Planning Evidence

Block 3 Appendix 1

AMENDED PROVISIONS

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 <u>supporting</u> sub-catchment planning, and <u>to</u> use this planning to support the development of actions including edge of field mitigation measures. Support including measures that efficiently and effectively contribute to water quality improvements. This approach

Thisese approaches includes:

- a. Engaging early with tangata whenua and with landowners, communities 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 <u>Identifying</u> current water quality and sources of contaminant discharge<u>s</u>, 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.
- e. Providing for sub-catchment resource consents that are consistent with Policy 2(e).

Block 3 Appendix 1A

METHODS IF RETAINED BY COMMISSIONERS

Drafting note: WPL recommends that Methods 3.11.4.1 - 3.11.4.4 and 3.11.4.6 - 3.11.4.12 be deleted and that Method 3.11.4.5 be replaced by Rule 3.11.5.6B.

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 Waipa Rivers.

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

Waikato Regional Council will work with develop an industry sectors to set up and manage industry/sector schemes 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 Plans/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 the Farm Environment Planner author) and monitoring will be required.

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

Waikato Regional Council, working with others, will:

- a. Build on the Shallow Lakes Management Plan by developing 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. Prepare and implement Lake Catchment Plans with community involvement which include:
 - i. A vision for the lake developed in consultation with 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. 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. Work towards managing the presence of pest weeds and fish in the shallow lakes and connected lowland rivers area, including Whangamarino Wetland.
- e. 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. 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. 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 te whānuitanga o ngā riu kōawaawa

Waikato Regional Council will work with others to develop sub-catchment scale plans (where a catchment plan does not already exist) where it has been shown to be required. 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. <u>Further develop adaptive management and mitigation approaches (Including the use</u> and development of Decision Support Tools) to estimate total diffuse discharges associated with farming activities; the spatial variability of land use and diffuse losses of phosphorus, nitrogen, sediment and microbial pathogens; and the effect of diffuse discharges throughout the sub-catchment.
- b. <u>c.</u> 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.
- e. d. Assess and determine effective and efficient placement of constructed wetlands at a sub-catchment scale to improve water quality.
- d. <u>e.</u> 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. <u>f.</u> Integrate the regulatory requirements to fence waterways with the requirements for effective drainage scheme management.
- f. g. Coordinate funding of mitigation work by those contributing to water quality degradation, in proportion to that contribution.
- g. <u>h.</u> Utilise public funds to support edge of field mitigations where those mitigations provide significant public benefit.
- i. <u>Provide for sub-catchment resource consents that are consistent with Policy 2(e).</u>
- 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 <u>the</u> <u>development and implementation of</u> any future framework for the allocation of diffuse discharges including:

- a. Implementing processes that will support the setting of property, or enterprise, <u>sub-</u> <u>catchment or industry/sector scheme</u> -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 industry/sector schemes and how this can be related to the Table 3.11-1 Freshwater Objectives 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 tētehi anga toha mō te Mahere ā-Rohe e

whai ake ana

Waikato Regional Council will:

- Develop discharge allocation frameworks for individual properties, and enterprises, sub-catchments, and industry/sector schemes 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. <u>Monitor and review adaptive management and mitigation approaches developed for</u> <u>enterprises or sub-catchments or industry/sector schemes to determine an allocation</u> <u>regime for the relevant enterprise or sub-catchment or industry/sector scheme; and</u>
- b. c. 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, <u>sub-catchment or industry/sector scheme</u> 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 subcatchments 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 Freshwater 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[^], including:

