

Regulation

Hawke's Bay Regional Council Tukituki Catchment Plan (PC6) Procedural Guidelines

**A guidance document outlining how the regional council
proposes to implement the regulation requirements of the
plan.**

October 2021

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Document Control

The Procedural Guidelines are a controlled document. They are a requirement of the Tukituki Catchment Plan Policy TT4(h). The Guidelines were initially prepared in collaboration with primary industry stakeholders in 2019. Subsequent updates to the guidelines have been necessary as processes have been superseded due to external events beyond the original scope of the collaboration process, such as the impact of Covid-19, prolonged drought in 2020 and a proposed plan change which did not eventuate.

Subsequent updates supersede the previous version and will be signed off by the regional council's Group Manager of Policy and Regulation as the registered document owner. The latest version replaces older copies in accordance with the regional council document control processes.

Document Information

	Position
Document Owner	Louise McPhail – Principal Advisor Policy Implementation
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Document History

The FEMP Auditor manual will have a six-monthly review cycle.

Version	Issue Date	Changes	Status
1.0	October 2019	Final Report	Final - HBRC Publication No. 5427
2.0	September 2020	Final Report	Final – HBRC Publication No. 5530
3.0	March 2021	Updated Report	Final – HBRC Publication No. 5549
4.0	October 2021	Reviewed Report due to Overseer review by MfE	Final – HBRC Publication No. 5565

Document Sign-off

Name	Role	Sign-off date
Katrina Brunton	Group Manager – Policy and Regulation	11 th October 2021
Louise McPhail	Principal Advisor Policy Implementation - Regulation	11 th October 2021

1. Introduction

The regional council recognises that landowners and occupiers of the land are critical for making a difference – the vast majority of the actions required to achieve policy outcomes for the Tukituki catchment need to be ‘delivered’ by landowners and occupiers. They are an essential piece of the puzzle to successful implementation and therefore effectiveness of the policy.

The policy and rule framework for the catchment will require change to the way that some enterprises are managed, and this could impact the income and profitability of an enterprise.

It is acknowledged that business approaches may need to change and the introduction of Good Management Practice (GMP) and mitigations to offset nitrogen leaching will incur cost, however the regional council aims to work with businesses to adapt and change over time.

The regional council recognises that other stakeholder groups can contribute knowledge, resources and processes to the successful implementation of the policy. These procedural guidelines have been developed jointly by the regional council and primary sector representatives, as a requirement set out in the Tukituki Catchment Plan (2015) (Plan Change 6)¹.

The regional council would like to thank the following organisations for their participation in the original development of this document:

Ballance Agri Nutrients
Beef and Lamb New Zealand
Dairy NZ
Deer Industry New Zealand
Federated Farmers of New Zealand
Fonterra Co-operative Group Limited
Foundation for Arable Research (FAR)
Hawke’s Bay Federated Farmers
Hawke’s Bay Fruit Growers Association
Hawke’s Bay Vegetable Growers Association
Hawke’s Bay Wine Growers Association
Horticulture New Zealand
Ministry for Primary Industries
New Zealand Deer Farmer’s Association
Ravensdown

¹ POL TT4(1)(h)

2. Government review of Overseer

In late 2018, the Ministry for the Environment and the Ministry for Primary Industries commissioned a review of Overseer by a Science Advisory Panel (SAP).

The panel considered Overseer's ability to estimate nitrogen loss across a range of conditions found in New Zealand.

The outcome of the review was published in August 2021². The panel concluded that they would not have confidence in Overseer to estimate the volume/rate of nutrient loss and whether nitrogen loss was being increased or reduced as a result of on-farm actions.

In its response to the review, the Government advised the regional sector that regulatory outcomes should not be determined solely based upon nutrient budget outputs from Overseer. This has resulted in a quandary for the Tukituki Catchment Plan, as Overseer is heavily embedded in both the policy and the rules themselves.

In view of the SAP review of Overseer and the Government response, the Council is unable to continue with implementation of the Tukituki Catchment plan as it is currently proposed in the Tukituki Catchment Plan (PC6) Procedural Guidelines (version 3, published March 2021).

We have determined that we will be unable to reliably assess whether individual high leachers are exceeding their LUC N allowance, based on Table 5.9.1D, without the use of Overseer. Enforcement of this rule based on Overseer outputs would also be unlikely to succeed. Therefore, we do not believe that we will be able to require applications for individual high leachers that are located outside a DIN exceeding sub-catchment.

We will still require applications for properties located within sub-catchments which are exceeding their DIN target. These farms require consent regardless of their Overseer estimated N loss. However, we will not be able to determine the 'activity class', which is based upon the amount of N leaching modelled in an Overseer nutrient budget, as currently required by the rules in the plan. Instead, we propose to apply a single 'activity class', of Restricted Discretionary, under Rule TT2 across all the DIN exceeding sub-catchments using other provisions in Rule TT1 (namely Rule TT1(j))4).

² <https://www.mpi.govt.nz/dmsdocument/46360-Overseer-whole-model-review-Assessment-of-the-model-approach>

We also propose a shorter term of consent (e.g., five years) as set out in the Government guidance document³. This will allow time for the proposed upgrade or replacement of the Overseer model and for the Tukituki Catchment Plan to be reviewed as part of the region wide Kotahi Plan being prepared and to be notified by the end of 2024, to meet the requirements of the NPS-FM 2020.

These Procedural Guidelines have been reviewed and updated to reflect the new implementation pathway, in collaboration with primary sector representatives.

The Tukituki Catchment Plan will be reviewed as part of the freshwater policy work being undertaken by the regional council in response to the Governments release of the NPS-FM 2020. It is intended that this will be completed by the end of 2024.

³ <https://environment.govt.nz/assets/publications/Responding-to-the-Overseer-review-advisory-note-FINAL.pdf>

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2. Outcomes

The Tukituki Catchment Plan sets the freshwater objectives for the Tukituki catchment.

The five objectives in PC6 are:

OBJ TT1	To sustainably manage the use and development of land, the discharge of contaminants including nutrients, and the taking, using, damming or diverting of fresh water in the Tukituki River catchment so that: (a) Groundwater levels, river flows, lake and wetland levels and water quality maintain or enhance the habitat and health of aquatic ecosystems, macroinvertebrates, native fish and trout; (b) Water quality enables safe contact recreation and food gathering; (ba) Water quality and quantity enables safe and reliable human drinking water supplies (c) The frequency and duration of excessive periphyton growths that adversely affect recreational and cultural uses and amenity are reduced; (d) The significant values of wetlands are protected; (e) The mauri of surface water bodies and groundwater is recognised and adverse effect on aspects of water quality and quantity that contribute to healthy mauri are avoided, remedied, or mitigated; (f) The taking and use of water for primary production and the processing of beverages, food and fibre is provided for.
OBJ TT2	Where the quality of fresh water has been degraded by human activities to such an extent that Objective TT1 is not being achieved, water quality shall not be allowed to degrade further and it shall be improved progressively over time so that OBJ TT1 is achieved by 2030.
OBJ TT4	To manage the abstraction of surface water and groundwater within a minimum flow regime and allocation limits that achieve OBJ TT1 while recognising that existing takes support significant investment.
OBJ TT4A	To recognise that industry good practice for land and water management can assist with achieving Objectives TT1, TT2 and TT4
OBJ TT5	Subject to Objectives TT1, TT2 and TT4, to enable the development of on-farm storage and Community Irrigation Schemes that improve and maximise the efficient allocation and efficient use of water.

The regional council is managing land use activities in the Tukituki Catchment in order to maintain and achieve the limits and targets set in the Tukituki Catchment Plan. A specified target is to achieve the dissolved inorganic nitrogen (DIN) limit of 0.8 mg/L by 2030.

For more detail on the policies supporting these objectives please follow this link:

<https://www.hbrc.govt.nz/assets/Document-Library/Tukituki/Tukituki-Plan-Change-6.pdf>

In addition to these provisions, the Government has introduced the National Environmental Standards for Freshwater Regulations 2020 (NES-FW) and the Stock Exclusion Regulations 2020 (SER). These took effect from 3rd September 2020. Not all provisions come into effect immediately, but they will take effect over the next 2 – 3 years and there is merit in incorporating the outcomes expected by these regulations and any need for resource consents into this process. For more details on the regulations please follow these links:

Resource Management (National Environmental Standards for Freshwater) regulations 2020

<https://www.mfe.govt.nz/fresh-water/freshwater-acts-and-regulations/national-environmental-standards-freshwater>

<https://www.mfe.govt.nz/fresh-water/freshwater-acts-and-regulations/stock-exclusion-regulations>

3. Purpose

These guidelines have been prepared to assist the regional council, landowners and primary industry representatives within the Tukituki Catchment to better understand the implications for affected farming systems.

Rule TT1⁴ sets standards that were to be achieved by 2020 if an activity is to operate as a permitted activity. If these are not met, then a resource consent is required. In particular:

- If a property or farm enterprise is exceeding its Tukituki land use capability (LUC) nitrogen leaching rate (as set out in Table 5.9.1D – *Figure 1.*) it must obtain resource consent. **In view of the Government response to the SAP Overseer review, HBRC consider that this is currently unable to reliably be assessed or enforced.**
- If a sub-catchment is determined to be exceeding the Dissolved Inorganic Nitrogen (DIN) limit of 0.8 mg/L, then **all** properties within the sub-catchment, greater than 4 ha (excluding low intensity farming systems) must obtain resource consent.
- If a property is unable to meet the stock exclusion or stream crossing requirements.

LUC Class	I	II	III	IV	V	VI	VII	VIII
Rate (KgN/ha/year)	30.1	27.1	24.8	20.7	20	17	11.6	3

Figure 1. Table 5.9.1D: Tukituki Natural Capital; Nitrogen Leaching Rates - in view of Government response, this table and the related Rule (TT1(d) are not being enforced).

