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To: [Mailroom Mailbox](#)
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Subject: Plan Change 7 to the LWRP Submission
Date: Friday, 13 September 2019 11:01:13 AM
Attachments: [DairyNZ PC7 Submission Final with signature.pdf](#)

Good morning

Please find attached our submission on PC7 of the LWRP.

Regards

Charlotte

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SUBMISSION ON PROPOSED PLAN CHANGE 7 TO THE CANTERBURY LAND AND WATER REGIONAL PLAN

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Trade competition statement:

- 1 DairyNZ could not gain an advantage in trade competition through this submission.

Proposal this submission relates to is:

- 2 This is a submission on proposed Plan Change 7 (PC7) to the operative Canterbury Land and Water Regional Plan (LWRP).

The specific provisions of PC7 that this submission relates to:

- 3 This submission relates to:
 - 3.1 Region-wide components of PC7
 - 3.2 Part B of PC7 (Orari-Temuka-Opihi-Pareora (OTOP) sub-region component of PC7) in its entirety.
 - 3.3 Part C of PC7 (Waimakariri) sub-region component in its entirety.

Submission

- 4 This submission is structured as follows:
 - 4.1 Background to DairyNZ, including an overview of DairyNZ's commitment to working with dairy farmers to identify good management practices and to support the implementation of these practices on-farm to minimise impacts on the environment;
 - 4.2 DairyNZ's overall position on PC7;
 - 4.3 The specific relief sought by DairyNZ, contained within **Attachment 1**.

Introduction

- 5 DairyNZ welcomes the opportunity to submit on the Proposed Plan Change 7 to the operative LWRP. We acknowledge the significant efforts that the Zone Committees and Environment Canterbury (ECan) have undertaken to get the Zone Implementation Programme Addendums (ZIPA) and the Plan Change to this stage.
- 6 DairyNZ is the industry good organisation representing New Zealand's dairy farmers. Funded by a levy on milksolids and through government investment, our vision is for New Zealand dairy farming to have the world's most competitive and responsible dairy farming. DairyNZ's work includes research and development to create practical on-farm tools, leading on-farm adoption of farming within limits, promoting careers in dairying, and advocating for farmers with central and regional government.
- 7 The Dairy Tomorrow Strategy: The Future of New Zealand Dairying makes a firm commitment to the communities that dairy farmers are part of, and to the environment that communities value. DairyNZ supports the development of a resource management framework that achieves the sustainable management of natural and physical resources in an efficient and equitable way, whilst enabling social, cultural and economic wellbeing of people and communities.
- 8 This submission has been developed on behalf of dairy farmers, and in consultation with farmers and other primary sector groups.

Submission summary

- 9 DairyNZ supports the overall water quality objectives sought by the community under the Plan Change. Some minor changes are suggested to better align with the National Objectives Framework under the National Policy Statement for Freshwater Management (NPS-FM).
- 10 However, DairyNZ does have significant concerns regarding the prescriptive and long-term nature of the nitrogen reductions, particularly in the Waimakariri Zone. Both the hydrogeological modelling and the socio-economic modelling are not sufficiently robust to warrant the potentially severe socio-economic impacts on the farming communities in these zones. DairyNZ agrees nitrogen reductions are required to meet the community's water quality objectives, and ten-year staging is appropriate to align with plan review cycles and ideally, common consent expiry dates.

Overall position on Orari Temuka Opihi Pareora

- 11 Part B of PC7 introduces an overall framework for the sustainable management of freshwater resources in the Orari Temuka Opihi Pareora (OTOP) sub-region. This includes proposed changes to the LWRP to manage environmental flow and allocation regimes and freshwater quality. DairyNZ recognises the considerable challenges in developing the framework for this sub-region and acknowledges the work of the OTOP Zone Committee and Environment Canterbury (ECan) in developing the

recommendations underpinning the OTOP Zone Implementation Programme Addendum (ZIPA), and subsequently, PC7.

