Summary of the MHV Discharge Consent

February 2023



Introduction

The MHV Discharge Consent CRC185857 was issued on 13 May 2021 and the full consent conditions are available on our website www.mhvwater.nz

This booklet provides a summary and breakdown of what the consent means for you, our farmers, in practical terms and our expectations of you, as becoming part of our environmental programme.



We will continue to hold shed meetings to enable a forum for discussion between farmers and if you have any queries or concerns at any stage please give me a call.

Melanie Brooks CEO MHV Water Ltd

What being part of the programme provides

MHV currently delivers water and manages the environmental compliance for over 58 000 hectares of farmland between the Ashburton and Rangitata Rivers. Our scheme covers a significant area of the Hekeao Hinds Catchment.

We continue to look at how we can support the wider catchment with environmental management and now offer the opportunity for those within the Hekeao Hinds Catchment to enter into a contractual agreement with us to utilise our environmental services.

As part of the contract, those joining our environmental programme will be required to adhere to the resource consent conditions, including annual Farm Environmental Plans (FEP's), and Nutrient Budgets as required, and maintain an "A" FEP Audit grade. If you wish to vary your farming activity, you need to complete a Farm Activity Variation Application (FAVA - see page seven).



Advantages of joining the programme

- More farmers working together.
- Consistency in approach to environmental outcomes across the catchment.
- Support with your Farm Environment Plan and associated actions.
- Your independent FEP Audit will be facilitated for you, and you will be provided guidance on requirements in advance of the audit.
- Trends in the FEP Audit results are used to identify areas of education that are scheduled by the scheme and incorporated into your costs.
- One annual cost for all participating in the programme, and the benefit of scale.
- Assistance is provided to meet your FEP Audit actions, including providing a Bucket Testing service on a cost recovery basis.
- Part of a larger collective of farmers to advocate to the local, regional, and national government.
- Potential for increased water reliability (adaptive management groundwater consents or water taken from shallow wells or drains)

What land is covered?

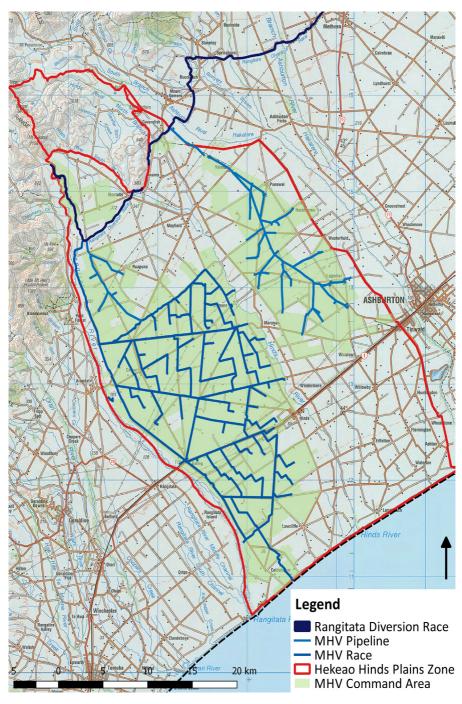
CRC185857 is a discharge consent that permits farming on properties where MHV Water delivers water for the purpose of irrigation to, this could include one-off manual deliveries to the farm.

Farming is permitted on the whole property, under the consent, even if only part of the property is irrigated by water delivered by MHV Water.

All land regardless of when it was first irrigated is held to the same level of environmental compliance.

For every Community Drinking Water Supply, the Regional Plan defines a Protection Zone. Those zones have additional restrictions to land use, commensurate with their assessed risk. Shareholders who have a Community Drinking Water Protection Zone (CDWPZ) as part of their property have been engaged in the associated rules.

Any land in the Hekeao Hinds Plains Zone (see next page) has the ability to join our environmental programme, and there are no limitations on the size of the property.



What the consent requires you to do?

We continue to operate an Audited Self Management (ASM) programme which means you are required to have an active Farm Environment Plan which must be regularly audited in line with the ECan Auditors Manual, ie every four years for an A audit result The consent includes the provision for MHV to change to a Certified Freshwater Plan when the Government regulation evolves, for the property that is permitted under the consent.