These guidelines set out information on a number of matters that will provide greater certainty for landowners in assessing the environmental impacts of their current and future land use operations to assist in their decision making.

Specifically, these guidelines address⁵:

- The methodology for how Tukituki production land use consent applications will be assessed using a risk matrix for potential Nitrogen loss risk from the farm.
- The process for monitoring water quality trends and alerting affected farming properties if water quality limits are being approached.
- Delineation of the “capture zone” for the relevant water body. I.e., the area of groundwater or surface water contributing to the particular part of the water body in question

⁴ <https://www.hbrc.govt.nz/assets/Document-Library/Tukituki/Tukituki-Plan-Change-6.pdf>

⁵ These are requirements of policy TT4 1. (h)

- Where Rule TT2 (the need for a land use consent) is triggered, an adaptive management process for reducing nitrogen leaching from affected farming properties based on the implementation of progressively more stringent on-farm management practices.

4. Delineation of 'capture zones'

Under the rules of the plan, the regional council is to determine the delineation of the 'capture zones' for the relevant water body (area of groundwater or surface water contributing to the particular part of the water body in question).

Initially the delineation of the 'capture zones' will be based upon the surface water catchments of each sub-catchment as outlined in Schedule XIV (see Figure 2). The regional council will undertake modelling to further determine the impact, if any, from DIN sources outside the surface sub-catchment, on the levels of DIN recorded at monitoring sites in neighbouring catchments. It is anticipated that this modelling will be completed in the 2020 - 2021 financial year.

Once more information is known regarding the relationship and therefore potential contribution of nutrients in the groundwater from outside a sub-catchment, the capture zones may be reviewed.

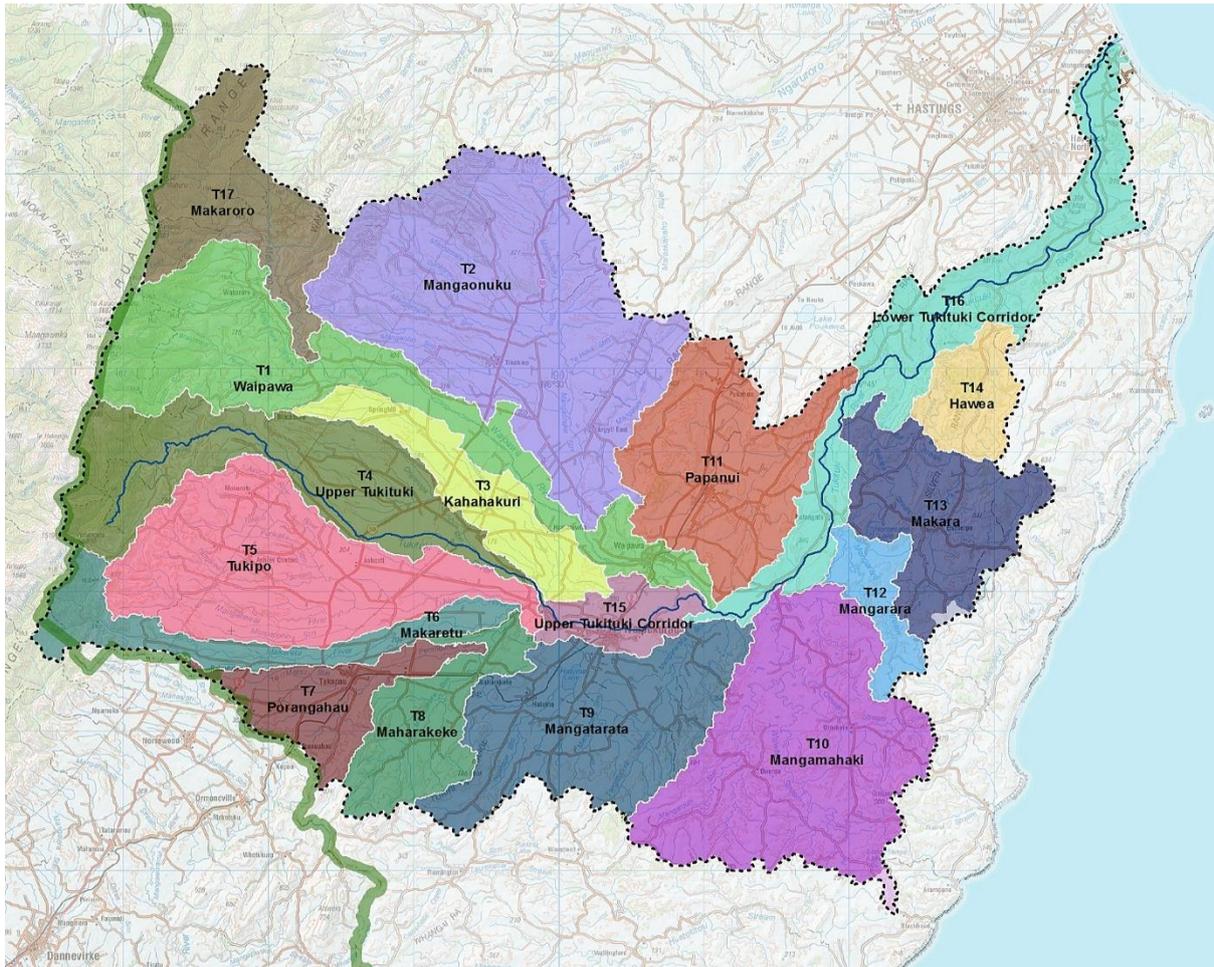


Figure 2. Schedule XIV – Tukituki River Sub-Catchments

5. Monitoring sites

Properties within each sub-catchment will be tied to a designated downstream regional council monitoring site in the relevant mainstem or tributary of a river. The regional council monitors a number of attributes (indicators of ecosystem health), including dissolved inorganic nitrogen (DIN).

DIN is comprised of nitrate, nitrite and ammonium. These forms of nitrogen are readily available to periphyton and may fuel excessive nuisance algae and phormidium growth, compromising the health and utility of causing waterways. This is a particular problem in the Tukituki River.

All properties over 4 ha (excluding low intensity farming systems), within a sub-catchment which has a **five-year average** exceeding the permitted DIN level of 0.8 mg/L (see Figures 3 & 4), will require a resource consent regardless of the individual property's LUC values.

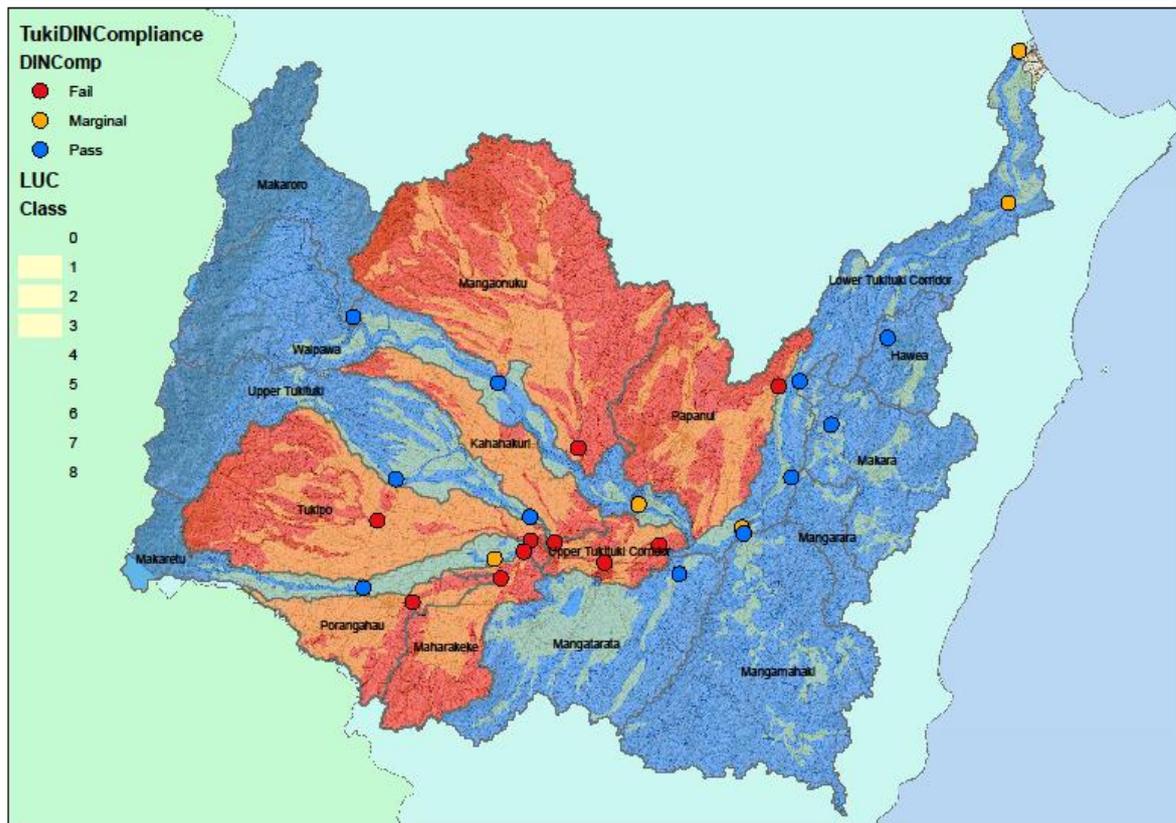


Figure 3. Sub-catchment compliance with DIN. Points are monitoring sites. Red indicates a sub-catchment is at risk of exceeding or has already exceeded the DIN limit, based on most downstream monitoring site in sub-catchment (i.e., the DIN compliance site). Yellow overlay indicates LUC class.

