

Form 'B' – Assessment of Environmental Effects

Tukituki Production Land Use Activities

This form is for farms in the Tukituki Catchment only.

Before you apply for resource consent please ensure you have:

- A Farm Environmental Management Plan (FEMP) that accurately reflects your current and proposed farming activities; and
- Overseer Nutrient Budgets (published to the Council using OverseerFM).

If you do not have both of these, you are unlikely to be able to complete your resource consent application to a level that will be accepted by HBRC. Please contact the Consents Advisor at HBRC before proceeding.

Guidance notes are available to assist you to make an acceptable application. The guidance is also available online.

Applicant Name: I & P Farming Ltd (from Form 'A' Q1.4)

All information Council holds is 'official' public information under section 2 of the Local Government Official Information and Meetings Act 1987 (LGOIMA), as such any and all information may be requested by a third party.

We understand some of what is contained in your FEMP is commercially sensitive information, that you would not like to be made freely available to the public. You can that your FEMP is withheld from the public in Q19 of this form. If you do request your FEMP to be kept confidential you must answer the FEMP related questions in Application Form B fully, so any person reading the consent application form can gain enough understanding of the proposed activity and its effects.

If you do not require your FEMP to be kept confidential you can refer to the sections in your FEMP that answer the relevant application Form B questions, instead of repeating the information. Where you want to do this, please provide details of where in your FEMP the relevant information can be found (e.g. on page 4, under the heading Phosphorus Mitigations).

Sections A, B, C, H, I and K must be completed in full by all applicants. If your FEMP is to be withheld from public release, you must also fill in the additional sections in full where they are applicable to your farm.

A: DETAILS OF THE ACTIVITY

(THIS SECTION MUST BE COMPLETED IN FULL)

- 1 Location/ address of the Activity**
337 Ongaonga Waipukurau Rd Waipukurau
- 2 Name of property/farming enterprise:**
Braemar
- 3 General description of farm/enterprise (e.g. dairy, sheep and beef, deer, horticulture etc):**
Braemar is a currently unirrigated, flat 305ha sheep, beef and cropping operation in Central Hawkes Bay with a winter animal feeding operation that has triggered the requirement for a Feedlot Land Use Resource Consent.
This consent application covers both the current dryland farming operation and the farm under irrigation if a water use consent is approved.
- 4 Dairy supplier number (if applicable):**
N/A
- 5 Total farm or farm enterprise area (ha):**
The property pays rates on 313.425ha however there are some over and under boundary areas due to the waterways running alongside the farm. The title area on the LINZ database is 303ha. The area mapped in Overseer FM is the 305.1ha measured using an aerial image of the farmed area. The area of 304.9 used to calculate the Land Use Capability based Nitrogen Leaching Limit is this area less the 0.15ha mapped as "River" in the New Zealand Land Use Resource Inventory database.
- 6 What is the (estimated) total area of the farm/ property within each catchment?**
The property has 75.3ha in the Upper Tukituki sub-catchment and 230.3ha in the Kahahakuri sub-catchment. The whole farm sits within the Middle-Upper Tukituki Surface Water Allocation Zone.

(If you are unsure of your sub-catchment, go to:
<https://www.hbrc.govt.nz/environment/farmershub/in-the-tukituki-catchment/tukituki-dashboard>*)*
- 7 Please provide a description of the physical features of your property/farming enterprise and the surrounding area.**
The property is flat, bounded to the southwest by the Tukituki River, and has several tributaries of the Kahahakuri stream crossing the property. Adjacent properties are also flat, irrigated and dryland sheep, beef and cropping farms.