- a. Collecting information on nitrogen, phosphorus, sediment and microbial pathogen levels in the respective fresh water bodies in each Freshwater Management Unit[^] 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^.
- 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^ targets^; 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 <u>industry/sector</u> <u>schemes, sub-catchments</u>, properties and enterprises that supports the management of nitrogen, phosphorus, sediment and microbial pathogens diffuse discharges at an <u>industry/sector scheme</u>, <u>sub-catchment</u>, 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 <u>and mitigations</u> at <u>a industry/sector</u> <u>scheme</u>, sub-catchment, property and enterprise level, and their contribution to reductions in the discharge of contaminants.
- c. Monitor the achievement of the values^ for the Waikato and Waipa 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, sub-catchments and industry/sector schemes and nitrogen discharge data reported under Farm Environment Plans.
- e. Work with industry to collate information on the functioning and success of any <u>adaptive</u> <u>management and mitigation approach developed by an industry/sector scheme, sub-</u><u>catchment, enterprise or property. Certified Industry Scheme</u>.

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.

Block 3 Appendix 1B

COMMERCIAL VEGETABLE PRODUCTION PROVISIONS

Drafting note: Suggested planning amendments included for completeness.

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

Manage and require reductions in diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens from commercial vegetable production through a tailored, property or enterprise <u>or sub-catchment or industry/sector scheme</u>-specific approach where:

- a. Flexibility is provided to undertake crop rotations on changing parcels of land for commercial vegetable production, while reducing average contaminant discharges over time; and
- b. The maximum area in production for a property or enterprise <u>or sub-catchment or</u> <u>industry/sector scheme</u> is established and capped utilising commercial vegetable production data from the 10 years up to 2016; and
- c. Establishing a Nitrogen Reference Point for each property or enterprise <u>or sub-</u> <u>catchment or industry/sector scheme</u>; and
- d. <u>Through the implementation of Good Farming Practices</u> across the sector, A <u>a</u> 10% decrease in the diffuse discharge of nitrogen and a tailored reduction approach to the reductions in the diffuse discharge of phosphorus, sediment and microbial pathogens is achieved by 2026. 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 a Farm Environment Plan and associated resource consent, or in specific requirements established by participation in a Certified Industry Scheme.
- f. Commercial vegetable production <u>systems</u> 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.

Rule 3.11.5.5 - Controlled Activity Rule – Existing commercial vegetable production

Drafting Note: Rule 3.11.5.1A Interim Permitted Rule needs amending or replicating to also include this rule as a PA until 1 January 2020.

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 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 activity (requiring resource consent) subject to the following standards and terms:

- a. The property is registered with the Waikato Regional Council in conformance provision of information for the property or enterprise or sub-catchment of industry/sector scheme in accordance with with Schedule A; and
- b. A Nitrogen Reference Point is produced for the property or enterprise <u>or sub-</u> <u>catchment or industry/sector scheme</u> 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 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 enterprise that was used for commercial vegetable production during the period 1 July 2006 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 <u>or sub-catchment or</u> <u>industry/sector scheme</u> 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.
 - i. <u>Vulnerable Land has been identified and appropriate Mitigation actions are included in the Farm Environment Plan.</u>

Matters of Control

Waikato Regional Council reserves control over the following matters:

- i. The content of the Farm Environment Plan, including the Vulnerable Land assessment and identified Mitigation actions.
- ii. The maximum area of land to be used for commercial vegetable production.
- iii. The actions and timeframes 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 having regard to Policy 4.
- vi. 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. The time frame and circumstances under which the consent conditions may be reviewed.
- viii. Procedures for reviewing, amending and re-certifying the Farm Environment Plan.

Notification:

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

Block 3 Appendix 2

SCHEDULE 1 FARM ENVIRONMENT PLANS

Drafting note: Delete all parts of Schedule 1 as notified (except the Vegetable growing minimum standards) and replace with the following underlined text:

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

Parts A and B of this schedule apply to all farming activities, but it is acknowledged that some provisions will not be relevant to every farming activity.

Part A – Farm Environment Plans

- 1. <u>A Farm Environment Plan (FEP) shall be prepared and implemented in accordance with the requirements below.</u>
- 2. <u>The FEP shall be in written or digital form and include the following:</u>
 - a) The material set out in Parts B and D below; or
 - b) For sub-catchment consents the material set out in Parts B, C and D below; or
 - c) For industry/sector scheme consents the material set out in Parts B and D below.