The five yearly average is based upon monthly monitoring data from the regional council monitoring sites located within each sub-catchment. For some sub-catchments five years of data is not yet available. In these circumstances, implementation of rule TT2 will be delayed until sufficient data becomes available to be able to determine a five-year average, (see Table 1, p11)

Each year, DIN compliance will be calculated based on 5-year periods ending May 31st. All landowners within the exceeding sub-catchment will be notified of the status of the catchment, and the subsequent requirement for a resource consent. Landowners will be given six months post notification of exceedance, to apply for resource consent.

The requirement for land use resource consents will enable the regional council to actively monitor farm activities and to ensure that the necessary steps are being taken by land managers to reduce the level of nitrogen being leached into waterways. The resource consent conditions will support a combination of good management practice, adaptive management and the use of mitigation strategies on farms, to reduce nitrogen leaching over time.

6. Sub catchments exceeding DIN

Subcatchment	Monitoring site name	Number of samples between June 2016 and May 2021	Average DIN (mg/l)	% of DIN limit
T01 Waipawa	Waipawa River at RDS/SH2	58	0.73	91
T02 Mangaonuku	Mangaonuku Stream at Waipawa Tikokino Rd	59	2.01	251
T03 Kahahakuri	Kahahakuri Stream U/S Tukituki Confl	59	3.22	403
T04 Upper Tukituki	Tukituki River at Waipuk Onga Road	56	0.26	33
T05 Tukipo	Tukipo River U/S Makaretu Confluence	58	2.24	281
T06 Makaretu	Makaretu Stream at Speedy Rd Bridge Gw8	58	0.51	64
T07 Porangahau	Porangahau Strm US Maharakeke Strm	57	2.81	351
T08 Maharakeke	Maharakeke Stream at State Highway 2 Br	57	1.69	211
T09 Mangatarata	Mangatarata Stream at Mangatarata Road	58	0.14	18
T10 Mangamahaki	Mangamahaki Stream at Tamumu	58	0.13	16
T11 Papanui	Papanui Stream at Middle Road	59	0.78	98
T12 Mangarara	Makara Stream at St Lawrence Road	58	0.15	19
T13 Mangarara	Makara Stream at St Lawrence Road	58	0.15	19
T14 Mangarara	Makara Stream at St Lawrence Road	58	0.15	19
T15 Upper Tukituki Corridor	Tukituki River at Tapairu Rd	58	1.42	178
T16 Lower Tukituki Corridor	Tukituki River at Red Bridge	59	0.65	81
T17 Makaroro	Makaroro River at Burnt Bridge	58	0.06	8

Figure 4. DIN compliance in Tukituki sub-catchments (Limit; 0.8 mg/L). Red highlighted sub-catchments are exceeding, orange highlight is within 80% of DIN limit.

Currently all properties over 4 ha (excluding low intensity farming systems) located within the **Mangaonuku and Kahahakuri sub-catchments** will be required to apply for a resource consent by 26th February 2021⁶ and all properties over 4 ha (excluding low intensity farming systems), located within the **Maharakeke, Tukipo, Porangahau, and the Upper Tukituki Corridor** will need to lodge an application by 30th November 2021.

Papanui sub-catchment

It was expected that the Papanui sub-catchment would be below 0.8 mg/L DIN at the time of the revised lodgement date for Tukituki land use resource consent applications (26/02/21). Affected landowners in the sub-catchment will be issued a 'Water Quality' warning and will be expected to implement GMPs as outlined in their individual FEMPs. Council will reassess the status of the sub-catchment on 31 May of each year (commencing from 31 May 2022) to determine whether the water quality continues to exceed the DIN limit. Landowners within the sub-catchment will be notified if the DIN limit has been exceeded and given six months to lodge the appropriate land use resource consent application with Council. Farms that were estimated as operating over their LUC limit will not be required to obtain resource consent at this time because of the status of Overseer.

From this date forward, if the average level of DIN (mg/L) is fluctuating above and below the 0.8 mg/L limit, the sub-catchment will be deemed to be exceeding until the average level of DIN has been below 0.8 mg/L limit for two consecutive years, based on a five-year rolling average as at the 31st May of the given years

⁶ Due to Covid-19, an interim process was established requiring pre applications to be lodged by the original date of 31 May 2020. A new lodgement date for full applications was set for 26th February 2021.

7. Farm Environmental Management Plans (FEMPs)

FEMPs play a pivotal role in achieving and demonstrating a multi-layered farm management approach to environmental stewardship.

The intent of FEMPs is to apply a flexible, property specific approach which allows the most effective actions to be chosen to address issues and risks to local water quality. This is particularly necessary to successfully address phosphorus loss, which requires identification and management of critical source areas (CSA). These are the areas of greatest contaminant loss. Mitigations are scaled to reduce contaminant losses to water from all agricultural activities.

Having a good plan is the first step. Ensuring landowner understanding of on-farm environmental effects, ownership of their FEMP and engagement in achieving individual property and catchment improvements, is essential to achieve catchment outcomes. Since 31 May 2018, all properties over 4 ha (excluding low intensity farming systems between 4 and 10ha in size), located within the Tukituki catchment, have been required to have a FEMP as provided by an accredited farm plan provider.

All FEMPs must adhere to Schedule XXII requirements of the Regional Resource Management Plan⁷, with the exception in light of the SAP report being provision of an Overseer nutrient budget (although this may still be provided as discussed below). They should also include matters covered by the National Environmental Standards for Freshwater 2020 (NES-FW) and Resource Management (Stock Exclusion) Regulations 2020 (SER). The FEMP produced must adequately identify all on-farm critical source areas and determine contaminant loss from all enterprise activities i.e., stock, fertiliser application and septic tanks enabling properties with a FEMP to prioritise an environmental action plan. As a minimum, the FEMP must state current industry good management practice (GMP) actions for reducing the risk of these nutrient/contaminant losses to water.

The FEMP must demonstrate how nitrogen leaching is to be minimised by implementing good management practices⁸ and where the nitrogen loss is considered a risk for the farm, must address Nitrogen loss and any practice changes that can be made. The Council recognises that while Overseer related provisions are not being actively enforced for regulatory purposes, that Overseer continues to be available and supported and provides a useful tool for capturing and reporting key farm data. It also provides a good method for assisting FEMP providers to understand and assess the risk of N leaching from activities occurring on the farm and understand how mitigation measures may change this risk.

The regional council acknowledges that for some farming systems, there will be a high risk of N loss, and the FEMP should set out how this risk will be managed. The FEMP will be reviewed and updated over the life of any consent, and it is expected that any relevant changes to Good

⁷ <https://www.hbrc.govt.nz/assets/Document-Library/Plans/Regional-Resource-Management-Plan/View-RRMP/New-Schedule-22.pdf>

⁸ As recognised by OBJ and POL TT4(c)

Management Practices (GMPs)⁹, and new technologies will also be adopted as they become practicably available to further reduce the degree of non-compliance.

Plantation forestry must be included in general FEMPs where it comprises up to 80% of a property's overall land use. Properties with forest cover of 80% or more, are permitted to be managed under a forestry-specific FEMP that takes account of the different nutrient loss profile of plantation forestry and abide to the National Environmental Standards for Plantation Forestry (NES-PF). It essentially must contain a phosphorus management plan and uses an N loss of 3kgN/ha as the basis for the N leaching rate from the forestry area.

Through addressing the whole of farm operation, the FEMP is an ideal tool to demonstrate how NES-FW and SER provisions are being addressed. Matters that should be covered in the FEMP to show that the NES-FM and SER provisions are being addressed include:

- Feedlots and other stockholding areas;
- Agricultural intensification; – forestry to pasture, pasture to dairy, increased dairy run-off, increases in irrigation of dairy land;
- Intensive winter grazing, through inclusion of a winter grazing module to specifically address risks associated with this practice.
- Use of synthetic nitrogen fertiliser;
- Monitoring and reporting;
- Wetlands, separation of activities from wetlands and effects of activities on wetlands;
- Effects on fish passage of any culverts, weirs, flap gates, dams or fords;
- Stock exclusion.

The requirements, content and regulations for nationally required farm plans are expected to be developed by the end of 2021.

8. FEMP Auditing

NES - Fresh Water Farm Plans (FWFP)

Freshwater farm plans will soon be mandatory for all farms with 20 or more hectares of land in arable or pastoral use or five or more hectares of the farm in horticultural land use. They are expected to come into effect from mid-2022. It is expected that the Tuketuki FEMPs will transition into a FWFP by 2024.

The auditing of Farm Environmental Management Plans (FEMPs) in Hawke's Bay will ensure that farm plan quality is at a consistent acceptable standard. Farm plans will contribute to the delivery of catchment-desired water quality and biodiversity outcomes and having a robust audit process in place will help keep the regional council on track to achieve these outcomes. Secondly, auditing of farm plans will support the regional council's FEMP Provider

⁹ See Appendix 2 for a list of recognised GMPs

Accreditation Scheme by providing immediate rigour to those submitting FEMPs and will ensure that standards are maintained over time

An auditing process will give feedback to landowners and FEMP providers. This will improve understanding, quality of plans, and engagement with catchment issues and outcomes.

Variations of FEMPs are going to be required nationally and will be a key component of catchment management for Hawke's Bay into the future.

The audit's design is focused on the auditor mentoring/guiding the landowner on a continuous improvement path. The auditor is the conduit for all parts of farm planning - a Good Management Practice (GMP) expert, and a farm systems expert with regulation knowledge enabling them to take part in thorough farm planning conversations with all stakeholders.

All FEMPs are eligible to undergo an audit. The farm selection criteria for auditing covers:

1. Farms that are assessed as having a high risk of potential Nitrogen loss
2. Farms assessed as having a medium risk of nutrient loss but are located in sensitive catchments or contain practices which could have a disproportionate effect on water quality
3. Stream length
4. Farm size
5. Low risk of N loss in DIN exceeding sub-catchment
6. Random sampling of Accredited Auditors
7. Random sampling

Conducting consistent and robust FEMP audits is critical to achieving the requirements in Schedule XXII of the Tukituki Catchment Plan.

Individual audit reports are expected to provide information directly to farmers and contribute to continuous improvement of farm environmental management plans and their effective implementation.

The audit process covers both approved providers and those working through the approval process.

Farm plans are to be reviewed and updated regularly, so the farm plan represents the current farm system. A farm system change will require a FEMP update

Tukituki farm plans need updating before the deadline of the three-year renewal cycle. If an accredited farm planners' farm plan is found to not pass an audit, the farm plan must be updated with the relevant corrections and submitted at the renewal period deadline.

The first Tukituki catchment three-year review cycle required farm plans to be re-submitted to the regional council by 31 May 2021. The next review cycle is due for submission by 31 May 2024.

The desired outcome from auditing FEMPs is improved management of all on-farm environmental risks and the achievement of catchment objectives.

8.1 Auditing processes

Auditing will consist of a farm plan meeting all criteria as specified in the Tukituki Catchment Plan Schedule XXII (except an Overseer nutrient budget). Farm plans will also be assessed for completeness as part of the initial consent application process. The permitted activity farms outside of a DIN exceeding sub-catchment will consist of an annual programme utilising the above stated selection criteria.

Auditing will be undertaken by two groups; the FEMP auditing team who will focus on permitted activity farms and compliance monitoring who will audit consented properties. This is described more fully in the compliance section (13) of this document.

Ongoing maintenance of a “passing audit grade” will be a requirement of resource consent conditions and maintainance of a permitted activity status. For some consents, auditing will take a more regular compliance monitoring regime (annually) and be undertaken by the regional council compliance monitoring team. However, compliance monitoring will also be assessing implementation of the FEMP and related consent conditions, not just whether the FEMP meets Sch XXII as for the permitted activity related auditing.

9. Overseer and alternative Risk Matrix approach

Overseer is the nutrient model used in the Tukituki Catchment Plan to estimate farm leachate concentration. It was developed over a number of years for use by farmers to manage nutrients to maximise production and profitability. It is now used as a tool to provide additional data in the management of water quality and is key to a number of the Tukituki Catchment Plan provisions.

In 2018 the government commissioned a science advisory panel (SAP) review of Overseer which concluded Overseer is not to be solely relied upon in a regulatory context, the Council is therefore unable to continue with implementation of the Tukituki Catchment plan as it was proposed in the Tukituki Catchment Plan (PC6) Procedural Guidelines (v3 – March 2021).

Nutrient budgets can continue to be prepared using the latest version of Overseer and published to the council via the Overseer^{FM} platform or applicants can choose to supply information to HBRC as required by Schedule XXI of the Tukituki Catchment Plan.

In light of this, the Council developed an approach with two options.

1. Prepare an Overseer nutrient budget as before or
2. Provide specific alternative information otherwise included in an Overseer budget

In September 2021 this was socialized with the primary industry representative group who collaborated on the original Procedural Guidelines in 2019. Members indicated a preference to work together to further develop the second option

A working group was established with representation from the dairy, sheep and beef, arable and horticulture sectors. At pace, the group collaborated and shared information which allowed Council to develop an alternative risk matrix. Sector wide agreement on the approach was reached quickly.

Landowners will be required to retain specific farm data, including that set out in Schedule XXI and in consent conditions. This data could be used to assess risk or for input into a future version of Overseer or an alternative tool as is deemed appropriate.

A 'Two-Tiered Risk Matrix' was developed, based off the conversations had with industry and the discussion above around most useful, balanced with ease of data collection across industry indicators of Nitrogen potential loss risk.

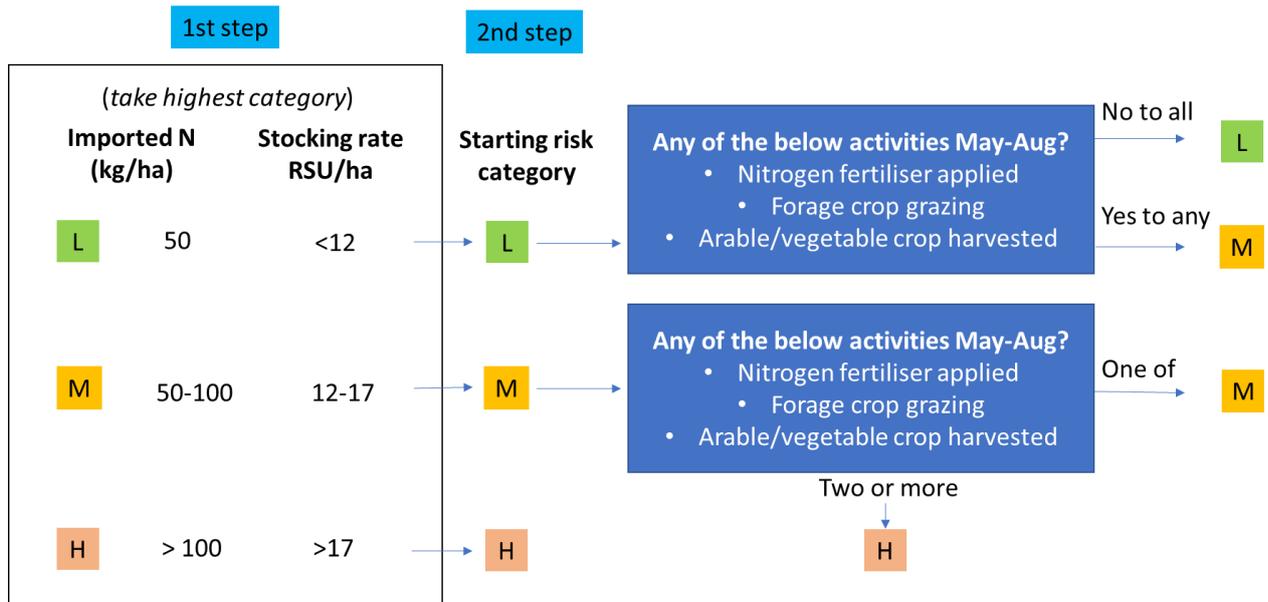


Figure 5 – The ‘Two-Tiered Risk Matrix’

Firstly, Imported Nitrogen (in fertiliser and feed, in kg/ha/yr) and stocking rate (in RSU/ha) are checked against the three categories. Whichever of the two is the highest has the initial category applied to it e.g., low, medium or high.

E.g., a farm importing 55kg/N/yr in fertilizer and feed with a stocking rate of 11 RSU/ha would take the imported N as the highest category and be ‘medium’ for the first step.

If the property comes out ‘high’ it stays high. If the property comes out low or medium, three key questions are then asked:

1. Do you use any Nitrogen fertiliser between May and August?
2. Do you graze any forage crops by stock between May and August?
3. Do you harvest any arable or vegetable crop between May and August?

Depending on how many of the above questions apply to the farm it may stay in its initial category or move up to a medium or high category.

The matrix will be socialised with the farm plan providers, to be used when updating a landowners FEMP and applying for consent. It is intended that by the provider running through the matrix and having the conversation with the landowner, a part of the FEMP update and the consent application can be structured based off the result of the matrix. Noting this

approach is only a *potential* risk of nitrogen leaching from the farm. It does not account for other contaminants that should still be addressed in both the FEMP and consent application.

E.g., if a farm uses winter Nitrogen and has cattle grazing winter forage crops these activities should be discussed in the application, and mitigated/managed appropriately (Intensive Winter grazing modules, timing of fertiliser applications with soil temperature and buffers, etc.)

To determine the data needed in the matrix, either an Overseer file could be used to provide the figures (e.g., RSU/ha) or a calculator that will be supplied by HBRC can be used determine nitrogen content in feed and RSU/ha. Fertiliser nitrogen load per hectare can be determined from fertiliser records.

Property Address:	
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CALCULATION OF REVISED STOCK UNITS (RSU)

Stock units are a means of calculating stock number equivalents between species and age groups on the basis of feed consumed. 1 RSU is defined as an animal with an intake of 6000 MJME/yr or 550kgDM/yr. Assumptions for conversion ratios are provided in the tables below

Instructions:

- 1) In the highlighted grey cells enter the tally/ peak number of animals carried in late spring (eg Oct/Nov or 1 month before weaning)
- 2) Add farm area at the bottom of the table
- 3) Use revised stock units per Ha (R.S.U./ha) in your reporting

SHEEP	Tally / number	Stock unit conversion	Stock units
Ewes		1	0
Hoggets		0.7	0
Wethers		0.7	0
Rams		0.8	0
Total sheep	0		0

BEEF CATTLE	Tally / number	Stock unit conversion	Stock units
M.A. Cows		5.5	0
Heifers 2.5 Yr		5.5	0

Figure 6: Image of Revised Stock Units (RSU) Calculator

CALCULATION OF NITROGEN IN FEED IMPORTED

Nitrogen (N) in feed and N in Fertiliser together make up nitrogen imported to the property. The table below contains the assumptions and a calculator to use to work out N in feed imported.

Instructions:

1) Enter amount of each feed in either grey highlighted column as tonnes or kg DM. Use dry matter % from table below if needed

2) Ensure farm area is entered in blue cell E88

3) Use kgN/ha from feed in your reporting

Agricultural product name	Nitrogen		Amount of feed imported (KG Dry Matter)	Nitrogen imported in Feed (kg)	Amount of feed imported (Tonnes DM)	Nitrogen imported in Feed (T)
	Dry matter % (N) %	Category				
Apple Pomace	65	1.1 Concentrates		0		0
Apples	18	0.6 By-product		0		0
Bread	63	0.8125 By-product		0		0
Cabbage	9	3.2 By-product		0		0
Carrots	13	1.52 By-product		0		0
Citrus Pulp	20	1.12 By-product		0		0
Copra	88	3.2 By-product		0		0
Fishmeal	88	11.09 By-product		0		0
Grape Marc	38	1.12 By-product		0		0
Grape Pomace	38	1.12 By-product		0		0
Kiwifruit	15	0.8 By-product		0		0
Onions	10	1.6 By-product		0		0

Figure 7: Image of Nitrogen in feed imported (abridged version)

Once a production land use consent has been lodged with a two-tier N risk matrix evaluation the consent team will use the evaluation as part of how they assess the consent.

The level of risk determined from the matrix is a way for the consent team to triage what applications they may need to scrutinise more. The risk level isn't something that would hold landowners to a specific set of mitigations or certain reductions. But it is an indication of how much evidence the consents team will expect to see around efforts taken to minimise nitrogen loss. The risk index is also an indication of how much focus will be placed on different types of properties in future plan iterations. The council would highlight that the more evidence we can collect of progress made towards reducing nitrogen in the next few years will help inform discussions around how restrictive any future regulations may need to be.

Protocol for submitting Overseer nutrient budgets to HBRC

If applicants choose to continue to use Overseer, the regional council requires nutrient budget data to be submitted using the latest version of Overseer.

All data inputted into Overseer is now in an online platform (OverseerFM), with different levels of access for the farm. The regional council will require a version of a farm's nutrient budget(s) to be 'published' to the regional council's OverseerFM account.

This will become part of the consent application. Applicants can also choose to include a printed copy of this analysis with their application, but access must be given electronically.

The 'published' file is read only access to the Council, so the regional council cannot make any changes to the shared, published nutrient budgets. They represent the farm's nutrient budget analysis and information at the time they were published. Any subsequent changes will require another publication, and applicants will need to supply the new reference number to Council.

One published version should represent the system that the applicant is seeking consent for. Multiple published versions may be required to support an application, for example if the applicant is proposing to decrease their Nitrogen leaching after a set number of years. When an applicant publishes a file, it should be named using the following convention:

Dairy farms: use supply number (no spaces) and scenario name/number

Other farms: use physical address (no spaces) and scenario name/number

For example:

700ExampleRoadConsentScenario

700ExampleRoadYearXScenario

10. Consents

Disclaimer: The discussion below is intended to give a general indication of Hawke's Bay Regional Council's intended approach to processing production land use consents. Each application will be assessed on its own merits. The general approach set out below may differ once the individual circumstances of each application and its actual and potential effects on the environment are considered.

Cost¹⁰:

\$1150 initial deposit – Single property located in a DIN exceeding sub-catchment, not assessed as 'high' risk for N loss

\$2300 initial deposit – All other land use consent types (stock exclusion and crossings, feed lots, NES FM applications, 'high' N loss risk, farm enterprise comprising multiple farms)

Actual and reasonable costs will be charged for the processing of all resource consents. Further deposits may be required if an application for resource consent is to be notified.

Ongoing costs

Compliance monitoring costs – actual and reasonable costs will be charged for ongoing monitoring of resource consents. The level of costs will vary according to the required frequency of compliance monitoring.

10.1 Guidance on Table 5.9.1D post SAP Report and Government Response

The Tukituki Catchment Plan (PC6) was made operative in 2015. It introduced new ways to manage production land use activities. This means that production land use (farming) needs to operate in accordance with conditions and limits, and if it doesn't a resource consent is required.

Production land use consent activity classes are based on a farm's (or farming enterprise's) individual Nitrogen loss in relation to a Nitrogen loss table in the Plan (Table 5.9.1D). The table was created in 2012 using an older version of Overseer (v 5.4.3), and since then over a dozen updates have occurred.

The most up to date version of Overseer (currently version 6.3.3) will be used to determine Nitrogen loss and compare production land use activities against the rates set in Table 5.1.9D.

¹⁰ Subject to change according to the charges set in HBRC annual plan. Please refer to the Consent Charges Guide for current information.

LUC Class	I	II	III	IV	V	VI	VII	VIII
Rate (KgN/ha/year)	30.1	27.1	24.8	20.7	20	17	11.6	3

Figure 8 Table 5.1.9D (HBRRMP Plan Change 6)

Table 5.9.1D was included in the Tukituki plan to set out the Rule and therefore the activity status each farm or farm enterprise would fall under, as follows:

- On or under the LUC leaching limit: permitted activity (outside of DIN sub catchment, and no stock exclusion consent requirements) (Rule TT1)
- Up to 30% over LUC leaching limit: restricted discretionary consent (and/or in a DIN exceeding catchment or no/incomplete stock exclusion) (Rule TT2)
- More than 30% over LUC leaching limit: non-complying activity consent (Rule TT2A)

As discussed above, the SAP report has cast considerable doubt on the accuracy of Overseer and its ability to be used in a regulatory context. A comparison to Table 5.9.1D was to be used when determining consent activity status under Rules TT2 and TT2A of the Plan. As this can now not be done reliably, Table 5.9.1D and associated policies and rules¹¹ will not be able to be implemented.

If NES-FM or SER matters are being addressed within this process this may lead to a different activity status for parts of the activity.

10.2 Consents; Sub-catchment exceeding DIN

If a sub-catchment is currently determined to be exceeding the DIN limit of 0.8 mg/L, then **all** properties within the sub-catchment, greater than 4 ha (excluding low intensity farming systems) must obtain resource consent.

The regional council does not have the discretion to make exceptions to this without first going through a process to change the Plan. In the remaining sub-catchments, if a five-year average exceedance of DIN is confirmed, all landowners within the exceeding sub-catchment will be notified of the status of the catchment, and the subsequent requirement for a resource consent. Landowners will be given six months post notification of exceedance, to apply for a resource consent.

If an individual property is located in an exceeding sub-catchment but is assessed as presenting a low risk of contribution to N loss, then the resource consent will focus on ensuring that the farming enterprise follows the action schedule set out in the associated FEMP, and

¹¹ Specifically, POL TT4(f), POL TT6(1)(b), Rules TT1(d) and TT2A.

that other industry GMP measures are implemented over set timeframes if these are not already adequately captured by the FEMP.

The aim is to decrease the degree of DIN exceedance within the sub-catchment. Properties which are located within a sub-catchment which is exceeding the DIN limit, may be prevented from increasing the intensity of their farming operation, if it is likely to lead to an increased nitrogen leaching rate. Farm system changes¹² will result in the need for an updated FEMP and a new consent. As part of this process the applicant will need to demonstrate the impact of the changes proposed. Evidence provided with the application could include Overseer scenarios or other modelling, and reference to best available evidence, particularly peer reviewed scientific reports.

The Government advice on Overseer indicates that multiple lines of evidence are required to show the effect of changing farm systems, and Overseer cannot be relied on alone to support applications of this nature. Applications for farm system changes will need to be prepared with the assistance of specialist technical advisers (e.g., farm systems experts, water quality scientist or similar) and a planner. Where changes to a farm system are proposed, further information may be requested from the applicant through the consent process. The onus is on the applicant to provide information to support their application for any change to the farming system. In some cases, such as expansion of irrigation on a dairy farm, or expansion of dairy support land, consent is also required under the NES FW.

If more than 4 ha of a property (or 10 ha if that part of the property is low intensity) is located upstream of a monitoring site within a sub-catchment that does not meet Table 5.9.1B or 5.9.1C, then the entire property will need to apply for resource consent.

If NES-FM or SER matters are being addressed within this process this may lead to a different activity status for parts of the activity.

10.3 Consents; Individual property exceedance

If a property or farm enterprise is exceeding its Tukituki LUC natural capital nitrogen leaching rate (as calculated based on Table 5.9.1D – *Figure 8*), consent would be required. However, as set out above, Council does not consider it can enforce this requirement given the SAP review findings on Overseer. A landowner may choose to carry on and apply for a resource consent should they see a benefit in holding a consent. These would be assessed as restricted discretionary activities under Rule TT2.

Resource consents may be required under Plan Change 6 for other reasons such as:

- not excluding stock from the beds and margins of lakes, wetlands or flowing rivers (whether intermittent or permanent)
- for formed stock crossings through a surface waterbody

¹² Farm system change: Means a change in farming practices beyond routine fluctuations that arise as a result of rotational, annual or seasonal variations in climatic and/or market conditions.

- not having and implementing an up-to-date FEMP

Resource consents are required under the RRMP for other reasons such as:

- feedlots
- dairy effluent discharges
- water takes
- structure over water ways (e.g., bridges and culverts)

These activities also need to be integrated into any FEMP.

Resource consents may be required under the NES-FM if they are not addressed as part of the Production Land use Consents.

These activities include:

- feedlots
- other stockholding areas
- agricultural intensification
- conversions of land to dairy farmland (increase by more than 10ha)
- irrigation of dairy farmland (increase by more than 10ha)
- use of land as dairy support (if more area than used during the reference period 1 July 2014 to 30 June 2019)
- Intensive winter grazing
- Application of synthetic fertiliser (exceeding the nitrogen cap of 190kg/ha)
- Activities affecting wetlands or rivers

The Stock Exclusion Regulations (s360) requires the exclusion of stock (beef cattle, dairy cattle, dairy support cattle, deer and pigs) from lakes, wide rivers and natural wetlands by no later than 2025. Resource consents cannot be applied for to allow stock to graze within these exclusion areas.

If NES-FM or SER matters are being addressed within this process this may lead to a different activity status for parts of the activity.