8 Identify the activities you require resource consent for? (there may be more than one)

Consent Required? (Y or N)	Activity	Explanation/Description of when consent is required
N	Stock Exclusion	You have not, or will not have, excluded all livestock (excluding sheep) from the beds and margins of all lakes, wetlands and rivers/ streams within your property/enterprise by 1 June 2020 as required by Rule TT1(e) and (f)
N	Exceed LUC Nitrogen Leaching Rate	The nitrogen modelled to leach from your property/enterprise exceeds the Nitrogen Leaching Rate specified in Table 5.9.1D of Plan Change 6 - Rule TT1(d).
Y	Subcatchment exceeds limits	Your property is located within a sub-catchment that exceeds the limits for nitrate-nitrogen or DIN (Dissolved Inorganic Nitrogen) – Rule TT1(j)
N	Stock crossings	You have not, or will not have by 1 June 2020, installed a permanent facility (i.e. a bridge or culvert) on all formed stock races that cross permanent and intermittent rivers/ streams as required by Rule TT1(i)
N	Intensive winter grazing ¹	<p>Intensive winter grazing that does not meet one or more of the conditions of Regulation 26 of the NES FW.</p> <p>Tick the conditions that you cannot meet (it may be more than one):</p> <ul style="list-style-type: none"> <input type="checkbox"/> area of farm used for intensive winter grazing will exceed 50 ha or 10% of the farm. <input type="checkbox"/> mean slope of a paddock used for intensive winter grazing exceed 10 degrees. <input type="checkbox"/> pugging exceeds 20 cm in depth at any one point <input type="checkbox"/> pugging of any depth covers > 50% of the paddock <input type="checkbox"/> Separation distance to waterways (5m) not met <input type="checkbox"/> Replanting before 1 October each year not met
N	Expansion of intensive winter grazing area	<p>Expansion of an intensive winter grazing area that does not meet Regulation 29 of the NES FW:</p> <p>Tick the conditions that you cannot meet:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Land on the farm has not been used for winter grazing within the period 1 July 2014 to 30 June 2019. <input type="checkbox"/> The area of the farm used for winter grazing exceeds the maximum area of the farm previous used for winter grazing in the period 1 July 2014 to 30 June 2019.

¹ Intensive Winter Grazing: means grazing livestock on an annual forage crop at any time in the period that begins on 1 May and ends with the close of 30 September of the same year.

B: FARM ENVIRONMENT MANAGEMENT PLAN (FEMP)

(THIS SECTION MUST BE COMPLETED IN FULL)

- 9 FEMP attached to application? Yes
FEMP version and date:
V3 12/11/2021
- 10 What date was your FEMP first prepared?
19/11/2018
- 11 Who initially prepared your FEMP?
Colin Tyler
- 12 Are they a HBRC Accredited FEMP Provider? Yes No
- 13 When was your FEMP reviewed? or Not reviewed
13.1 What date was your FEMP reviewed?
12/11/2021
- 13.2 Who reviewed your FEMP:
Emma Buchanan
- 13.3 Are they a HBRC Accredited FEMP Provider? Yes No
- 14 Has there been any significant change since your FEMP was prepared/reviewed?
Yes No if Yes please provide detail
- 15 Have any of the actions identified in your FEMP been completed? Yes No
15.1 If Yes, please detail what actions, and when they were completed below.

Action	Description (what was done, where)	Date completed
Stock exclusion	Waterways crossing the property have been fenced to exclude stock	Prior to May 2018
Nitrogen leaching is within limits	Overseer Nutrient Budget averaged over 4 years shows nitrogen leaching below limit	12/11/2021
Run off from wintering area, yards and sheds is directed into pasture	Sediment is prevented from reaching waterways	Ongoing
Irrigation design and modelling will not lower the farms environmental performance	Overseer modelling	Ongoing

- 16 All information Council holds is 'official' and as such may be requested by a third party in accordance with the Local Government Official Information and Meetings Act 1987 (LGOIMA). LGOIMA has some provisions for the withholding of this information, please indicate if these apply to your FEMP

Tick:

- I do not request the withholding of my FEMP; Or
- I consider that disclosure of my FEMP could result in:
 - Prejudice to the commercial position of the property, and/or
 - Improper gain or improper advantage by a third party, and/or
 - The protection of natural person's privacy being beached, and/or
- Other _____ (s6/7 of LGOIMA)

I Ian Abernethy ask Council to consider the above and confirm that it accepts the FEMP subject to an obligation of confidence and that it will consult me before making it, or any part of it available to any third party.

NOTE: if you request that your FEMP remains confidential you must fully complete this application form in detail. Failure to do so may mean that the Council is unable to accept your application for processing under Section 88 of the RMA.

C: NUTRIENT BUDGET

(THIS SECTION MUST BE COMPLETED IN FULL)

- 17 **What date was your Nutrient Budget prepared?**
12/11/2021
- 18 **What version of Overseer was used to publish your Nutrient Budget?**
Overseer FM 4.1.2.4
- 19 **Who prepared your nutrient budget and are they a Certified Nutrient Management Advisor (CNMA) ?**
Emma Buchanan, Yes
- 20 **Was your Overseer Nutrient Budget prepared in accordance with the Overseer Best Practice Data Input Standards? Yes No**
If No please advise why _____
- 21 **Have you modelled any farm system changes or mitigation measures set out in your FEMP? Explain the nutrient loss reductions and associated timeframes proposed. See guidance – more than one ONB will be required. ONB should be used to allow for a four year rolling average nutrient loss to be estimated.**
Not applicable, under N leaching Limit
- 22 **Have you published your Nutrient Budgets to the Council Yes No**
Name(s) of published file(s):
Abernethy Braemar 2021
Abernethy Braemar 2020
Abernethy Braemar 2019
Abernethy Braemar 2018
Abernethy Braemar Irrigation Scenario

See Guidance - Council requires nutrient budget data to be published using Overseer FM.

D: STOCK EXCLUSION

(THIS SECTION MUST BE COMPLETED IN FULL IF YOU HAVE ASKED FOR YOUR FEMP TO REMAIN CONFIDENTIAL)

(or tick if not applicable to your farm)

23 Please outline your work plan to achieve stock exclusion, or the alternative measures you are proposing to undertake if stock exclusion is not being done?
All waterways have been fenced to exclude stock and bridged as required

24 Please explain/justify the timeframes for the work/mitigations you plan to do (Please provide specific comment about why works cannot be completed more quickly, and if possible, please provide evidence to support this).
N/A all works completed

Supporting evidence attached? Yes No

25 Please comment on whether or not you believe that you are taking all reasonable and practicable opportunities to reduce phosphorus losses from your property/enterprise, and provide reasons for your answer.
Yes we are. All works completed

E: LUC EXCEEDANCE AND/OR SUB-CATCHMENT DIN EXCEEDANCE

(THIS SECTION MUST BE COMPLETED IN FULL IF YOU HAVE ASKED FOR YOUR FEMP TO REMAIN CONFIDENTIAL)

(or tick if not applicable to your farm)

- 26 What is your property/farming enterprise's modelled Nitrogen leaching rate? (estimated using a 4 year rolling average)

21.75

- 27 How was this calculated? (e.g. averaged from 4 years of overseer outputs)

Nutrient budgets were prepared for this property on 12/11/2021. When considered as a whole enterprise, the farm shows a four-year rolling average N loss to water modelled in Overseer FM of 21.75 kgN/ha/year, which achieves the limit of 30.1 kgN/ha/year.

Year	Nitrogen Leaching Limit (kgN/ha/year)	OVERSEERFM® Nitrogen Leaching Result (kgN/ha/year)
2017-2018		23
2018-2019		23
2019-2020		22
2019-2021		19
4 year rolling average	30.1	21.75

An application is underway to gain resource consent from the Hawkes Bay Regional Council to access 1.2 million m³ for irrigation.

Proposed pivot designs show the irrigation could cover between 220 and 240ha depending on the layout chosen. A scenario prepared in Overseer assumes irrigation of 181.5ha, an arbitrary indicative area modelled to illustrate the concept with the drains crossing paddocks removed from the total irrigable area using variable rate irrigation targeted to location and crop needs. The exact area to be irrigated would be optimised during the design of the system and may not be exactly 181.5ha. Irrigation scheduling would be based on soil moisture monitors installed to trigger irrigation when a minimum soil moisture level is reached, up to a maximum optimum level.

The stocking policy on the farm would change significantly from that demonstrated in the years 2017-2020 (the year ending 2021 is not a normal season, with unusually low stock numbers after the drought) with a reduction in cattle over the year, replaced with lamb trading over winter. The ability to use irrigation to get autumn grass started well should allow some "mop up" of the autumn nitrogen flush traditionally seen in dryland areas, and the smaller urine patches of lambs compared to big cattle should result in a more event spread and increased plant uptake of urinary nitrogen. The winter feeding area would continue to be utilised without irrigation due to the stony soils on this part of the farm. Crops and fertiliser would be targeted to ensure soil structure and health are maintained, and the nitrogen leaching limit is continually achieved on the basis of a four-year rolling average.

The scenario with irrigation and an increased lamb trading policy showed a modelled N loss to water of 21kgN/ha/year, a reduction from the typical modelled leaching under the current dryland programme. Scenarios for the property under irrigation, and with the intention to manage that irrigation according to best practice and within nitrogen limits, demonstrates the property can continue to operate within the Tukituki N Leaching Limits with the addition of irrigation, potentially with an improved environmental performance to the benefit of the ground and surface water quality.

28 Please outline what you propose to do to reduce nitrogen and phosphorus losses from your farming operation.

Continue to manage stocking rates, cropping and fertiliser use to achieve the nitrogen leaching limit. Continue to protect soils from erosion and waterways from stock access.

29 Please explain/justify the timeframes for the work/mitigations you plan to do (Please provide specific comment about why the proposed works are the best practicable option compared to other possible options, and why they cannot be completed more quickly, and if possible, please provide evidence to support this).

The property is well under the N leaching limit, including modelled with irrigation

Supporting evidence attached? Yes No what:

30 Explain how you are taking all reasonable and practicable opportunities to reduce nitrogen losses from your property/enterprise and provide reasons for your answer.

The property is well under the N leaching limit.

31 For non-complying activities: (Individual LUC Exceedance is >30%): Please outline what alternatives are possible that would reduce nitrogen loss from your farming operation and why these have not been chosen ?

N/A

32 Explain how you are taking all reasonable and practicable opportunities to avoid additional phosphorus load to the Tukituki River, as well as any steps you are taking to reduce your properties existing phosphorus loads

N/A

F: STOCK CROSSINGS

(THIS SECTION MUST BE COMPLETED IN FULL IF YOU HAVE ASKED FOR YOUR FEMP TO REMAIN CONFIDENTIAL)

(or tick if not applicable to your farm)

- 33 Please outline your work plan to install bridges/culverts, or the alternative measures you propose to undertake if bridges/culverts are not going to be installed.**

All formed stock races have been bridged or culverted where they cross waterways.

- 34 Please explain/justify the timeframes for the work/mitigations you plan to do (Please provide specific comment about why works cannot be completed more quickly, and if possible, please provide evidence to support this).**

All works completed and rules complied with.

Supporting evidence attached? Yes No

- 35 Please comment on the reasonable and practicable opportunities that have or will be taken to reduce phosphorus losses from your property:**

Stock are excluded from waterways as required. Run off from yards and sheds is directed into pasture and away from waterways.

G: INTENSIVE WINTER GRAZING UNDER NES-FW (2020)

(THIS SECTION MUST BE COMPLETED IN FULL IF YOU HAVE ASKED FOR YOUR FEMP TO
REMAIN CONFIDENTIAL)

(or tick if not applicable to your farm)

Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NES-F) took effect on 3 September 2020. The NES-FW sets requirements of certain activities that pose a risk to water quality. Intensive winter grazing is now covered by Regulations contained within the NES-FW. Intensive Winter Grazing means grazing livestock on an annual forage crop at any time in the period that begins on 1 May and ends with the close of 30 September of the same year.

More guidance on the NES-FW is available on the MFE website here:

<https://www.mfe.govt.nz/essential-freshwater-new-rules-and-regulations>.

- 36 What is the maximum area of intensive winter grazing in any one year?
_____ ha
- 37 Distance from intensive winter grazing areas to nearest surface water body?
_____ m
- 38 Over what period will intensive winter grazing occur? (e.g. 1 June – 30 September)
- 39 Will the intensive winter grazing area be used every year?
- 40 If the answer to question 2.5 above is 'no', what frequency of use is proposed?
- 41 What class of animal is to be grazed on the winter grazing area? (e.g. Breeding ewes, 2 y/o bulls, R2 heifers etc.)
- 42 What crops do you intend to grow on the winter grazing area?
- 43 What is the maximum number of animals to grazed at any one time (if multiple classes of animal, please state maximum number of each class)?
- 44 How will sediment/nutrient runoff to water ways be avoided?
- 45 Explain and list which Good Management Practices will be adhered to (the relevant part of your FEMP may be referenced, or you may reference relevant good practice guidelines such as <https://www.hbrc.govt.nz/assets/DocumentLibrary/InformationSheets/Land/Wintering-on-crops-in-Hawkes-Bay-July2017EMAIL.pdf>):
- 46 How will the winter grazing area be managed to reduce the risk of contaminants being mobilised by surface flows that run through the winter grazing area ?
- 47 What is the average slope of the intensive winter grazing area(s) (use to each paddocks name/identifier)
- | Paddock name/identifier | Average slope (degrees) |
|-------------------------|-------------------------|
| | |
- 48 Where the slope of a paddock is greater than 15 degrees, provide a specific winter grazing paddock plan. For information on how to prepare this plan: <https://www.hbrc.govt.nz/assets/DocumentLibrary/Information-Sheets/Land/Wintering-on-crops-in-Hawkes-Bay-July2017EMAIL.pdf>
Please provide a farm map/plan that designated your intensive winter grazing area. This is the area within which intensive winter grazing will occur in any given year. Ensure that each intensive winter grazing paddock has a unique name/identifier.

H: ASSESSMENT OF ENVIRONMENTAL EFFECTS (AEE)

(THIS SECTION MUST BE COMPLETED IN FULL)

49 AEE Attached? Yes (Move to 40) Or

50 Please explain what actual, or potential effects your farming activity has, or may have, on the environment (including the land, surface and groundwater, air quality and the ecosystems (i.e. plants and animals) that live in that environment). You may refer to relevant sections of your FEMP:

Farming can cause enrichment of ground and surface water from nitrogen lost below the rootzone. However on this property, Nitrogen leaching averaged over four years is 21.75 kgN/ha/year which is below the limit of 30.1 kgN/ha/year

Farming can cause enrichment of ground and surface water from phosphorus lost overland in soil and fertiliser run off and through the soil in drainage, as well as from direct deposition from stock defecating in waterways or run off from critical source areas. When cropping, direct drilling is used wherever possible. Stock are excluded from waterways as required. Grass is maintained around the yards to intercept sediment runoff. Tracks are cambered and cutouts are used to direct runoff into paddocks and away from waterways

51 Please explain what effect your farming activity has on the wider community, including any social, economic or cultural effects and positive effects.

The farm provides employment for local staff on-farm, as well as supporting local contractors and rural suppliers.

52 Please comment on what effect your farming operation has on natural and physical resources that may have special values (these special values could include things such as recreational, cultural, or scientific values) for present and future generations. (for example, identify any nearby areas of special value such as the Statutory Acknowledgment Areas – see Guidance notes):

The farm should have a small effect on natural and physical resources, with a low rate of Nitrogen leaching against the limit, stock exclusion from waterways and best practices followed for cropping to protect waterways.

53 Cumulative effects assessment

I have attached a cumulative effects assessment with my AEE or

I agree to participate in a joint, Council commissioned cumulative effects assessment to inform my application, along with other applicants in my sub catchment. I understand

that I will be charged a portion of the cost of conducting this assessment and that my application will be placed 'on hold' in accordance with s92(2) while this work is undertaken

I: REGIONAL PLAN, NPS AND NES ASSESSMENT

Regional Resource Management Plan Objectives and Policies²:

Provision	Will your activity help achieve this? (Y/N/NA)	Explanation/supporting comments
Land		
<i>Obj 11</i> An ongoing reduction in the extent and severity of hill country erosion.	N/A	Flat land
<i>Obj 12</i> The avoidance of loss in the productive capability of land, as a result of inappropriate land use practices hastening wind erosion.	Y	Direct drilling is used where possible and crop cover is maintained as much as practical
<i>Obj 13</i> The avoidance of nuisance effects or economic losses on adjoining properties as a result of wind erosion.	Y	Direct drilling is used where possible and crop cover is maintained as much as practical
<i>Obj 14</i> The avoidance of loss in the productive capability of land, as a result of reduced soil health	Y	Fertiliser use according to expert advice Direct drilling used where possible
<i>Obj 38</i> The sustainable management of the land resource so as to avoid compromising future use and water quality.	Y	Waterways protected with fencing, and bridging as required. Low N leaching
<p><i>Pol 67</i> To encourage landowners and occupiers to manage the effects of activities affecting soil in accordance with the following guidelines:</p> <ul style="list-style-type: none"> • <u>Appropriate land use</u>: Land use activities should not exceed the land use capability of the subject land. • <u>Soils prone to wind erosion</u>: Areas prone to wind erosion from land use activities should have preventative or remedial measures applied. The depth of soil should not be reduced at a rate that exceeds the natural rate of replenishment. • <u>Soils prone to other types of erosion</u>: Where vegetation is removed from areas prone to erosion, best management practices should be followed. These should include replanting the area within 18 months with vegetation that will provide equivalent or better land stabilisation, or other recognised methods that will stabilise land or prevent erosion. • <u>Soil Health</u>: There should be no long-term degradation of the physical properties (including soil structure) or biological properties (including organic matter content) of soil. 	Y	See above

² For full text please refer to the Regional Resource Management Plan available here: <https://www.hbrc.govt.nz/documents-and-forms/rrmp/?url=/our-council/policiesplans-strategies/rrmp/>

Scarcity of Indigenous Vegetation and Wetlands		
<i>Obj 15</i> The preservation and enhancement of remaining areas of significant indigenous vegetation, significant habitats of indigenous fauna and ecologically significant wetlands.	Y	Wet areas and dams have been fenced and planted
Groundwater Quality		
<i>Obj 21</i> No degradation of existing groundwater quality in the Heretaunga Plains and Ruataniwha Plains aquifer systems.	Y	Low N leaching
<i>Obj 22</i> The maintenance or enhancement of groundwater quality in unconfined or semiconfined productive aquifers in order that it is suitable for human consumption and irrigation without treatment, or after treatment where this is necessary because of the natural water quality.	Y	Low N leaching
Surface Water Resources		
<i>Obj 27</i> The maintenance or enhancement of the water quality of rivers/ streams, lakes and wetlands in order that it is suitable for sustaining or improving aquatic ecosystems in catchments as a whole, and for contact recreation purposes where appropriate.	Y	Waterways protected with fencing and bridging as required. Low N leaching
Recognition of Matters of Significance to Iwi/Hapu		
<i>Obj 36</i> To protect and where necessary aid the preservation of waahi tapu (sacred places), and tauranga waka (landings for waka).	Y	As above
<i>Obj 37</i> To protect and where necessary aid the preservation of mahinga kai (food cultivation areas), mahinga mataitai (sea-food gathering places), taonga raranga (plants used for weaving and resources used for traditional crafts) and taonga rongoa (medicinal plants, herbs and resource).	Y	As above
<i>Pol 64</i> Activities should not have any significant adverse effects on waahi tapu, or Tauranga waka.	Y	As above
<i>Pol 65</i> Activities should not have any significant adverse effects on taonga raranga, mahinga kai or mahinga mataitai.	Y	As above
<i>Pol 66</i> The importance of coastal, lake, wetlands and river environments and their associated resources to Maori should be recognised in the management of those resources.	Y	As above
Tukituki River Catchment		
<i>Obj TT1</i> 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;	Y	Completed FEMP

