Definition – Good Management Practice/s**

**Good Management Farming<sup>186</sup> Practice/s:** For the purposes of Chapter 3.11, means industry agreed and approved<sup>187</sup> practices and actions undertaken on a farm property or enterprise that to manage,<sup>188</sup> and reduce or minimise the risk diffuse discharge of contaminants entering to a water body/waterbody.

**Definition – Livestock crossing structure**

**Livestock crossing structure:** means a lawfully established structure installed to allow that enables<sup>189</sup> livestock to cross a water body such that the livestock do not enter or have access to the bed of the water body<sup>190</sup>.

**Definition – Mahinga kai**

**Mahinga kai:** the customary and contemporary gathering and use of naturally occurring and cultivated foods (also known as Hauanga kai).

<sup>179</sup> Gourmet Mokai Ltd PC1-7250, Tuaropaki Trust PC1-3009

<sup>180</sup> H Clarke PC1-8466

<sup>181</sup> Consequential change to the relief sought by P Hurley PC1-1088, Federated Farmers V1PC1-338.

<sup>182</sup> Adapted from Freeman, M.; (ed). (2016). Using Overseer- Establishing national guidance for the appropriate and consistent use of Overseer by regional councils in setting and managing water quality limits Consultation Draft Overseer Guidance Project, Overseer Management Services Ltd. Wellington, New Zealand

<sup>183</sup> New Zealand Grain and Seed Trade Association PC1-1680

<sup>184</sup> Genetic Technologies Ltd PC1-3341, A McGovern PC1-8295

<sup>185</sup> New Zealand Grain and Seed Trade Association PC1-1680

<sup>186</sup> Ballance PC1-6862, FANZ PC1-9712

<sup>187</sup> Oji PC1-8937

<sup>188</sup> Federated Farmers V1PC1-800

<sup>189</sup> WRC PC1-3672

<sup>190</sup> Fish and Game PC1-11017

**Definition – Microbial pathogen/s**

**Microbial pathogen/s**<sup>191</sup>: A microorganism capable of inducing illness in humans.

**Definition – Milking platform**

**Milking platform**: means that area devoted to feeding cows on a daily basis and includes land used for the growing of feed for the cows within the same property during the milking season<sup>192</sup>.

**Definition – Nitrogen Reference Point**

**Nitrogen Reference Point**: The nitrogen loss number (units of kg N/ha/year) that is derived from an OVERSEER<sup>®</sup> use protocol compliant OVERSEER<sup>®</sup> file that describes the property or farm enterprise and farm practices in an agreed year or years developed by a Certified Farm Nutrient Advisor, using the current version of the OVERSEER<sup>®</sup> model (or another model approved by the Council) for the property or enterprise at the "reference" point in time.

The nitrogen discharge benchmark established for a farm property, when the farm system in place during the reference period is modelled using the most recent version of the Overseer model (or an alternative model approved by the Chief Executive Officer of the Waikato Regional Council) as described in Schedule B.<sup>193</sup>

**Definition – Offset/s**

**Offset/s**: For the purposes purpose of Chapter 3.11 means for a specific contaminant/s a measurable action, demonstrated through robust and appropriate methodology, that reduces the intensity, extent and/or duration of residual adverse effects of that contaminant on water quality and will result in a positive benefit contributing to the restoration of the Waikato and Waipā Rivers.

**Definition – Point source discharge/s**

**Planted production forest**: means land used solely for commercial forestry operations and is not part of a farming enterprise that contains a small forest or plantation for land stabilisation and nutrient loss mitigation.

**Point source discharge**: A stationary or fixed facility from which contaminants are discharged or emitted. For the purposes of Chapter 3.11, means discharges from a stationary or fixed facility, including includes the irrigation onto land from consented industrial and municipal wastewater systems.<sup>194</sup>

**Regionally significant industry**: means an economic activity based on the use of natural and physical resources in the region, which is demonstrated to have benefits that are significant at a regional or national scale. These may include social, economic or cultural benefits.<sup>195</sup>

**Regionally significant infrastructure**: includes:

- a. pipelines for the distribution or transmission of natural or manufactured gas or petroleum;
- b. infrastructure required to permit telecommunication as defined in the Telecommunications Act 2001;
- c. radio apparatus as defined in section 2(1) of the Radio Communications Act 1989;
- d. the national electricity grid, as defined by the Electricity Industry Act 2010;
- e. a network (as defined in the Electricity Industry Act 2010);
- f. infrastructure for the generation and/ or conveyance of electricity that is fed into the national grid or a network (as defined in the Electricity Industry Act 2010);
- g. significant transport corridors as defined in Map 6.1 and 6.1A;
- h. lifeline utilities, as defined in the Civil Defence and Emergency Management Act 2002, and their associated essential infrastructure and services;
- i. municipal wastewater treatment plants, water supply treatment plants and bulk water supply, wastewater conveyance and storage systems, municipal supply dams (including Mangatangi and Mangatawhiri water supply dams) and ancillary infrastructure;

<sup>191</sup> Adapted from Ministry of Health. 2008. Drinking-water Standards for New Zealand 2005 (Revised 2008). Wellington

<sup>192</sup> Pamu PC1-5938

<sup>193</sup> Fonterra PC1-10580, Pamu PC1-5932

<sup>194</sup> Fonterra PC1-10593

<sup>195</sup> Trustees of Highfield Deer Park PC1-3978

- j. flood and drainage infrastructure managed by Waikato Regional Council;
- k. Hamilton City bus terminal and Hamilton Railway Station terminus; and
- l. Hamilton International Airport.<sup>196</sup>