Part B – Farm Environment Plan Content

- 1) <u>The FEP shall contain the following details:</u>
 - a) <u>Full name, address and contact details (including email addresses and telephone numbers)</u> of the person(s) responsible for the farming activities under this FEP or trading name (if applicable).
 - b) A list of land parcels which constitute the properties or enterprises and including:
 - i) <u>The physical address and ownership of each parcel of land (if different from the person</u> responsible for managing the properties or enterprises) and any relevant farm identifiers such as the dairy supply number, Agribase identification number, valuation reference; and
 - ii) <u>The legal description of each parcel of land.</u>
- 2) <u>The FEP shall contain map(s) or aerial photograph(s) of the land area(s) at a scale that clearly show the locations of:</u>
 - a) The boundaries of the legal parcels of the properties/enterprises; and
 - b) Any relevant internal property/enterprise boundaries that relate to risks and mitigation actions described in the FEP; and
 - c) Any water bodies including rivers, streams, drains, permanent lakes, ponds, springs and wetlands; and
 - d) <u>The existing and proposed riparian vegetation and fences (or other stock exclusion</u> <u>methods) adjacent to water bodies; and</u>
 - e) <u>The places where stock access or cross water bodies (including bridges, culverts and fords); and</u>
 - f) Vulnerable Land areas, as identified in Part B 3(a); and
 - g) <u>The existing and future mitigation actions to control farming activities and manage any</u> <u>associated contaminant diffuse discharges; and</u>
 - h) <u>Any freshwater monitoring locations associated with mitigation targets.</u>
- 3) <u>The FEP shall contain an assessment of the risk of any diffuse discharges of sediment,</u> <u>nitrogen, phosphorus and microbial pathogens associated with the farming activities on the</u>

land parcels, and the priority of those identified risks, having regard to sub-catchment targets in Table 3.11-1 and the priority of lakes and wetlands within the sub-catchment. As a minimum, the assessment shall include:

- a) <u>A description of the Vulnerable Land areas and an assessment of measures to</u> <u>manage any diffuse discharges of sediment, nitrogen, phosphorous and microbial</u> <u>pathogens associated with farming activities on the land parcels, including:</u>
 - i) <u>The identification of an appropriate buffer zone for water bodies including intermittent water</u> bodies, overland flow paths and areas prone to flooding and ponding; and
 - ii) <u>The identification of erosion prone land including: LUC Class 8 land; actively</u> eroding areas; gully head areas; and areas of bare soil; and
 - iii) An assessment of any nitrogen risk areas where rapid groundwater travel times based on land close to water bodies with high soil permeability or aquifer transmissivity lead to direct nitrogen losses; and
 - iv) An assessment of the shallow groundwater areas with saturated soils, artificial drainage (e.g. tile/mole drains).
- b) <u>A description of setbacks and riparian management, including:</u>
 - i) <u>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</u>
 - ii) <u>The provision of minimum setbacks from water bodies for stock exclusion of 5 metres</u> with an average 15 metres setback target (where practicable) from the water bodies across the FEP total land parcel areas; and
 - iii) <u>The provision of minimum setbacks of 5 metres where cultivation should be avoided;</u> <u>and</u>
 - iv) How stock shall be excluded from riparian margins and water bodies to achieve compliance with Schedule C; and
 - v) For areas with a slope exceeding 25° and where water body fencing is impracticable, the provision of alternative mitigation measures.
- c) <u>Performance goals within the FEP that clearly set an action plan and timeframe for</u> <u>managing any diffuse discharges associated with farming activities on the land parcels.</u>
- d) The use of any DST (in accordance with Schedule B) in the above assessment.
- 4) <u>The FEP shall include a nutrient budget (which includes nutrient losses to the environment) calculated in accordance with Schedule B. The nutrient budget shall also include the following:</u>
 - a) Budget updates at the end of each reporting year (including any: change in crop area, crop rotation length, type of crops grown, stocking rate or stock type);
 - b) Each time the nutrient budget is updated all the input data used to prepare it shall be reviewed, and a record of the input data review shall be kept;
 - c) <u>Calculation of the five-year rolling average NRP (except in the case of Rule 3.11.5.5).</u>
- 5) <u>The FEP shall contain Good Farm Practice¹ (GFP) benchmarks which identify:</u>
 - a) Existing GFP including any implemented since 22 October 2016; and
 - b) How GFP will be implemented annually during the term of the land use consent; and