If you change the management of your farm or apply for a FAVA (see the following page), you will trigger an audit the following year, at your cost.

The consent requires nitrogen reductions at a catchment level. To meet the catchment reductions we will require all shareholders those part of the MHV Environmental Programme to meet minimum practice standards and to maintain an A audit.

To maintain an A audit farmers will need to adopt a continuous improvement mindset on environmental actions to minimise their impact.

You will not have a specific nutrient loss number to adhere to, you will have an Authorised Land Use (ALU).

The Authorised Land Use for each property is determined using the information you have provided us for the 2014-2019 period or as approved by a FAVA. This 'reference period' is aligned with the timeframes in the Essential Freshwater Package.

We will require a nutrient budget at least once every four years.

If you are intensifying beyond the parameters of your Authorised Land Use, you must first seek approval by MHV.

If you do not seek our approval you put the consent of <u>ALL</u> our shareholders at risk and may be required to 'unwind' your changes.

- * Any increase in irrigation area
- * Any increase in the area of winter grazing in situ or timing
- * Any increase in relative stocking units or types of stock
- * Any intensification of your dairy system
- * Any change in land use.

When seeking approval from MHV for a Farm Activity Variation Application (FAVA), your application will need to show:

- The change will not result in an increase in N loss, or concentration of N drainage
- The proposal doesn't increase contaminant load or Phosphorus loss
- Proposed mitigations satisfy Arowhenua (if required)
- No increase in N Surplus
- The property is able to meet anticipated reduction targets
- The property does not rely on an unauthorised intensification on another property (e.g. move winter grazing somewhere else)
- The variation does not have a negative impact on a sensitive receiving area.
- The proposed variation aligns with the scheme's overall objectives, including continuous improvement.

Roadmap to Reductions

NOW

A Audit

Good Management Practice

Reducing synthetic nitrogen application

Optimal crop rotation

2025

Advanced Mitigation (AM1)

Precision application of fertiliser and water

Lower impact farm systems

Biodiversity planting

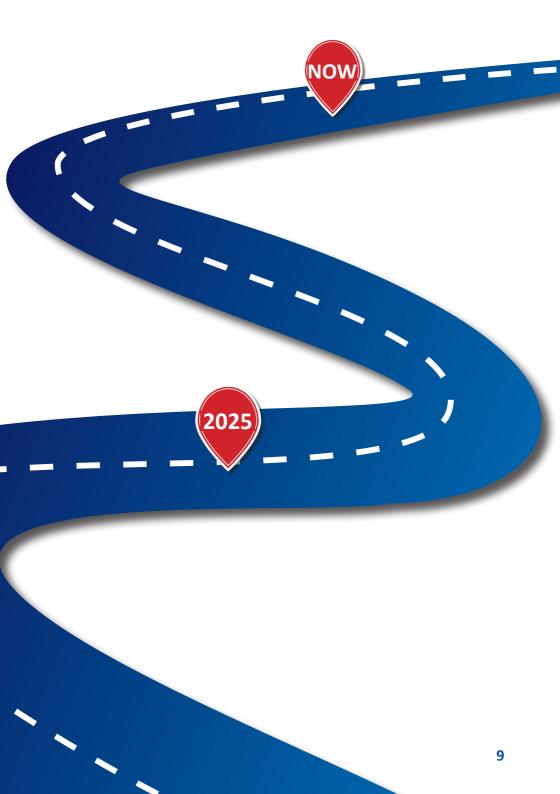
2030

AM1

Optimised Stocking Rates

Precision farming







Groundwater and Surface Water monitoring

We have an Environmental Monitoring Plan, as part of our Environmental Strategy. The plan details how we will collate information that will assist with better understanding the effects of nutrient discharges from the scheme. The plan includes ten bores across the Hekeao Hinds Plains, with a further six surface water sites (Harris and Oakdale Drains and the Hekeao Hinds River).

We are required to monitor Nitrate Nitrogen toxicity, Dissolved Reactive Phosphorus (DRP), E.coli, Macroinvertebrates, deposited fine sediment, periphyton, and macrophytes in the surface water on a monthly basis.

If a deterioration in the water quality is identified (based on five years of data) a Response and Remediation Plan must be prepared. The plan must include how the Environmental Management Strategy (EMS) and FEPs can be refined to better affect improved outcomes and we must engage with Arowhenua on the Plan.

If the catchment achieves 2.4mg/L Nitrate Nitrogen in the Rivers and 6.9mg/L in the groundwater, further reductions in nitrate leaching are not required.

If deterioration is evident in rivers or groundwater after five years of baseline analysis, further reductions in nutrient leaching as a result of on farm practices, will be required. As such we need to monitor both groundwater and surface water and continually improve our farming practices.

At your approval we may test bores on your property.

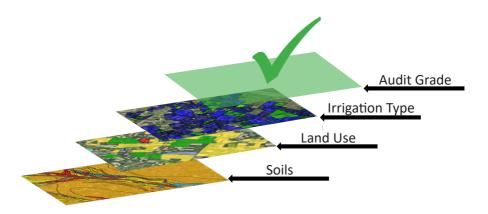
How we calculate the load, and compliance to it

The Matrix is a catchment model, which estimates block N losses based on land use, irrigation type, and soil. N losses from each block are aggregated to estimate the N losses for the catchment.

The Matrix is used to calculate MHV's N losses between 2009-13, or load, and sets the point from where reductions are applied. We also use The Matrix to calculate compliance with the consented limit by mapping your current irrigation, land use, and FEP audit grade.

Using the Matrix for setting the load limit and determining compliance with it means we know what we need to do to, achieve our N loss reduction targets.

Increasing the intensity of your farming operation or increasing your irrigated area will result in a direct increase in N losses reported against our load limits, therefore we require shareholders to seek permission first through a FAVA to ensure we all remain on track with meeting our targets and environmental objectives.



How the Essential Freshwater Package (2020) impacts your actions

The Essential Freshwater Package introduced by the Government in 2020 includes the National Environmental Standards (NES). These standards include restricting further intensification beyond the maximum for any year during the period 2014-2019. We have included these provisions in our consent:-

- An increase in area irrigated by more than 10 ha on dairy farm land
- An increase in the area used for dairy farming by more than 10 ha
- Any increase in the area for intensive winter grazing
- Any increase in the area of dairy support land.

Prior to seeking MHV approval if you intend to trigger one of these intensifications beyond your Authorised Land Use, a shareholder must first seek Regional Council (Environment Canterbury) consent.

MHV is working through a resolution for this duplication of consenting BUT at the time of writing you must seek ECan approval, prior to MHV approval.





Joining or leaving the Environmental Programme

If a property leaves the MHV environmental programme we are required to provide Environment Canterbury a copy of that property's baseline information from the Matrix, which includes the high-level land use and irrigation type for each block.

New properties can be added to the scheme consent if they receive MHV delivery of water. Our load would increase or decrease by the Matrix calculated baseline for any properties joining or leaving the scheme.

Plan Change 2 of the Land and Water Regional Plan does not allow us to include landowners who do not receive delivery of water by MHV in our consent. Therefore, we will deliver water for irrigation, manually if needed, to new landowners wishing to join the scheme to support the catchment's environmental objectives.



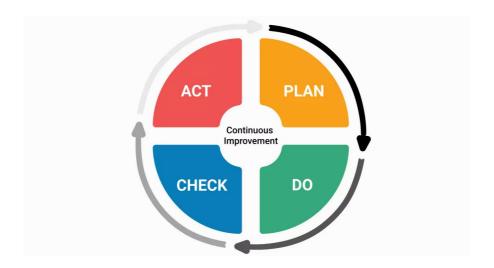
Our reporting to ECan

Our Environmental Management Strategy (EMS) was drafted in collaboration with Arowhenua and MHV Farmers.

The EMS confirms how we will achieve the conditions of our consent and each year a 1/3 of the strategy document is reviewed/ audited to ensure it is fit for purpose so that over a three-year period the full strategy document has been reviewed.

We must report annually on compliance with our consent conditions, including providing commentary on any repeat C or D grades. FEP audits will also be subject to spot checks.

The consent requires MHV to ensure there is a legally binding obligation running with the land to achieve the Plan Change 2 Nutrient Reductions, this is covered in the Terms of Water Supply and Service and Supply Agreement.



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