10.4 Consents; Restricted discretionary activity

For a restricted discretionary activity (RDA) resource consent, the regional council can only consider and set conditions on matters within the specified matters of discretion. The matters for discretion under Rule TT2 are:

- a. *The actual or proposed nutrient loss from production land within the farm property or farming enterprise in relation to:*
 - i) *Tukituki LUC Natural Capital; Nitrogen Leaching Rates on a whole of farm property or whole of farming enterprise basis in Table 5.9.1D having regard to POL TT4;*

- ii) *The current surface water quality and the surface water quality limits in the catchment having regard to POL TT1;*
- iii) *The current groundwater water quality and the groundwater water quality limits in the catchment having regard to POLTT2;*
- iv) *Current estimates of catchment or water management zone loads of nitrogen and phosphorus having regard to POLTT4, TT5 and TT6;*
- v) *Whether reasonable and practicable opportunities have been taken to reduce phosphorus losses from the farm property or farming enterprise having regard to POL TT5.*
- vi) *Whether **reasonable and practicable** opportunities have been taken to reduce nitrogen losses from the farm property or farming enterprise having regard to POL TT4.*
- b. *The adequacy of any proposed industry good practices and any associated FEMP designed to avoid, remedy or mitigate the effects of the activity having regard to POL TT6.*
- c. *The imposition of mitigation measures where stock are unable to be excluded from water as required by Rule TT1*
- d. *The imposition of mitigation measures where the activity is likely to contribute to or cause a breach of the Drinking-Water Standards for New Zealand having regard to POL TT1 and POL TT2.*
- e. *Monitoring and reporting requirements having regard to POL TT15.*
- f. *Duration of consent having regard to POL TT6 (3).*
- g. *Review of consent conditions.*

Given the SAP review findings, applications will be considered as restricted discretionary activities¹³.

10.5 Consents; Notification

The information below is for guidance only – each application will be assessed on its merits and the actual and potential adverse effects of the proposed activity on the environment and on other parties.

Consent applications must be publicly notified if the proposed activity will have, or is likely to have, adverse effects on the environment that are more than minor¹⁴. Limited notification of any affected person is required if the activity's adverse effects on the person are minor or more than minor (but are not less than minor)¹⁵.

Case law has found that 'minor', means comparatively small in size or importance, and terms such as 'comparatively unimportant', 'relatively small or unimportant', 'of little significance or consequence' capture the intended meaning of the term.

¹³ Unless there is a need to bundle these applications with other applications with a more restrictive activity class, for example under the NES FW

¹⁴ RMA, s95A and 95D

¹⁵ RMA, s95E

When considering notification, Council is only concerned with the adverse effects of the activity, but the effectiveness of any proposed mitigation measures can be taken into account.

In some cases, the Council may determine that an application needs to be notified on a limited basis (limited notification). This means that only certain groups or persons are considered to be adversely affected by the proposal, and therefore only those persons are notified of the application and can make a submission on the application.

In sub-catchments with poor water quality, there is a possibility that some applications will need to be notified. This is most likely for those applications for farms with high leaching risk and/or where farm system changes are proposed that are likely to increase nutrient losses, and where these are located in parts of the catchment with demonstrably poor water quality (e.g., where nitrate levels exceed toxicity). It is unlikely that applications for existing farms of lower risk will be publicly notified. It is also unlikely that applications for farms located outside of 'poor' water quality catchments will be publicly notified.

10.6 Consent term

Duration of consent will be a maximum of five years, in line with Government guidance¹⁶. This will allow time for Overseer to be improved and/ or for a new model to be developed. This will also allow time for the Tukituki Catchment Plan to be reviewed as part of the NPS-FM 2020 freshwater planning requirements.

Resource consents will still be required under the NES-F, which contains regulations that apply to a range of activities that pose risks to freshwater and freshwater ecosystems, including Agricultural intensification and the Synthetic nitrogen fertiliser cap.

10.7 Application requirements

To be accepted for processing, an application must contain the information required by s88 and Schedule 4 of the RMA.

An application for consent must include the following (refer s88 and Schedule 4 of the RMA):

- An application form complying with Form 9 of the *Resource Management Act (Forms, Fees and Procedure) Regulations 2003*

The Council has developed application forms for use by applicants. Use of these forms will satisfy this requirement. The Council's information sheet for the sub-catchments may also be used to describe the existing issues and trends in water quality.

- An assessment of environmental effects (AEE).

¹⁶ <https://environment.govt.nz/assets/publications/Responding-to-the-Overseer-review-advisory-note-FINAL.pdf>

The AEE should:

- Identify and describe the receiving environment.
- Identify the actual and potential effects (including cumulative effects) of the activity on that environment.
- Assess the impact of those effects – including effects on the environment and to other people.
- Identify whether measures are available or necessary to avoid, remedy, or mitigate those effects.

The term 'effect' is defined fully in s 3 of the RMA and includes both positive and adverse effects, effects that are past, present and future, and any cumulative effect which arises over time or in combination with other effects - regardless of the scale, intensity, duration, or frequency of the effect. The term effect also includes any potential effect of high probability and any potential effect of low probability which has high potential impact.

Cumulative effects will need to be considered. A FEMP on its own is not likely to constitute an AEE, but where it meets Schedule XXII requirements it will adequately describe the activity (i.e., the farm) and its individual effects. Where a FEMP is being withheld from public release, the application form must be completed in full.

Once the majority of applications have been received for a sub-catchment the regional council may undertake a cumulative effects assessment of the activities. The cost of this work will be split evenly across the applicants for each sub-catchment. The work will assess the current state and water quality trends within each sub-catchment.

This work, along with the other information requirements, will help to ensure that the applications are complete and are able to be accepted for processing.

The application forms will allow for applicants to agree to being part of the group that will be assessed as part of this work. Those not agreeing will be expected to provide their own assessment of cumulative effects.

- An assessment of the activity against all relevant NPS FM (2020), Regional Policy Statement and Regional Plan policies and objectives.

This would specifically include the Tukituki Catchment Plan objectives and policies. It may also include relevant RPS provisions. Guidance material could be developed by HBRC or by industry bodies to help applicants to identify the relevant provisions.

The application forms will contain prompts to ensure the relevant provisions are assessed. For more complicated applications such as for higher risk farms, farm system changes, or enterprises consisting of multiple farms, use of a consultant is recommended.

- An assessment of the activity against any relevant National Environmental Standards or Regulations.

The NES Sources of Human Drinking Water will be a relevant consideration and should be specifically considered in each application. This will require identification of nearby registered drinking water supplies.

HBRC will need to provide access to maps so that applicants can identify nearby registered supplies.

The NES Freshwater will also be relevant, and the need for any other consent requirements should be clearly identified.

11. Stock exclusion

Stock exclusion is a key success parameter for the Tukituki plan to achieve the freshwater objectives OBJ TT1 and surface water E. coli targets (Table 5.9.1A of PC6).

The Stock Exclusion Regulation (SER) also applies. Farmers undertaking new fencing should be aware of the requirements of the SER, including a 3 m setback from the edge of the bed of a lake or river (a bed that is wider than 1 metre anywhere in a land parcel) and the low slope land requirements (www.mfe.govt.nz/fresh-water/freshwater-acts-and-regulations/stock-exclusion). Land which falls within the area delineated by the 'low slope' map falls under the SER rules and therefore there is no consenting option available to allow stock access to rivers, streams, lakes or natural wetlands past the dates set in the regulations.

Summary Rule TT1, clauses (e), (f) and (g):

e. For single paddocks on land delineated in Schedule XX as having a slope of 15 degrees or less all livestock (other than sheep), shall be excluded from the beds and margins of any lake, wetland and flowing river (whether intermittent or permanent) by 31 May 2020;

f. For single paddocks on production land delineated in Schedule XX as having a slope of greater than 15 degrees and where the stocking rate of livestock excluding sheep exceeds 18 stock units per hectare either:

(i) all livestock (other than sheep) shall be excluded from the beds and margins of any lake, wetland and any flowing river (whether intermittent or permanent) by 31 May 2020;

or

(ii) Outside of the Papanui, Porangahau, Maharakeke, Tukipo, Kahahakuri and Upper Tukituki corridor catchments (as shown in Schedule XIVc), for individual farm properties or farming enterprises exceeding 4 hectares in size, by 31 May 2020 a Phosphorus Management Plan shall be prepared as part of a Farm Environmental Management Plan and it shall include stock exclusion requirements where stock exclusion is reasonably practicable, and alternative phosphorus loss mitigation measures where stock exclusion is not reasonably practical.

(iii) Within the Papanui, Porangahau, Maharakeke, Tukipo, Kahahakuri and upper Tukituki corridor catchments (as shown in Schedule XIVc) Rule TT1(f)(i) must be complied with.

g. Notwithstanding conditions (e) and (f), grazing of a permanently fenced riparian margin may occur for weed control purposes provided that:

(i) The total period of grazing in any year does not exceed 7 days;

(ii) The fenced riparian margin shall be grazed no more than twice in any year during the period 1 November to 30 April.

Stock may continue to utilise managed stream crossing points (where stock are usually excluded from the surface water body but are actively herded across the surface water body by the farmer).

Stock exclusion Papanui, Porangahau, Maharakeke, Tukipo, Kahahakuri and upper Tukituki corridor catchments;

1. All livestock except sheep on slopes under 15 degrees (Schedule XX) and stocking density above 18 su/ha
2. From the bed and margin of any lake wetland any flowing river (permanently flowing or intermittent)
3. To be completed by 31 May 2020
4. If not completed to obtain a consent from 31 May 2020

Stock exclusion in other catchments;

- for individual farm properties or farming enterprises exceeding 4 hectares in size,
- by 31 May 2020 a Phosphorus Management Plan shall be prepared as part of a FEMP.
- it shall include stock exclusion requirements where stock exclusion is reasonably practicable
- alternative phosphorus loss mitigation measures where stock exclusion is not reasonably practical.

Farmers are expected to have identified all areas required to have stock exclusion and have completed implementing the exclusion methods in these areas. If stock exclusion has not been completed a resource consent is required. Farmers are expected to hold appropriate consents for their operations

Where stock exclusion is not reasonably practicable alternative mitigation measures shall be implemented.