¹ Examples of GFP are provided on the HortNZ, DairyNZ and Beef and Lamb New Zealand websites and in the document titled "Good Farming Practice Action Plan for Water Quality 2018" published by Federated Farmers.

- c) <u>The effectiveness of the GFP.</u>
- 6) In response to the assessments carried out under Part B paragraphs 3, 4 and 5 above the FEP shall include mitigation actions that will be undertaken to:
 - a) <u>Manage any diffuse discharges of nitrogen, phosphorus, sediment and microbial</u> <u>pathogens (associated with farming activities on the land parcels) as determined in Table</u> <u>3.11-1; and</u>
 - b) Maintain the five-year rolling average NRP (below the NRP baseline); and
 - c) <u>Identify:</u>
 - i) Management triggers; and
 - ii) Evaluation and screening processes; and
 - iii) Proactive and reactive mitigation actions; and
 - d) Implement GFP benchmarks; and
 - e) <u>Achieve performance goals to manage such diffuse discharges.</u>
- 7) <u>The FEP shall contain a record of:</u>
 - a) <u>Management triggers; and</u>
 - b) Actions, timeframes and other measures to manage any diffuse discharges (associated with farming activities) from the land parcels; and
 - c) <u>Annual reviews of where the actions will be undertaken, and when and to what standard</u> they will be completed; and
 - d) Monitoring against performance goals.
- 8) <u>The FEP shall be certified as meeting the requirements of this Schedule by a</u> <u>Certified Farm Environment Planner.</u>
- 9) <u>The FEP shall be reviewed at least once in every 12 month period from grant of the land use consent and the outcome of the review documented, and provided to the Waikato Regional Council upon request.</u>

Part C Sub-catchment scale consents

FEPs required under Rule 3.11.5.6 (B) shall contain the following additional matters.

- 1. <u>Identify and assess the critical water quality issues in the sub-catchment to achieve</u> the freshwater objectives, targets and limits in Table 3.11-1;
- Use of any DST (in accordance with Schedule B) to measure, model, and predict changes in the quality of water in water bodies measured against the freshwater objectives, targets and limits in the sub-catchment relative to farming activities on all individual properties and enterprises within the sub-catchment, and how they relate to the sub-catchment loads within Table 3.11-1;
- 3. Establish the principles for mitigation of input loads at the sub-catchment level based on the relationship between farming activities and the freshwater objectives, targets and limits and loads for the sub-catchment in Table 3.11-1;
- 4. <u>A monitoring programme (reporting in a suitable written or digital format) designed to</u> <u>monitor the actual or potential environmental effects of farming activities within the</u> <u>sub-catchment;</u>
- 5. <u>Use of adaptive management approaches to respond as part of any mitigation</u> actions to actual or potential adverse effects of farming activities on the receiving environment identified in the monitoring programme; and
- 6. Requirements for annual monitoring and mitigation reports.

Advice note: FEPs prepared in relation to sub-catchment scale consents must also comply with the additional matters in Schedule 2.

<u>Part D</u> Vegetable growing minimum standards

Farm Environment Plans required under Rule 3.11.5.5 shall contain the following additional matters.

No	Contaminant	Vegetable growing minimum standards
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/Phosphoru s	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
8	Nitrogen, Phosphorus	Evidence available to demonstrate split applications by block/crop following expert approved practice relating to: