***Background***

There is a growing body of evidence indicating land use and irrigation change has impacted water quality in our district. We need to ensure further changes in farm activities are effectively managed to promote improvements in water quality and ecosystem health.

MHV Water holds resource consent CRC185857 to manage nitrogen loss discharges on behalf of all shareholders. The consent specifies a scheme nitrogen load limit for the Hekaeo/Hinds Catchment and includes specific requirements related to “Significant Change” and effects on sensitive receptors. The consent also includes extensive surface water and groundwater monitoring programmes and require a Remediation and Response plan if water quality trends continue to deteriorate.

Shareholders who wish to vary their farming activities in a way which trigger a “Significant Change”, or potentially impact water quality in the long-term must first seek approval from MHV Water. Applicants with a demonstrated history of excellent environmental performance and continuous improvement will have more flexibility.

The following document specifies the information that must be provided for any proposed land use change to be approved.

***Definition of a Farm Activity Variation***

A FAVA is required where a Shareholder seeks a Significant Change[[1]](#footnote-1) or to vary the Authorised Land Use (ALU) on their Property for activities at risk of increasing nitrogen losses in the long term. Examples of variations in land use which are not “significant” under the consent, but require approval include, but are not limited to:-

* Long term increase in stocking rate relative to what was permitted
* Increase in irrigated area less than 10 ha
* Any intensification of your dairy system (e.g. move from Dairy system 2 to Dairy system 3)
* Change in land use
* Increase in effective area

Where a proposed variation meets at least one of the above criteria (either for a new property entering the scheme or for an existing property), the change is long term, and likely to result in an increase in nitrogen losses, then the applicant will need to apply for a Farm Activity Variation.

It is noted some changes will also need resource consent from Environment Canterbury as required by the National Environment Standards for Freshwater (2020).

***FAVA Application Timeframes***

* All “High Risk” and “Significant Change” FAVA applications are reviewed by an Environmental Decisions Panel and approved by the MHV Water board.
* Allow at least 25 working days for processing a FAVA application. Some “High Risk” or “Significant Change” applications may take longer. Check with the Enviro Team for the cut off dates to receive “High Risk” or “Significant Change” applications for approval at the next Board meeting.
* Additional time will be required where there are any issues with the information provided, the Authorised Land Use had not been prepared for the property, external consultation is required or the application impacts a sensitive receptor.
* Please ensure you allow sufficient time for this process, before effecting any changes in farm activity.
* If in doubt, please seek advice from the Irrigo Enviro team in advance of submitting your application, particularly if related to a property sale to ensure due diligence timeframes are achievable.

***Application Checklist***

* Complete this application form
* Maps of the proposed activity (where irrigation or land use area changes)
* Evidence to support the proposal’s alignment with scheme values (where applicable)
* Provide sufficient details to Irrigo Environmental team to allow OverseerFM nutrient budgets to be prepared to ensure the following is demonstrated:
  + Authorised nitrogen losses at Good Management Practice[[2]](#footnote-2)
  + Your proposed nitrogen losses
* An active OverseerFM account with annual subscription paid and
* Access to the applicable OverseerFM nutrient budgets

*Where an applicant is not currently a shareholder please also include the following:*

* 2009-13 nitrogen baseline (including irrigation and land use maps of the farm during the baseline)
* 2019-20 Overseer nutrient budget (including irrigation and land use maps of the farm applicable at that time)
* Sufficient farm system data between 2014-2019 to identify limitations under the NES-FW 2020
* Farm Environment Plan for the property (including farm maps)
* Most recent FEP Audit report
* Demonstrate the property proposed to join the scheme complies with regulatory requirements

**Note:** Irrigo Centre Limited will invoice the applicant at a rate of $140/hour for the time spent processing this application.

***Please note MHV Water will only approve changes which are scheduled to occur within 12 months of the application being approved.***

***Once the FAVA is approved an FEP Audit will be carried out within 12 months by an Irrigo Approved Auditor.***

# Criteria to Apply for a FAVA

Certain activities will result in an automatic decline of your FAVA application. Before an application is submitted, please check:

**Is the application to enterprise nutrients on a property located in the Hekaeo/Hinds catchment with N losses less than 21 kg N/ha? (i.e. irrigate or intensify a property by spreading nutrients from your existing BCI irrigated property)**

*No FAVA or new water applications will be approved in the Hekeao/Hinds Plains catchment unless the property can operate within the property’s 2009-13 baseline (no enterprising of nutrients with another scheme property will be considered).*

**Does your application rely on intensification on another property occurring? For instance, additional intensive winter grazing on another property?**

*Your application will be automatically declined unless you can demonstrate the transfer of nutrients to another property is authorised. For instance, increasing cow numbers on a dairy platform will potentially result in an increase in winter grazing area and/or RSU on a winter grazing block. You will need to demonstrate the winter grazing block either complies with the scheme policies and/or national or regional rules before a FAVA will be considered.*

**Are you familiar with the farm system and mitigations modelled by your consultant to meet your nitrogen discharge allowance?**

*All mitigations modelled to maintain or reduce your N loss need to be listed in the application form. Failure to document the proposed mitigations may result in your application being declined.*

**Are all outstanding environmental issues addressed?**

*Properties not currently operating at an “A” audit grade standard are unlikely to score sufficient points for a medium or high risk or significant change farm activity variations to achieve an approval. We recommend you address the outstanding issues, are re-audited and apply at a later date.*

# Existing and Proposed Farm System Information

|  |  |
| --- | --- |
| Date of Application |  |
| FEP # |  |
| Property name / ID |  |
| Property Owner |  |
| Property Owner Contact info |  |
| Contact number/s |  |
| Postal address |  |
| Email |  |
| Person responsible *(if different from Property Owner)* |  |
| Role of person responsible |  |
| Person responsible Contact info |  |
| Contact number/s |  |
| Postal address |  |
| Email |  |
| Farm Advisor |  |
| Legal Advisor |  |

**Proposed Land Use Descriptions:**

Describe the changes you are proposing to make

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | | | |
|  | | | | |
|  | | | | |
|  | | | | |
|  | | | | |
|  | | | | |
|  | | | | |
|  | | | | |
| **Season Proposed Changes will Occur: ­­** | | | | |
|  |  | **Authorised Land Use[[3]](#footnote-3)** | **Proposed Land Use** | **Difference** |
| **Total Effective Area** | **Ha** |  |  |  |
| **Total Irrigated Area** | **Ha** |  |  |  |
| **Land Use(s)**  **e.g. Arable/Sheep/Beef, Dairy etc** | **Ha** |  |  |  |
| **LWRP Winter Grazing Area**  **Cattle on brassicas or root crops only** | **Ha** |  |  |  |
| **NES Intensive Winter Grazing Area**  **Livestock on Annual Crop** | **Ha** |  |  |  |
| **Average Stocking** | **R.S.U[[4]](#footnote-4)** |  |  |  |
| **Cows/ha** |  |  |  |
| **Other Relevant Changes (please describe)** |  |  |  |  |

# Sensitive Receptors Assessment

*Are any of the following features located on or adjacent to any property this FAVA applies to?*

|  |  |  |
| --- | --- | --- |
| Hurdle | Comment | Yes/No |
| Community Drinking Water Protection Zone |  |  |
| Site of Cultural Significance |  |  |
| Surface Water Body |  |  |
| Wetlands |  |  |
| Riparian areas |  |  |

# FAVA Risk Assessment

*Note: Supporting information required for the FAVA depends on the potential risk of the change proposed.*

| **Permitted** | **Low Risk** | **Moderate Risk** | **High Risk** | **Significant Change** |
| --- | --- | --- | --- | --- |
| Increase in irrigated area by up to 10 ha, provided following conditions are met:   1. New irrigation is spray or sub-surface 2. Property already audited as being an “A” 3. No other variation to land use occurs | * Less than increase 250 RSU on land not grazed by dairy animals | * Between 250-750 RSU increase on land not grazed by dairy animals * Increase below 3% in RSU on land grazed by (or proposed to be grazed by) dairy animals * Effective area increase less than 10 ha * Increase in irrigated area less than 10 ha, which does not comply with permitted conditions. | * Increase in RSU more than 750 RSU on land not grazed by dairy animals. * Increase by more than 3% in RSU on land grazed by (or proposed to be grazed by) dairy animals * Increase in effective area greater than 10 ha * Change in land use * Any change on a property with, or adjacent to, a sensitive receptor | * More than 10 ha new irrigation * More than 10 ha dairy farm land * Any increase in winter grazing * Any increase in dairy support land |
| **Yes/No** | **Yes/No** | **Yes/No** | **Yes/No** | **Yes/No** |
| **Information Required** | | | | |
| Proposed Irrigation Maps Required Only | Completed FAVA  Nutrient Budget assessment optional, can be Matrix only | Completed FAVA application form  Overseer nutrient budget | Completed FAVA application form  Overseer nutrient budget  Catchment contaminant concentration and load assessment  Approval from Te Runanga o Arowhenua *if related to site of cultural significance* | |

# Regulations Check

*Please note, resource consent from Environment Canterbury may be required if the proposed farming activity triggers any of the requirements below.*

**NES-FW 2020 Check**

|  | Dairy Farm Land | Dairy Support Land | Intensive Winter Grazing[[5]](#footnote-5) | Irrigation on Dairy Farm Land | Plantation Forestry |
| --- | --- | --- | --- | --- | --- |
| 2014-15 (ha) |  |  |  |  |  |
| 2015-16 (ha) |  |  |  |  |  |
| 2016-17 (ha) |  |  |  |  |  |
| 2017-18 (ha) |  |  |  |  |  |
| 2018-19 (ha) |  |  |  |  |  |
| Sept 2020 (ha) |  |  |  |  |  |
| Proposed (ha) |  |  |  |  |  |
| NES Trigger | +10 ha | Any | Any | + 10 ha | + 10 ha to pasture |
| NES Triggered | **Yes/No** | **Yes/No** | **Yes/No** | **Yes/No** | **Yes/No** |

**Other Resource Consents Check**

|  |  |
| --- | --- |
| Effluent Storage Sufficient (if applicable) |  |
| Effluent discharge consent will be complied with? (if applicable) |  |
| Other Resource consents required? |  |

# Proposed Nutrient Loss Summary

*Note – nutrient budgets not required for Permitted or Low Risk FAVA applications. All OverseerFM nutrient budgets used support your FAVA application are prepared by a Certified Nutrient Management Advisor (CNMA), meets the Best Practice Data Input Standards and the Irrigo Nutrient Budget Consistency Protocols.*

|  |  |
| --- | --- |
| **Proposed Nutrient Budget Information** | |
| OverseerFM Account Name |  |
| Proposed Scenario Nutrient Budgets Name |  |
| N loss Rate (kg N/ha/year) |  |
| Total N loss (kg N/year) |  |
| Area (ha) |  |

# Farm Maps

*Your farm map information will be used to calculate N losses according to The Matrix.*

*Please provide a farm map of your current and proposed farm system, including:*

* *Property boundary*
* *Irrigated area and type*
* *Winter grazing area(s)*
* *Effluent area*
* *Any other relevant change*

# Catchment Contaminant Load and Concentration Assessment

*Required for High Risk or Significant Change Applications Only*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Contaminant** | **2020 Load** | **2020 Concentration** | **Proposed Load** | **Proposed Concentration** |
| Nitrogen | *Set by ALU* | *Set by ALU* |  |  |
| Phosphorus |  |  |  |  |
| Bacteria |  |  |  |  |
| Other |  |  |  |  |

# Scheme Objectives

*MHV Water will assess your application to ensure it aligns with the overall values and objectives of the scheme. Note – not required for Permitted Change FAVA applications*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Value** | **Objective** | **Discussion** | **Evidence** | **Mitigation** |
| Continuous Improvement | How does your proposal promote continuous improvement both individually and as a catchment?  Can you demonstrate a history of continuous improvement? |  |  |  |
| Catchment Consistency | How is this application consistent with what you could do outside of the scheme? |  |  |  |
| Catchment outcomes will be improved | How will your proposal improve water quality, cultural values and biodiversity in the catchment? |  |  |  |
| Economic Sustainability | How does this proposal promote economic sustainability for yourself and the catchment? |  |  |  |

# Proposed Mitigations

*You are likely required to review or update your management practices to remain in your current nutrient footprint. Please list what these actions are below to ensure you operate the proposed activity as modelled for this approval.*

|  |  |
| --- | --- |
| **Proposed Mitigation** | **Proposed Date of Implementation** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

***FAVA Applications may be declined where mitigation management practices to reduce N loss have been modelled in your supporting OveseerFM nutrient budgets, but not listed above.***

# Environmental Compliance History

|  |  |
| --- | --- |
| Date of Last FEP Audit |  |
| Auditor Name |  |
| FEP Audit Grade |  |
| Required Actions from FEP Audit |  |
| Other Action Taken  *e.g. Registered environmental incidents, Formal warnings, cease water notices, significant non-compliance issues with resource consents etc* |  |
| Existing Demonstration of Continuous Improvement  *e.g. participation in trials, environmental extension programmes, additional training or leadership responsibilities, benchmarking data to support claims of excellent management etc* |  |

**Declaration**

*I declare the information I have provided is true and correct. If this application for a variation and farm activity is approved, I will ensure:*

1. *The farm activity variation will not exceed the nitrogen losses (or equivalent based on later versions of OverseerFM) proposed and approved by this application*
2. *I maintain or implement Good Management Practices as described in this application*
3. *The farm management mitigations proposed and modelled as part of this application are understood, realistic and achievable.*
4. *The farm activity variation will be implemented within 12 months of this approval being granted*
5. *My property will be audited by MHV Water within 12 months of this approval being granted for the purpose of ensuring all conditions of approval are met*

*I understand that failing to meet the above two conditions of this approval may result in a breach of the Water User Agreement and be subject to the Mayfield Hinds Valetta Water Limited internal compliance procedures*.

|  |  |
| --- | --- |
| ***Signed*** | ***Date*** |
|  |  |
| ***Name(s)*** |  |
|  |  |

*The FAVA applicant agrees that MHV is entitled to review and change its policy at any time during the application process.  This reflects the rate of regulatory change that MHV is experiencing and the fact that MHV’s policy must continue to evolve.  For this reason, the applicant accepts that the application will be assessed against the MHV policy applicable at the date the application is considered by the Board of MHV as opposed to the date of application by the applicant.*

# Appendix 1: Good Management Practices and Advanced Mitigation

Good Management Practice has been defined in the Industry Agreed Good Management Practice relating to Water Quality Guide:

<http://files.ecan.govt.nz/public/pc5/MGM_Technical_Reports/Industry_Agreed_Good_Management_Practices_MGM_2015.pdf>

The Advanced Mitigation Framework is in the process of being developed and will be provided once finalised and approved by Environment Canterbury.

# Appendix 2: FAVA Assessment Criteria

All FAVA applications will consider the following:

* If the change results in an increase in N losses greater than the Nitrogen Discharge Allowance (NDA) or risk non-compliance with scheme N load limit[[6]](#footnote-6)
* The Property is able to meet reduction targets and or net positive gain when Advanced Mitigation measures are implemented
* The Property does not rely on an unauthorised intensification on another property (e.g. move winter grazing somewhere else)
* Regulatory requirements are complied with
* The variation does not have a negative impact on a sensitive receptor
* Environmental performance history of the applicant
* The proposed variation aligns with the schemes overall objectives, including promotion of continuous improvement and catchment outcomes being met
* Sufficiency of proposed mitigations to ensure the overall catchment outcomes are met

Variations in land use which are deemed “Significant Change” or “High Risk” must also be able to demonstrate the following:

* The activity will not result in an increase in catchment contaminant loads or concentrations relative to that which was authorised at September 2020[[7]](#footnote-7).
* Adverse effects on sensitive receptors are avoided, remedied or mitigated

# Appendix 3: Decision Process

1. Significant Change means in relation to the farming activity on a Property means:

   1. an increase in the area irrigated by more than 10 hectares;
   2. an increase in the area used for dairy farming (being the use of land by milking dairy cows) (whether irrigated or not) by more than 10 hectares;
   3. any increase in the area used for intensive winter grazing (being the grazing of livestock on annual forage crop at any time in the period 1 May to the following 30 September); and
   4. any increase in the area on a property of dairy support land (being the farming of non-milking dairy cows, including heifers),

   as compared to the maximum area used on that Property in any year (being the period of 1 July to 30 June) in the period 1 July 2014 to 30 June 2019. For clarity, any increase in irrigation area, and the area of land used for Dairy Farm Land and Dairy Support Land for the purpose of assessing if a change is “significant” will be defined based on the land use mapped for the property in the MHV QGIS mapping system at the commencement date of resource consent CRC185857 (13th May 2021). [↑](#footnote-ref-1)
2. We may have Overseer nutrient budget information available for existing MHV Water shareholders [↑](#footnote-ref-2)
3. Authorised Land Use established the permitted land use activities for the property based on information provided to MHV between 2014-2019 [↑](#footnote-ref-3)
4. R.S.U. = Revised Stocking Units as calculated in the OverseerFM animal reports [↑](#footnote-ref-4)
5. As defined in National Environmental Standards for Freshwater 2020 [↑](#footnote-ref-5)
6. Generally no increase in N load according to The Matrix. Approval may be granted where the change results in an increase in N loss reported using The Matrix, provided the following conditions are met:

   Compliance load is less than 90% of the consented nitrogen limit

   Property is currently managed at GMP or better

   Matrix N losses for the property are below the 15th percentile for the scheme as calculated from the most recent compliance load calculation

   Proposed Matrix N losses are within 1T and still less than 15th percentile loss.

   Proposed activity complies with NDA [↑](#footnote-ref-6)
7. Generally represented by the effects of the land use permitted to occur at September 2020 [↑](#footnote-ref-7)