<p>(e) The mauri of surface water bodies and groundwater is recognised and adverse effects on aspects of water quality and quantity that contribute to healthy mauri are avoided, remedied or mitigated; and</p> <p>(f) The taking and use of water for primary production and the processing of beverages, food and fibre is provided for.</p>		
<p><i>Obj TT2</i> 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.</p>	Y	Under N limit
<p><i>Obj TT4A</i> To recognise that industry good practice for land and water management can assist with achieving Objectives TT1, TT2 and TT4.</p>	Y	FEMP implementing industry best practice
<p><i>Pol TT1</i> Manage the use of production land upstream of any registered drinking water supply takes to ensure compliance with the Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007 and the Drinking-Water Standards for New Zealand (2005 Revised edition 2008).</p>	Y	Under N limit
<p><i>Pol TT2</i> For groundwater Hawke's Bay Regional Council will:</p> <p>(a) Manage the adverse effects of activities likely to affect the quality of groundwater located 10m or more below ground level in accordance with the limits for aesthetic, organic and inorganic determinands; Escherichia coli and nitrate-nitrogen set in Table 5.9.2;</p> <p>(c) Manage activities likely to affect the quality of groundwater connected to and affecting surface water quality having regard to effects on the achievement of the limits and targets set in Tables 5.9.1A and 5.9.1B;</p> <p>(d) Manage the use of production land upstream of any registered drinking water supply takes to ensure compliance with the Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007 and the Drinking-Water Standards for New Zealand (2005 Revised edition 2008).</p> <p>2. The implementation of POL TT2(1) shall take into account uncertainties associated with variables such as the location of the activity, the spatial and temporal nature of groundwater flows, seasonal variations in groundwater levels, and the effects of historical production land use activities on existing and future groundwater quality.</p>	Y	Under N limit Waterways protected with fencing and bridging as required.
<p><i>Pol TT4</i> To ensure that the Table 5.9.1B nitrate-nitrogen and dissolved inorganic nitrogen surface water quality limits and the Table 5.9.1D Tukituki LUC Natural Capital Leaching Rates are not exceeded on a whole of farm property or whole of farming enterprise basis:</p> <p>(a) From 1 June 2013 onwards farm properties or farming enterprises exceeding 4 hectares in area shall be required to either:</p> <p>(i) Keep the records specified in Schedule XXI so that Nutrient Budgets can be calculated using Overseer14 (or an alternative model approved by Hawke's Bay Regional Council15) prior to 31 May 2018; or</p> <p>(ii) Keep copies of Nutrient Budget input and output files that have been prepared in accordance with an industry programme approved by Hawke's Bay Regional Council;</p> <p>(b) FEMPs shall be updated at three yearly intervals from 1 June 2018.</p> <p>(c) Require industry good practices to be implemented on farm properties or farming enterprises in order to minimise nitrogen losses;</p> <p>(d) Nutrient Budgets must be updated at least 3 yearly (from 31 May 2018).</p>	Y	Compliant FEMP

