

## Submission on Essential Freshwater Package – Action for Healthy Waterways



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Signed:

Date: 31/10/2019

## **Schedule 1 - Submission on Essential Freshwater Package – Action for Healthy Waterways**

### **1 INTRODUCTION**

1.1 Dairy Farm Management Services Ltd (DFMS) is a rural consultancy business based in Canterbury. Our consultants provide guidance and advice to dairy farmers. DFMS consultants provide clients with a range of services including farm systems analysis and development, day-to-day management advice, financial planning, human resources, strategic advice, nutrient and environmental analysis and advice, and advice on succession planning.

1.2 Our goal is to assist farmers in incorporating strategies that will enhance and protect their businesses and build flexibility.

“As consultants with skin in the game, we understand the effort and passion that goes into farm systems and the strategies that make them work.”

1.3 The structure of DFMS includes three farm consultants, two farm environmental consultants, and one administration employee. We are also currently going through the process of employing two more consultants to grow our business.

1.4 As a consultancy company based in Canterbury, we have a profound understanding of the environmental changes and pressures faced by dairy farmers within our region. However, we are deeply concerned about the impact of proposed regulations on farming families and the wider community.

### **2 INTEREST**

2.1 A multi-disciplinary agricultural based consultancy company.

### **3 ISSUES**

3.1 The shareholders and employees of DFMS are supportive of sustainable, environmentally friendly dairying and developing farming systems that provide improvements in water quality and lessen environmental impacts over time.

3.2 However, they believe the Essential Freshwater Package does not support farmers who have made significant progress and investments on a pathway to improvement including fencing off waterway and riparian plantings. Other examples include soil moisture monitoring, improving irrigation systems to become more efficient and significant expenditure on improved effluent systems. In addition, farmers have significantly lowered their nutrient load to comply with the Canterbury Land and Water Regional Plan rules and Regulations.

3.3 The specific issues for DFMS are:

- The nationally proposed instream values of DIN, DRP and MCI levels outlined in the discussion document are unachievable in the short to medium term for many catchments. The proposal should allow for catchment specific values to be set by the community.
- The wintering thresholds are impractical from a farm management point of view and the definition of pugging is unclear.

- The stock exclusion rules and setback distances of 5m are unjustified and do not recognise the significant input and investment of riparian planting and fencing for stock exclusion
  - There is no socio-economic analysis report to reflect the impact of this proposal on farming communities.
- 3.4 In our view, it is essential that the Action for Healthy Waterways consultation document, allows farming to be sustainable and that socio-economic impacts are taken into account.
- 3.5 Please note the particular submission points detailing the provision, comment and relief sought in the attached Schedule.

Thank you for taking into consideration our submission.

## 4.- Summary of Proposals

Page numbers in the below table refer to the Ministry for the Environment's *Action for Healthy Waterways: A discussion document on national direction for our essential freshwater*: <https://www.mfe.govt.nz/sites/default/files/media/Fresh%20water/action-for-healthy-waterways.pdf>