An application for consent to not undertake stock exclusion will need to convincingly demonstrate why stock exclusion is not reasonably practicable. The applicant will be expected to undertake a full and detailed assessment of alternatives, including achieving stock exclusion using a staged approach, and to demonstrate that any alternative options will achieve the equivalent or better water quality outcome than stock exclusion. Stock exclusion is known to be a particularly effective measure for improving water quality, and the regional council will generally be reluctant to grant consent for applications to avoid this measure.

But notice needs to be taken of the **Stock Exclusion Regulation (SER)** (discussed above) which will prohibit stock access in many circumstances by 2025 or earlier.

12. Formed stock crossings

Summary Rule TT1, clauses (h) and (i):

h. Notwithstanding conditions (e) and (f), stock may continue to utilise managed stream crossing points (where stock are usually excluded from the surface water body but are actively herded across the surface water body by the farmer). But the SER limits this to no more than crossing more than twice per month.

i. Permanent and intermittent rivers that are crossed by formed stock races shall be bridged or culverted by 31 May 2020.

Definitions:

Managed stock crossing;

Managed stream crossing refers to a point(s) along a stream where stock are actively herded across to access another paddock or part of the farm. It is intended that this activity be infrequent, not on formed raceways and that stock shall be actively managed.

Intermittent River;

A river that does not flow continuously and has a bed that is predominantly unvegetated and comprises silt, sand, gravel, boulders or similar material.

Formed stock races;

- These are not defined in the glossary in the Regional Resource Management Plan (RRMP).
- There is no material difference between a track, a laneway and a race, the key is the word formed.
- The track or race is obvious and formed in some way i.e., gravel/an obvious dirt track or fenced.
- A cut and fill track on sloping ground has been formed.
- A fenced strip of land used to muster stock between paddocks.
- It would be unlikely that there would be consistent pasture cover maintained on the race/track.

The stock crossing rule is separate to the stock exclusion rules. The stock crossing rule does not mention sheep being excluded from the requirement for a bridge or culvert and therefore applies to all livestock. Sheep were excluded from the stock exclusion rule on the basis that they avoid standing in water. If they are being moved over a waterway along a formed stock race sheep will go through the water the same as other livestock and with similar effects on water quality.

Farmers are expected to have identified in their FEMP all crossing points required to have culverts or bridges installed. The culvert or bridge is required by the plan to be completed by 31 May 2020.

If installing a crossing, this requires a resource consent (Refer to Rule 72 and Rule 69 of the RRMP), a consent should be obtained prior to commencing any site works. Farmers are expected to hold appropriate consents for their operations

Culverts and bridges may not be required under this rule (TT1) but may be installed as a mitigation for a critical source area (CSA).

Compliance monitoring will monitor resource consents, follow up with failed FEMP audits and respond to calls regarding stock accessing waterways.

The NES-FW also applies to river crossings.

STOCK EXCLUSION – WHEN DOES IT APPLY IN THE TUKITUKI CATCHMENT?

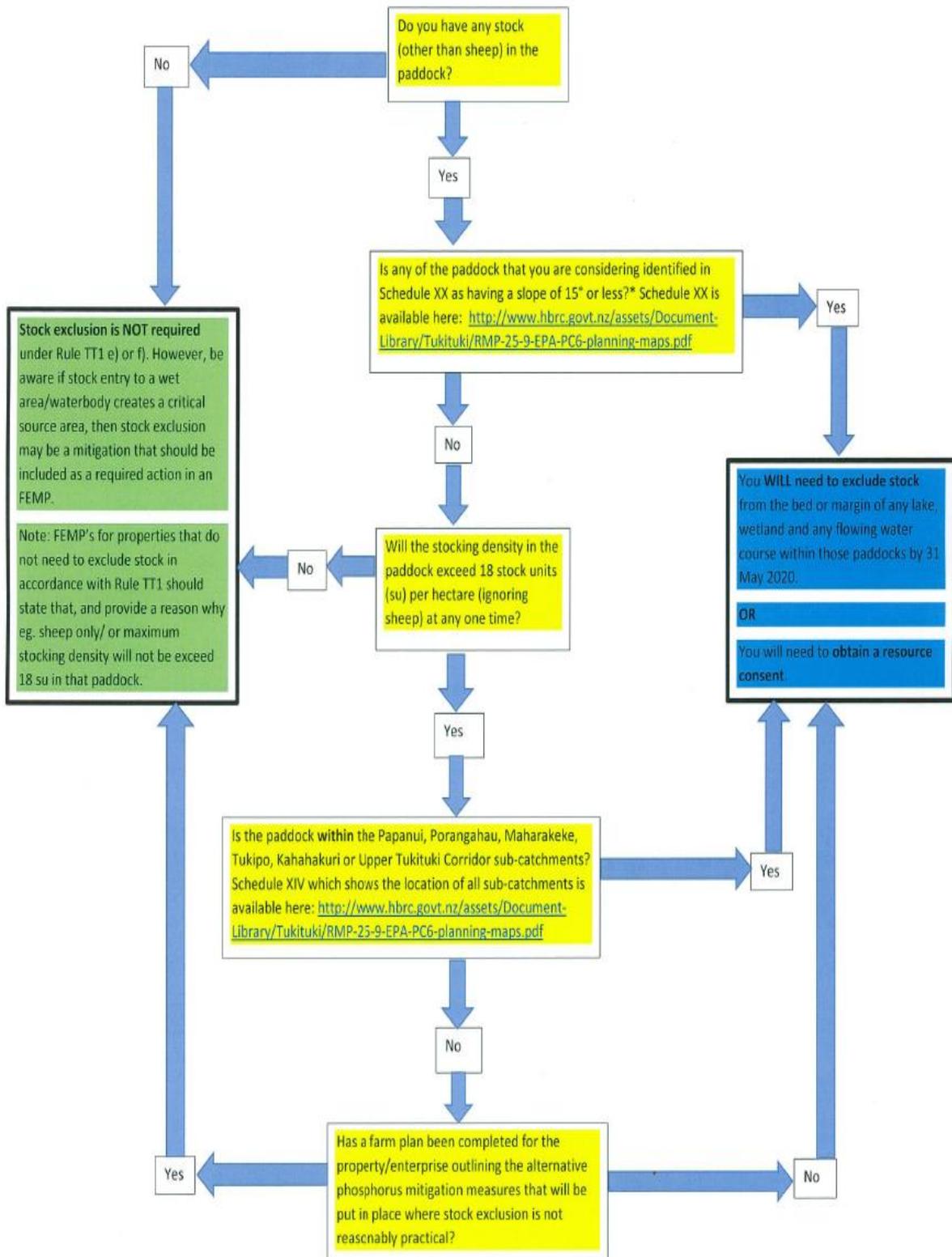


Figure 9: Stock exclusion rules¹⁷

13. Compliance

The Council has adopted the 4 E's model Engage, Educate, Enable and Enforce and will apply these as a 'spectrum' (rather than solely as a linear progression). This is considered the most effective way of achieving the highest levels of compliance with regulation. Some sections of council have a greater responsibility in Engagement Education and Enabling, enforcement however is solely a compliance function.

Farm Environmental Management Plans

Compliance Monitoring will follow up where an enterprise does not hold a FEMP or a low intensity farming system confirmation. Failure to hold a current and appropriate FEMP is a breach of the plan and will be investigated. Any enforcement action taken will be consistent with the HBRC Enforcement Manual (February 2018).

Where a property is sold, or operational control transferred such as through a rental or lease agreement Council needs to confirm if the new owner /occupier will acquire and adopt the existing FEMP. Otherwise, if the farming operation will significantly change, a new FEMP or an update is required.

FEMPs are required to be updated at a significant change in farming system or 3 yearly from 1 June 2018. For those that do not submit a FEMP Update Summary as required the compliance section will follow up to ensure all farm properties are covered by a current farm plan.

Support for land use consenting process

Council has made a significant effort to engage with, educate and enable production land users to be aware of the need to apply for resource consents ahead of times specified in the regional plan. Properties that are required to hold a production land use consent for which no application is made will be followed up by compliance monitoring.

The consent application processing also needs to be fully supported by the applicant. Causing delay by not supporting the consent application may also be investigated by compliance monitoring.

Monitoring of FEMP implementation and compliance with resource consent conditions.

Where a property holds a resource consent the consent will be monitored by the compliance monitoring section. FEMPs for properties requiring either a non-complying or restricted discretionary activity consent will be audited as part of the ongoing monitoring requirements specific to the individual resource consent conditions. The frequency of the monitoring required by consents will reflect the intensity and nutrient loss rate of the farm.

¹⁷ The stock Exclusion Regulation (SER) also applies. Farmers undertaking new fencing should be aware of the requirements of the SER, including a 3 m setback from the edge of the bed of a lake or river (a bed that is wider than 1 metre anywhere in a land parcel) and the low slope land requirements (www.mfe.govt.nz/fresh-water/freshwater-acts-and-regulations/stock-exclusion).

Where minor matters of noncompliance are identified, effort will be put into education and enabling to achieve the compliance. In circumstances where significant noncompliance is identified, this is not possible, and enforcement action may be initiated.

Auditing of permitted activity farms (outside of a DIN exceeding sub-catchment) will be undertaken by the FEMP auditing team. Where significant noncompliance is identified this will be reported to the compliance monitoring section for follow up.

Permitted activity properties may also be visited on occasion by an HBRC compliance monitoring officer as part of ongoing permitted activity monitoring such as if information is received in relation to a possible breach of the rules, for example stock exclusion.

Properties over 10 hectares located within a priority DIN catchment, that have submitted to Council a low Intensity farming confirmation will receive follow up from the Compliance team to confirm their low intensity status. If on the compliance monitoring visit, the property is found to not meet the low intensity requirements or stock exclusion has not been completed, a resource consent will be required.