**Definition – Restoration**

**Restoration:** is the process of assisting the recovery of an ecosystem that has been degraded, damaged or destroyed. It is an intentional activity that initiates or accelerates an ecological pathway, or trajectory through time, towards a reference state consistent with Objective 1.<sup>197</sup>

**Sacrifice Paddock:** means the containment of livestock in a paddock that precludes the maintenance of vegetative groundcover.<sup>198</sup>

**Definition – Setback**

**Setback:** means the distance from the bed of a river or lake, or margin of a wetland.

**Definition – Stock unit**

**Stock unit:** means an animal that eats 6,000 megajoules of metabolisable energy per year, and for the stock listed, is determined by and is illustrated in<sup>199</sup> the following stocking rate table<sup>200</sup>:

Stock class	Number of Stock Units per animal	Animal performance definition
Dairy bull	6.1	620kg Friesian breeding bull
Dairy cow	10.4	450kg F8J8 dairy cow producing 400kg MS
Dairy heifer 1-2 years age	5.1	F8J8 199 – 419kg Jul to Apr
Dairy heifer calf (weaned)	1.6	F8J8 110 – 199kg Dec to Jun
Beef bull	6	620kg Beef cross MA breeding bull
Beef cow	7.5	480kg MA Beef cross breeding cow calving at 96%
Bull 1-2 years age	6.8	Friesian bull 209kg to 535kg slaughter weight
Steer 1-2 years age	5.8	WF steer 203kg to 478kg slaughter weight
Heifer 1-2 years age	5.7	WF heifer 208kg to 420kg slaughter weight
Steer calf < 1 year (weaned)	2.7	WF steer 100kg to 203kg Dec to Jun
Bull calf < 1 year (weaned)		Fresian 100kg to 209kg bull Dec to Jun
Heifer calf < 1 year (weaned)	1.6	WF heifer 90kg to 208kg Dec to Jun
Ram	1	73kg Romney ram, 4.5kg wool
Adult ewe	1.01	63kg Romney MA ewe lambing at 126%, 4.5kg wool
Sheep 1-2 years of age	0.9	Romney hogget 46kg to 66kg, 4kg wool
Sheep <1 years of age (weaned)	0.5	Romney 26kg to 46kg from Dec to June, 2kg wool

<sup>196</sup> Trustees of Highfield Deer Park PC1-3978

<sup>197</sup> Federated Farmers V1PC1-807

<sup>198</sup> Consequential change to the relief sought by P Hurley PC1-1088, Federated Farmers V1PC1-338.

<sup>199</sup> WRC V1PC1-1535

<sup>200</sup> Table adapted from Perrin Ag Consultants Ltd 2016. Bay of Plenty Regional Council: Methodology for creation of NDA reference files and stocking rate table; version 2. Table 1: Stocking rate table pg. 18.

Bucks & does < 1 year (weaned)	0.5	OVERSEER® default
Angora does	1.1	OVERSEER® default
Feral does	0.9	OVERSEER® default
Feral bucks & wethers	0.5	OVERSEER® default
Stag	2.4	Red stag 200kg, 4kg velvet
Breeding hind	2.5	Red hind 110kg, 86% fawning
Hind 1-2 years age	1.2	Red hind 53kg – 75kg
Hind fawn (weaned)	1	Red hind 37kg – 53kg over 4 months, annualised to 12 months
Stag 1-2 years age	2.3	Red stag 55kg – 159kg over 12 months, 2kg velvet
Stag fawn (weaned)	1.1	Red stag 42kg – 55kg over 4 months, annualised to 12 months
Alpaca	0.8	OVERSEER® default
Llama	1.6	OVERSEER® default
Pony	6	OVERSEER® default
Pony brood mare w/foal	8	OVERSEER® default
Small hack	8	OVERSEER® default
Small hack broodmare w/foal	10	OVERSEER® default
Large hack	12	OVERSEER® default
Thoroughbred	12	OVERSEER® default
Large hack broodmare w/foal	14	OVERSEER® default
Milking ewe	0.9	70kg ewe producing 50kg MS
Milking goat	1.8	80kg nanny producing 140kg MS

**Definition – Sub-catchment**

**Stocking rate:** is defined as the annual average of monthly stock units on a property over a 12-month period.

**Sub-catchment:** For the purposes of Chapter 3.11, means an area of land within the Waikato or ~~Waipa~~ <sup>Waipā</sup><sup>201</sup> River catchments representing the contributing area draining to one of ~~6974~~<sup>202</sup> locations in the stream and river network, and used as the basic spatial unit for analysis and modelling<sup>203</sup>.

**Definition – Tangata whenua ancestral lands**

**Tangata whenua ancestral lands:** means land that has been returned through settlement processes between the Crown and tangata whenua of the catchment<sup>204</sup>, or is, as at the date of notification (**22 October 2016**), Māori freehold land under the jurisdiction of Te Ture Whenua Maori Act 1993.

**Te Ture Whaimana:** means the Vision and Strategy as set out in Schedule 2 of the Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010, Schedule 1 of the Ngāti Tūwharetoa, Raukawa, and Te Arawa River Iwi Waikato River Act 2010, and Schedule 1 of the Ngā Wai o Maniapoto (Waipā River) Act 2012.

<sup>201</sup> Mercury Limited PC1-9685

<sup>202</sup> Refer to Map 3.11-2.

<sup>203</sup> Federated Farmers V1PC1-810

<sup>204</sup> Iwi of Hauraki V1PC1-455

**Definition – Woody vegetation**

**Woody vegetation:** means indigenous vegetation, planted production forest, and any other non-pastoral vegetation (excluding weed species).

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