Proposal	Detail	DFMS Initial Position
All farmers to have a farm plan to manage risks to freshwater by 2025 (pg. 67-70)	<ul style="list-style-type: none"> <li>All farms have a farm plan with a freshwater module (i.e. FW-FP), including farm map, identifying features, risk assessment, schedule of actions, and independently audited and progress reported to regional council</li> <li>Existing industry plans are recognised if standards are met</li> </ul>	<ul style="list-style-type: none"> <li>We support mandatory Farm Environmental Plans (FEPs) as the best way to manage environmental risks on farm and further improving water quality outcomes quickly (for all contaminants).</li> <li>For this reason, many of DFMS's clients already have a Farm Environment Plan. Some examples of good management practices that have been achieved on DFMS client farms are: <ul style="list-style-type: none"> <li>Improved irrigation management. For example, the conversion from rororainers, boarder dyke and K line irrigation to pivot and solid set irrigation. This allows more efficient irrigation application rates and lower N losses.</li> <li>Extensive riparian planting programs to minimize sediment and nutrient runoff into waterways.</li> <li>The installation of soil moisture monitors to help with efficient irrigation scheduling.</li> <li>Altered irrigation application depths in the shoulders of the season to prevent soil saturation and P and N runoff.</li> <li>Regular soil testing and maintenance fertiliser applied to pasture to ensure soil nutrients meet plant needs.</li> <li>Regular crop yield estimations that are used to calculate nutrient requirements for crops.</li> <li>Detailed annual nutrient budget is followed and matches pasture growth.</li> <li>Ongoing training for staff in irrigation to ensure best practice for irrigating.</li> <li>Ongoing maintenance programme for irrigators to ensure water used efficiently.</li> <li>Use slow release N (SustaiN and PhaSedN) in shoulders of the season.</li> <li>Reducing N fertiliser rates on the effluent blocks.</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- Spread the effluent to a larger area to allow more dilution of N into ground water.</li> <li>- Planting alternative pasture mixtures including plantain to reduce nitrogen loading onto pasture.</li> <li>- Planting a catch crop after forage crops to 'mop' up excess N in the soil</li> <li>- Use of fodder beet; fodder beet is lower in N content and therefore has been shown to reduce animal N intake and urinary N when fed as a supplement.</li> <li>- The installation of feed pads which can be used regularly to capture N and P runoff/leaching.</li> </ul> <ul style="list-style-type: none"> <li>• However, DFMS do have some concerns around how the proposed FEP module will be implemented. We would like to see additional work undertaken to ensure that all the policies are practical, will work for farmers, and that adequate resourcing has been considered. For example, that we have enough capability and resources around the country to support farmers in implementing the Government's proposed Farm Environment Plans, and that potential monitoring and/or compliance requirements are not too onerous for farmers, and build off the work already being undertaken by the sector.</li> <li>• As farm consultants, we should make the most of having Farm Environment Plans in place – our sector has already committed to all dairy farmers having FEPs by 2025. Some elements of the Essential Freshwater proposals would be better addressed through FEPs, rather than requiring a consent. For example, stock holding areas and the maintenance and management of wetlands should be Permitted Activities and managed through FEPs.</li> </ul>
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<p>Standards for intensive winter grazing of forage crops (e.g. brassicas) within 6 months after effect (pg. 79-80)</p>	<p>Two options being considered:</p> <ol style="list-style-type: none"> <li>1. New national standards through regulation, or:</li> <li>2. Current industry standards</li> </ol> <ul style="list-style-type: none"> <li>• Standards include a range of threshold values for land area, slope, buffer widths and pugging extent, and the government is seeking feedback on what the thresholds should be. For example, winter grazing setbacks from waterways of between 5 and 20 m have been proposed.</li> <li>• Winter grazing would be a permitted activity if all conditions/thresholds are met; if not, it would be a restricted discretionary activity.</li> </ul>	<ul style="list-style-type: none"> <li>• In principle we support national standards for intensive winter grazing.</li> <li>• The majority of standards for intensive winter grazing of winter forage crops are already listed as Good Management Practices by the primary sector. Therefore, these standards are already being carried out the majority of DFMS clients. For example: <ul style="list-style-type: none"> <li>- Selecting paddocks for winter grazing that are; not vulnerable to pugging and compaction; have trees or shelter to prevent soil loss through erosion; are away from waterways and; do not have temporary streams or natural drainage channels within the winter crop paddock.</li> <li>- Direct drilling or minimum tillage rather than conventional cultivation is used where possible on the farms.</li> <li>- Follow the crop with a catch crop to take up nitrogen from the soil left from intensive grazing.</li> <li>- Re-sow crops as soon as possible/practical to minimize exposed soil and prevent nutrient losses.</li> <li>- Also, it is important to note that the majority of DFMS clients farm on flat land and therefore, runoff does not occur from winter grazing on hills.</li> </ul> </li> <li>• However, DFMS do have concerns about the proposed definitions that they want to use, for example how “pugging” is defined and who/how it will be monitored.</li> </ul> <p>We believe more work needs to be done to improve the definition and rules for ‘pugging’ and requirements to re-sow within 1-month, in the winter grazing proposals. We support permitted activity rules for managing stock holding areas, rather than the need for a consent.</p>
<p>Standards for stock holding areas (pg. 81)</p>	<ul style="list-style-type: none"> <li>• Measures to control effluent and contaminant loss from areas where stock are held for more than 30 days a year or more than 10 days in a row</li> </ul>	<ul style="list-style-type: none"> <li>• As already mentioned previously, our position is that stock holding areas should be a permitted activity and be included as part of an FEP, as long as the defined conditions are met.</li> </ul>

	<ul style="list-style-type: none"> <li>• Sacrifice paddocks permitted activity if more than 50m away from waterways and do not include critical source areas</li> <li>• The NES for stock holding areas, which includes feed pads, would require a consent.</li> </ul>	
Stock exclusion (pg. 75)	<p>Large (Accord) waterways, wetlands and lakes:</p> <ul style="list-style-type: none"> <li>• Exclusion with 1m minimum and 5 m average setback across property by 2021 for existing dairy or 2023 other landuse for low slope land (less than 5 degrees)</li> <li>• For slope greater than 5 degrees above rules applies to paddocks used for winter grazing, dairy, or intense stock numbers (14 su/ha farm scale or 18 su/ha paddock scale). For existing fences, farmers have until 2035 if 1m minimum and average setback is more than 2m</li> </ul> <p>Small (non-accord) waterways:</p>	<ul style="list-style-type: none"> <li>• We support stock exclusion as one of the most effective measures for reducing contaminants entering permanent waterways. The majority of DFM clients have fenced off all their waterways and planted Riparian buffers to prevent nutrients from running in. As a result, significant time and money has been invested to improve the environment of properties already.</li> <li>• We support current fencing to remain in place, if minimum buffer widths are achieved.</li> <li>• We believe there is no scientific evidence to justify a 5 m setback rule. This is backed up by DairyNZ scientists who are reviewing the need for a 5m buffer to see if there is scientific evidence to support that position.</li> <li>• We support the proposed “average” width approach.</li> <li>• We support a focus of targeting ‘at risk’ areas, such as critical source areas with wider setbacks, sedimentation traps and possibly wetlands.</li> </ul>

	<ul style="list-style-type: none"> <li>Addressed through farm environment plan</li> </ul>	
<p>New bottom line for instream nitrogen and phosphorus for ecosystem health (where instream concentrations exceed proposed standard, including parts of Southland, Canterbury, Waikato) (pg. 47)</p>	<ul style="list-style-type: none"> <li>Regional councils to develop or amend regional plans by 2025 to meet new ecosystem health standards</li> <li>Modelling suggests reductions in nitrogen losses of 25-80% would be required to meet these in affected catchments</li> <li>Timeframes to meet water quality outcomes can occur over a generation (20-30 years)</li> </ul>	<ul style="list-style-type: none"> <li>We support policies that protect ecosystem health alongside swimability.</li> <li>We do not support the proposed nitrogen (DIN) and phosphorus (DRP) bottom lines as the most effective way to achieve this. DFMS feel that these new 'ecosystem health' nutrient thresholds are not scientifically robust and are unlikely to achieve improvements in waterway health as sought by the community. The science used to come up with these numbers is too simplistic and fails to account for current scientific understanding of the complexity of stream health.</li> <li>In addition, there is no socio- economic impact reports to show how the new bottom line for instream nitrogen and phosphorus will impact livelihoods and communities who rely on agriculture to survive. Therefore, we believe taking a more adaptive management approach to the ecosystem health (nitrogen and phosphorus levels) where community-set outcomes are not met is more reasonable.</li> <li>We believe significant decreases in N losses in Canterbury, calculated by Overseer, have already been made through better management practices in response to tighter nutrient rules imposed by regional councils. Therefore, continuing to carry out good management practices and monitoring farms through Overseer should be adequate to lower nitrogen and phosphorus levels in waterways. These include: <ul style="list-style-type: none"> <li>Aquaflex soil moisture monitors installed to help with efficient irrigation scheduling.</li> <li>Irrigation application depth is altered in the shoulders of the season prevent soil situation and P and N runoff.</li> <li>Crop yield estimations are used to calculate nutrient requirements for crops.</li> <li>A detailed annual nutrient budget is followed that matches pasture growth.</li> <li>Use slow release N (Sustain and PhaSedN) in shoulders of the season.</li> <li>Reducing N fertiliser rates on the effluent blocks.</li> </ul> </li> </ul>



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