Monitoring of stock exclusion and stock crossings

Crossings requiring bridging or culverting, and stock exclusion should be identified in the FEMP. If these are not installed by 1 June 2020 then the farm will need to hold a consent which will provide a timetable for installation.

Monitoring of stock exclusion and stock crossings will be incorporated with any FEMP auditing site visits and site visits for resource consent and permitted activity monitoring. Specific visits may be scheduled where a resource consent has been issued for exemptions or to allow time to assess effects on the waterways.

Where fences are compromised for reasons such as flooding HBRC will require these to be reinstated in a reasonable timeframe.

Where council receives information regarding a possible breach of a rule or a resource consent such as a failure of stock exclusion this will be followed up by compliance monitoring staff.

14. Communication/engagement

As well as direct communication with affected landowners/ managers in the Tukituki Catchment, the regional council have held meetings with subcatchments exceeding DIN and offered individual meetings to applicants with consent planners, to discuss requirements for resource consent applications.

If a subcatchment is exceeding DIN, but the regional council do not already hold five years of data, landowners within these subcatchments will be notified once this data becomes available and has been verified.

The regional council has developed a dashboard which is available on the website www.hbrc.govt.nz and search #Tukituki, which provides the latest water quality status of the subcatchments within the Tukituki catchment.

Information leaflets for each sub-catchment pertaining to water quality and ecosystem health have been produced for some subcatchments. Further subcatchments will be added to this suit of information leaflets in due course.

A 'Tukituki Catchment Plan – Do I need a resource consent? A quick guide.' has also been produced as a companion guide to the procedural guidelines and will be distributed throughout the Tukituki Catchment.

The regional council are also supportive of existing and new subcatchment groups which are working at a local level to mitigate the effects of nitrogen leaching through community projects such as wetlands.

More guidance is being developed on the NES-FM and SER. This is and will be made available via MFE, Industry and HBRC websites.

15. Adaptive management/ mitigation

The regional council has developed a proposed framework for considering farm consent applications in the context of potential nitrogen loss risk and ecosystem health. A central rationale is that mitigations that improve ecosystem health may not all reduce nitrogen, but any actions that improve ecosystem health will be considered when trying to mitigate the negative effects of nitrogen exceedance.

Initially, the Cawthron Research Institute had been contracted to identify and recommend proven ways to improve ecosystem health in a farming context. This will involve separating mitigation packages into low, moderate and high categories. The 'low' category will include the industry good management practices that all farmers should be implementing, as time and resourcing allows. The 'moderate' category will include mitigations that go over and above 'industry good practice' and are known to make substantial improvements to ecosystem health without being overly expensive. The 'high' category will include mitigations that are known to improve ecosystem health but may be relatively expensive for farmers to implement.

Moderate level mitigations

- Provide evidence of benefits from N mitigations not accounted for in Overseer
- Increase length the length of riparian areas that have a 5m wide managed buffer in place (buffer can be rank grass)
- Undertake riparian plantings that will provide effective shade over waterways(i.e not pasture grass), ideally in segments with 1km minimum planted length
- Other methods to protect waterways where fencing is impractical and not required by the plan (i.e. land slope is greater than 15° or only sheep are being grazed (strategic partial fencing gully heads, reticulation/alternative water supply, mid paddock shade trees)
- Implement fencing, grassed swales and detention bunds at critical source areas
- Improve fish passage through waterways on property
- Mitigations that contribute to tangata whenua values

High level mitigations

- As per moderate contributor, plus consideration of:
 - Increase length the length of riparian areas that have a 10m wide managed buffer in place (buffer can be rank grass)
 - Undertake riparian plantings that will provide effective shade over waterways(i.e not pasture grass), ideally in segments with 2km minimum planted length
 - Invest in constructed wetlands
 - Undertake native plantings and/or weed control on any natural wetlands

Figure 10. These lists are intended for guidance only They are indicative rather than prescriptive, and not exhaustive. Applicants would not need to do all things listed. The ultimate mitigation package will need to be tailored to individual farm circumstances.

Within a contributing group, larger properties will be expected to do more than smaller properties.

Through the consent process, farms will be considered for their potential N loss risk. Applicants will be able to provide information to explain why they may present a lower actual risk than what is suggested by the potential risk assessment tool. However, in general, higher risk farms are expected to be contributing more to instream nitrogen exceedances than other farms of lower risk.

During the consenting process, farms that are considered 'moderate' or 'high' contributors to the nitrogen problem may be expected to consider implementing more of the mitigation measures in the 'moderate' and 'high' mitigation packages, respectively than lower risk farms. All farms and personal situations are different, and so the ecosystem health workstream will be provided as 'guidelines' to help the consenting process, but HBRC will be taking a considered approach for each consent on an individual basis. As details emerge from this work, a better option may be identified and so some details above may change. It is also recognised that a short term of consent, as now proposed (5 years) may not be conducive to implementation of larger scale mitigation measures.

Please see Appendix 2 for Good Management Practice guidelines. For further advice on good land management practice and methods for reducing or mitigating nitrogen leaching from farming properties, guidance should be sought from farm consultants or primary industry representatives.

16. Sale of land/change of ownership

FEMP

The FEMP must reflect the current farming system on the property. When a farm (in whole or in part), changes ownership or is leased, the existing FEMP needs to be provided to the new owners or leasee and must continue to be followed.

If there are to be changes to activities on the property, the FEMP must be updated to reflect the change in farming system. If there is no proposed change to the farming system then the FEMP can be updated as part of the three-year review cycle, but the new owner should be aware of any actions specified by the FEMP and must implement these within the specified timeframes.

If the farm has a Production Land Use resource consent, then any material changes to the FEMP must also be reflected by the resource consent. This may require a change of conditions to the consent or a new consent (e.g., where there is a farm system change).

It is therefore recommended that prior to any farm system changes, the proposals are discussed with the regional council.

Resource consents

Although resource consents are issued in the name of an individual, partnership, trust or company, land use resource consents are tied to the land and cannot be transferred to a different location.

When a property sells any associated land use consent for production land use, must be transferred to the new owner of the land. The new owners can either adopt the existing FEMP or produce a new FEMP to reflect the proposed farming system for the property. This may require a change to the resource consent conditions and should be discussed with the regional council prior to any changes being implemented.

The aim of the Tukituki Catchment Plan is to improve the water quality of the Tukituki River and its tributaries. If changes to farm systems and FEMPs do not show improvements, then changes to resource consents may not be approved. The NES-FM and SER have similar aims and can be managed in conjunction with the requirements of the Tukituki Plan Change.

Contacts

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Appendix 1 – Response to Covid-19

The following interim process was instigated in response to the nationwide lockdown due to Covid-19 and the prolonged drought experienced in Hawke's Bay. As a consequence, a revised lodgement date of 26th February 2021 was introduced for Tukituki land Use Resource Consents. **Applications from the Kahahakuri and Mangaonuku sub-catchments are now overdue.**

Covid-19 response

Hawke's Bay Regional Council (HBRC) acknowledges that Covid-19 is having a major impact on New Zealanders and especially on our rural community, which is already under major pressure from prolonged drought conditions.

It is not currently possible for farmers to have service providers physically on farm or hold sub-catchment meetings. This may be the situation for some time. We also acknowledge the extreme challenges placed on farmers by the declared drought, which has affected the Upper Tukituki area more significantly than any other part of Hawke's Bay.

At this stage, the 31 May 2020 deadline for Tukituki land use resource consents still stands, it is part of an operative, legal plan. We are seeking a legislative solution, but this is not guaranteed, so HBRC have developed an interim approach. This approach is simple to comply with but does need some positive action from farmers.

Interim approach:

1. If you have a completed application, please submit this to HBRC by the 31 May 2020 deadline.
2. If a consent application has not yet been completed, please fill in, sign and return Form A, with the additional information required by Appendix Administration Form A by the 31 May 2020 deadline. This shows that you intend to apply for consent once you are able, and also gives HBRC up to date contact information.

The following information will hopefully provide answers to some of your questions regarding the consenting process. If you have submitted a pre application, it is important that once you are able, you work with your FEMP or nutrient budget provider and farm consultant to complete and submit a **full application** to HBRC.

Further guidance will be provided by HBRC as it becomes available. If you have any questions, please contact one of the HBRC staff listed at the end of this document.

Appendix 2 – Good Management Practices

1. Industry-agreed Good Management Practices relating to water:
http://files.ecan.govt.nz/public/pc5/MGM_Technical_Reports/Industry_Agreed_Good_Management_Practices_MGM_2015.pdf
2. Good Farming Practice, action plan for water quality 2018:
<http://www.hortnz.co.nz/assets/Our-Work-files/Good-farming-practice-for-water-action-plan-2018.pdf>
3. The Deer Industry environmental management code of practice 2018:
https://www.deernz.org/sites/dinz/files/Deer_EMCoP_Apr%202018_web_interactive.pdf
4. Horticulture New Zealand, Code of Practice for Nutrient Management (2014):
<http://www.hortnz.co.nz/assets/Uploads/Code-of-Practice-for-Nutrient-Management-v-1-0-29-Aug-2014.pdf>
5. Fertilizer Association, Code of Practise for Nutrient Management:
<http://www.fertiliser.org.nz/Site/code-of-practice/>
6. Dairy NZ, Nutrient Management on your dairy farm:
https://www.dairynz.co.nz/media/3361747/Nutrient_management_on_your_dairy_farm.pdf

Other information:

1. Planting native plants in Hawke's Bay:
https://www.dairynz.co.nz/media/3361747/Nutrient_management_on_your_dairy_farm.pdf
2. Practical guide to riparian planting on the east coast:
https://www.dairynz.co.nz/media/3361747/Nutrient_management_on_your_dairy_farm.pdf
3. Further Dairy NZ Environment Management advice:
<https://www.dairynz.co.nz/environment/>