<p>e) Require that the records kept in accordance with POL TT4(1)(a), (b) and (d) are to be reviewed annually in accordance with an industry programme approved by Hawke's Bay Regional Council (or in the absence of an industry programme, as directed by Hawke's Bay Regional Council) to assess whether any farm system changes are evident in the previous 12 months. If such a change is evident, the Nutrient Budget for the farm system must be updated to determine whether the nitrogen leached from the land exceeds the relevant limit in Table 5.9.1D on a whole of farm property or whole of farming enterprise basis and the updated Nutrient Budget must be provided to the Hawkes Bay Regional Council.</p> <p>(j) For the purposes of achieving compliance with Table 5.9.1D, the estimated leaching rate shall be a 4 year rolling average of the estimated nitrogen leaching rates derived from Nutrients Budgets prepared after 1 June 2013.</p>		
<p><i>Pol TT5</i> To ensure that the Table 5.9.1B dissolved reactive phosphorus (DRP) surface water quality limits are not exceeded and to attain the Table 5.9.1B DRP targets by 1 July 2030 Hawke's Bay Regional Council will:</p> <p>(a) From 1 June 2018 onwards, require farm properties or farming enterprises exceeding 4 hectares in area to prepare and maintain a Phosphorus Management Plan as part of a Farm Environmental Management Plan prepared in accordance with Schedule XXII.</p> <p>(d) Require any application for a resource consent for the use of production land on farm properties or farming enterprises to demonstrate:</p> <p>(i) In areas where the Table 5.9.1B DRP limits are not exceeded that the proposed activity will not lead to an exceedance of the limits in the Tukituki River or its tributaries;</p> <p>(ii) In areas where the Table 5.9.1B DRP targets are exceeded that the proposed activity will not increase existing DRP concentrations in the Tukituki River or its tributaries and that all reasonable and practicable opportunities have been taken to reduce phosphorus losses from the farm property;</p> <p>(iii) The likely achievement of (i) and (ii) through the preparation of a Phosphorus Management Plan.</p> <p>(f) Provide land advisory services and incentives, in collaboration with the primary industry sector and the community, prioritising efforts on tributary catchments which significantly exceed the DRP targets. In particular Hawke's Bay Regional Council will:</p> <p>(i) Develop a catchment strategy and implementation plan to identify critical source areas for phosphorus and eliminate or reduce phosphorus losses;</p> <p>(ii) Encourage industry good practices to be implemented on farm properties or farming enterprises in order to reduce phosphorus losses;</p> <p>(iii) Encourage riparian planting in conjunction with permanent stock exclusion fencing;</p> <p>(iv) In the Water Management Zone 5 (Papanui), encourage riparian planting which provides shading for rivers/ streams and streams in order to reduce macrophyte growth and improve life-supporting capacity of the stream;</p> <p>(v) Encourage surface runoff from stock races, stock yards, bridges and culverts to be diverted away from rivers and streams and discharged to land.</p>	Y	Compliant FEMP
<p><i>Pol TT6</i> (1) When considering an application for a land use consent to authorise the use of production land on farm properties or farming enterprises not associated with the operation of a Community Irrigation Scheme, the consent authority must have regard to the following matters:</p> <p>(a) The extent to which the use, in combination with other permitted or consented activities, will result in the nitrate-nitrogen and dissolved inorganic nitrogen limits in Table 5.9.1B being approached or exceeded;</p>	Y	Compliant FEMP

<p>(b) The extent to which the Tukituki LUC Natural Capital Nitrogen Leaching Rates specified in Table 5.9.1D are exceeded on a whole of farm property or whole of farming enterprise basis;</p> <p>(c) Whether the applicant has supplied a Farm Environmental Management Plan prepared in accordance with Schedule XXII which:</p> <ul style="list-style-type: none"> (i) Adequately describes the farm property or farming enterprise (including soils, climate, topography and environmental risks) and the proposed production land use on the farm property or farming enterprise; (ii) Contains a Nutrient Budget for the farm property or farming enterprise; (iii) Contains a Phosphorus Management Plan for the farm property or farming enterprise; (iv) Describes how industry good practices will be implemented to minimise nutrient (nitrogen and phosphorus) losses, sediment losses and faecal bacteria discharges from the farm property or farming enterprise appropriate to the production land use and land type; (v) Where the farm property or farming enterprise is in Water Management Zone 5, ensures appropriate riparian management measures are implemented to minimise nutrient losses and reduce macrophyte growth in order to improve the life-supporting capacity of the river or stream. (f) Phasing out of existing over-allocation. <p>3. From 4 May 2013 any land use consents granted under Rule TT2 or Rule TT2A to the landowner or occupier shall:</p> <ul style="list-style-type: none"> (a) have the same expiry date as any section 14 water take irrigation consents for the land, or (b) if there are no irrigation consents for the land then the maximum duration imposed shall not exceed 35 years. 		
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54 Will the proposed activity be consistent with the objectives of the NPS FM (2020)?

The Objective of the NPS FM (2020) is:

to ensure that natural and physical resources are managed in a way that prioritises:

(a) first, the health and well-being of water bodies and freshwater ecosystems

(b) second, the health needs of people (such as drinking water)

(c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.

Key Policies include:

Policy	
1	Freshwater is managed in a way that gives effect to Te Mana o te Wai.
2	Tangata whenua are actively involved in freshwater management (including decision-making processes), and Māori freshwater values are identified and provided for
3	Freshwater is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments.
5	Freshwater is managed through a National Objectives Framework to ensure that the health and well-being of degraded water bodies and freshwater ecosystems is improved, and the health and well-being of all other water bodies and freshwater ecosystems is maintained and (if communities choose) improved.
6	There is no further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted.
7	The loss of river extent and values is avoided to the extent practicable.
8	The significant values of outstanding water bodies are protected.
9	The habitats of indigenous freshwater species are protected.
10	The habitat of trout and salmon is protected, insofar as this is consistent with Policy 9.
12	The national target for water quality improvement to provide water quality suitable for human contact is achieved.
13	The condition of water bodies and freshwater ecosystems is systematically monitored over time, and action is taken where freshwater is degraded, and to reverse deteriorating trends.
15	Communities are enabled to provide for their social, economic, and cultural well-being in a way that is consistent with this National Policy Statement.

Yes No

If Yes, please comment on how

Waterways protected from stock and low nitrogen loss against limits

- 55 Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007: Are there any registered drinking water supplies that could be affected by your farming activities? Yes No

(A map of the larger consented supplies are shown on the map here:
<https://www.hbrc.govt.nz/services/resource-consents/national-environmentalstandards/drinking-water/>)

If Yes, please provide an assessment of the potential effect.

If No, please explain why.

Waterways protected from stock and low nitrogen loss against limits

56 Resource Management Act 1991 – Part 2, Purpose and Principles

Provisions	Will your activity help achieve this? (Y/N/NA)	Explanation/supporting comments
<p>Section 5: The purpose of this Act is to promote the sustainable management of natural and physical resources. In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while—</p> <p>(a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and</p> <p>(b) Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and</p> <p>(c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.</p>	Y	FEMP and farming operation compliant with Tukituki Plan Change 6 which gives effect to these provisions
<p>Section 6 – Matters of National Importance</p> <p>Recognise and provide for the following:</p> <p>a. the preservation of the natural character of the coastal environment, wetlands, and lakes and rivers/ streams and their margins, and the protection of them from inappropriate subdivision, use, and development.</p> <p>b. the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development.</p> <p>c. the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna.</p> <p>d. the maintenance and enhancement of public access to and along the coastal marine area, lakes and rivers.</p> <p>e. the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, wahi tapu, and other taonga.</p> <p>g. the protection of recognised customary activities.</p>	Y	FEMP and farming operation compliant with Tukituki Plan Change 6 which gives effect to these provisions
<p>Section 7 – Other Matters</p> <p>Have particular regard to the following:</p> <p>a. kaitiakitanga.</p> <p>aa. the ethic of stewardship.</p> <p>b. the efficient use and development of natural and physical resources.</p> <p>c. the maintenance and enhancement of amenity values.</p> <p>d. intrinsic values of ecosystems.</p> <p>f. maintenance and enhancement of the quality of the environment.</p> <p>g. any finite characteristics of natural and physical resources.</p> <p>h. the protection of the habitat of trout and salmon.</p> <p>i. the effects of climate change.</p>	Y	FEMP and farming operation compliant with Tukituki Plan Change 6 which gives effect to these provisions
<p>Section 8 – Principles of Treaty of Waitangi Take into account the principles of the Treaty of Waitangi.</p>	Y	FEMP and farming operation compliant with Tukituki Plan Change 6 which gives effect to these provisions

J: CONSULTATION

- 57 Please provide details of any discussions/consultation you have undertaken with any interested or potentially affected parties about your proposal. Please provide brief details of the views of those consulted (you can attach correspondence if appropriate).**
N/A

K: ADDITIONAL INFORMATION REQUIRED:

58 A plan/aerial photograph (Google or HBRC) showing the following information (where not already contained in the FEMP):

- Farm property boundaries, or properties making up the farming enterprise.
- Key farm features, including critical source areas, stock exclusion areas, effluent disposal areas, ONB blocks, intensive winter grazing blocks
- The proposed activity or activities in relation to roads, property boundaries, neighbouring properties, watercourses, wetlands, wells
- Any other relevant features of the surrounding environment.

FEMP

Paddock maps/plans for intensive winter grazing (where required)

Nutrient budget has been published to HBRC

For Intensive Winter Grazing: A plan of the grazing area showing where intensive winter grazing will occur in any given year. Ensure that each intensive winter grazing paddock has a unique name/identifier.

59 Please list all documentation (in addition to this form) which makes up your application. Please ensure that all documentation listed is included with your application when it is submitted.

Additional Documentation	Title	Author	Date
	FEMP	Emma Buchanan	12/11/2021

Please ensure all design plans or drawings are authorised for use by the author.

60 Please state what consent duration you are seeking, and why you want that duration (e.g. provide a schedule of works to identify the additional mitigation measures proposed with a longer duration). (Note: Policy TT6 3. establishes that the land use consent duration cannot exceed 35 years)

35 Years

61 Do you intend to carry out any monitoring to help understand what effect your farming operation is having on water quality? If yes, please provide details.

No