- 12 DairyNZ generally supports the direction of PC7, particularly the development of the overall framework for managing freshwater quality within the OTOP region, in accordance with recommendations set out in Section 4.8 of the OTOP ZIPA.¹
- 13 DairyNZ generally supports, at a high level, the following proposals within PC7:
 - a. Establishing six Freshwater Management Units (FMUs) to represent major surface water catchments and groundwater resources.
 - b. Setting freshwater outcomes and targets for each FMU to achieve the freshwater outcomes.
 - c. Adopting the established region-wide nutrient management framework for the OTOP sub-region, including requirements for farmers to operate at Good Management Practice and prepare and implement audited Farm Environment Plans.
 - d. Identifying and establishing High Nitrogen Concentration Areas (HNCAs) where the water quality outcomes, targets and limits are currently not being met.
 - e. Introducing a framework for managing winter grazing of cattle and deer within the High Runoff Risk Phosphorus Zones.
- 14 While DairyNZ supports the outcomes being proposed by PC7, it is concerned with some of the provisions, particularly those in section 14 of the LWRP as follows:
 - a. The limited manner in which the freshwater outcomes, targets and limits are used to inform changes to farming land use activities, especially in HNCAs
 - b. The omission of provisions to establish and implement a monitoring programme for the purpose of informing state of the environment reporting, future plan development requirements and whether further future nitrate reductions in HNCAs are required.
 - c. The specific provisions in the plan that require farming activities in HNCAs to further reduce nitrogen losses over time, and in particular:
 - i. Including staged reductions in Table 14(zc) to be achieved by 1 January 2035, which DairyNZ's technical work suggests are not realistic or achievable.

¹ Orari-Temuka-Opihi-Pareora Water Zone Committee, Zone Implementation Programme Addendum, December 2018.

- ii. The limited linkages between the staged reductions in Table 14(zc) and the water quality outcomes, targets and limits set by Tables 14(a) to (g).
 - iii. Requiring nitrogen reductions to be met by both 1 January 2030 and 1 January 2035 for 'other uses', which includes dairy support activities, and which both the section 32 report and DairyNZ's technical work suggests are not realistic or achievable.
 - iv. The considerable uncertainty with the geohydrological modelling used to set N loss reductions. As a gross simplification of a complex biophysical system, it will likely present inaccurate results that are not sufficiently robust to support the additional reductions beyond 2030.
 - v. DairyNZ's analyses suggest that the costs to farmers to achieve the proposed reductions may have a significant impact on land values and saleability, restricting land-use options and limiting further enhancements that would reduce nutrient losses. DairyNZ accepts the 2030 reductions, which will have a significant impact on the profitability of some businesses but cannot support the further 2035 reductions at this stage.
 - vi. There are significant gaps in the economic assessment carried out as part of ECan's section 32 evaluation report. For example, input output tables for Waimakariri have been used for OTOP, which has different farm types and economies. The section 32 report focuses on the efficiency and effectiveness of provisions over the next 10 years and not out to the 2035 reductions. While significant on-farm and district-wide economic effects are predicted, the report considers that farmers will have time to adjust. This contradicts DairyNZ's advice, where reductions in property values could be immediate.
- 15 The reliance of the nutrient management framework on the Farm Portal and the lack of confidence given to the equivalent and alternative pathways. The Farm Portal is not sufficiently robust to deal with a number of farm systems and the irrigation and fertiliser proxies are of particular concern.
- 16 Farming activities are being held accountable for the full extent of the proposed nutrient reductions. This is a different approach to other sub-regional sections, including Hinds and South Coastal Canterbury, where farming activities are acknowledged as one of several contributing factors.
- 17 ECan have not assessed the combined costs and benefits of the nutrient management provisions and the environmental flow and allocation regime.

- 18 Both will benefit water quality and impose costs on farmers, but the combined extent of the costs and benefits is not known. It is DairyNZ's view that linking nutrient reductions to environmental outcomes is one way to address this uncertainty.
- 19 Unless the issues set out above and in Attachment 1 are addressed, DairyNZ considers that the framework for managing freshwater quality as proposed, will not be able to be implemented as anticipated.
- 20 DairyNZ considers that the relief sought in Attachment 1 is necessary to:
- a. Address various analytical errors and omissions;
 - b. Ensure greater alignment with:
 - i. The region-wide provisions of the LWRP; and
 - ii. The recommendations contained in the OTOP ZIPA;
 - c. Give effect to the National Policy Statement for Freshwater Management, while also providing for social, cultural and economic considerations;
 - d. Improve the clarity of the policy framework; and
 - e. Improve the workability of the rules.

Overall position on Waimakariri

Nitrogen reduction targets and economic impacts

- 21 DairyNZ agrees with the need to specify a reduction target for 2030. Economic modelling shows that an achievable target is 10% beyond baseline GMP.² A target of 15% beyond GMP is likely to have a range in impacts on farm businesses, with significant impacts on the profitability of some businesses³, depending on the bGMP starting point and the level of debt servicing. Given these potentially significant impacts on some farm businesses, DairyNZ submits that 15% beyond bGMP by 2030 is a fair target, which allows farmers enough time to make changes, and for catchment-scale mitigations to be implemented.
- 22 DairyNZ opposes setting a N reduction target for 2040 (and beyond) based on likely severe economic impacts on the profitability and viability of these farms. ECan's economic modelling undertaken as part of its section 32 analysis shows that the 2040 target of 'a 30% N reduction beyond the baseline is expected to result in even the

² Mitigation Modelling for Dairy Farms in the Waimakariri Zone, DairyNZ August 2019.

³ Updated DairyNZ economic modelling that farm businesses could face up to a 35% decrease in profitability.

‘average farm’ becoming non-viable.’⁴ This echoes the DairyNZ modelling which states, ‘Requiring farms to reduce nitrogen leaching up to 30 percent beyond GMP is expected to have severe financial implications for some farms in the Waimakariri zone.’⁵ It is important to note that interest and tax repayments were considered in the section 32 report but not in the DairyNZ analysis.

- 23 The proposed N loss reductions will also have impacts on the regional economy. We note the technical report carried out to support the section 32 analysis which states that beyond 10% N reductions, regional indicators decline steeply. The report goes on to conclude that the additive costs under the plan change are unlikely to meet the zone committee’s goal of improving contribution to regional GDP.⁶
- 24 There are significant (yet understandable) gaps in the economic assessment carried out as part of ECan’s section 32 evaluation report. Firstly, the economic report notes that long-term economic impacts resulting from N reductions are too difficult to assess and therefore have not been assessed. Secondly, the additive nature of N loss reductions and loss of irrigation reliability have also not been assessed.⁷ These gaps cast serious doubt over the soundness of the section 32 report and bring into question whether long term reductions can be proposed without a full assessment of their likely impact.
- 25 Concern over the inability to assess economic impacts of N reductions over the long-term has been discussed. DairyNZ is also concerned that, while reductions are prescribed over a long time period, impacts on land values will occur more immediately. DairyNZ agrees with the section 32 report, which states:

‘The impact on land values will however be more immediate for a number of reasons. The uncertainty associated with the likely future impacts of mitigation will reduce the desirability of land in the affected areas, and thus sales price. It has also been true over the last 2 – 3 decades that increases in land value have been a major component of the returns experienced by landholders. Thus the mitigation pathway outlined in the ZIPA will cause an increased operating cost, reduced operating profit and reduced potential for capital gain. The combination of these factors is likely to see a more immediate reduction in land value for properties in the affected areas. Because reducing asset values will increase the debt to asset ratios and will increase the potential for business insolvency, these reductions in land value have the potential to become problematic well before the decrease in operating profits occur.’⁸

⁴ ‘Average’ means average performance. From Waimakariri land and water solutions programme Options and Solutions Assessment Economic assessment, 2019.

⁵ Mitigation Modelling for Dairy Farms in the Waimakariri Zone, DairyNZ August 2019.

⁶ Harris, S. 2019. Waimakariri Land & Water Solutions Programme Options & Solutions Assessment.

⁷ *Ibid*

⁸ *Ibid*

- 26 The author of the section 32 report also comments that housed mitigations may present a viable alternative before land use change is considered.⁹ DairyNZ urges caution in accepting this assumption, on the basis that these mitigations will have implications on greenhouse gas emissions, that may make this option less tenable. In addition, housed systems also require significant infrastructure investment and, for the financial reasons mentioned above, farmers may struggle to access affordable finance.

Social impacts of proposed N reductions

- 27 Farmers in the Nitrate Priority Area are used to working cooperatively under the Waimakariri Irrigation Scheme to manage water. The creation of sub-priority zones, and differential reductions across these sub zones, is likely to reduce social cohesion and undermine the cooperative nature of the Scheme. At the same time, catchment-wide mitigations such as Managed Aquifer Recharge require strong social cohesion and all participants to be equally invested in their success.
- 28 Impacts on community well-being are an important part of a section 32 evaluation. However, impacts on farmer stress, who are also facing significant and complex additional regulation across environment and biosecurity, are likely to be significant. This impact on community well-being has not been assessed as part of the section 32 report.

Modelling uncertainties

- 29 As approximations of reality, models will always be subject to a degree of error in modelling outputs. The hydrogeological model used to underpin N loss reductions in the plan change is no exemption. DairyNZ notes the discussion of the uncertainty inherent in nitrate concentration modelling undertaken as part of a technical report to support the plan change.¹⁰ The report notes two key areas of uncertainty namely:
- Uncertainty in Overseer modelling of nitrate loss rates from the soil profile, and
 - Groundwater modelling uncertainty.
- 30 DairyNZ has commissioned an independent review of the hydrogeological model by Aqualinc, who concluded as follows:
- It is more likely than not that flow is predominantly towards the coast, rather than Christchurch city.
 - There are various mismatches between measured and modelled nitrate concentrations.

⁹ The author comments that the modelling assumes that beyond this point land use change is required to achieve further reductions, and that this is potentially a conservative assumption because other mitigations such as housing of dairy cattle may potentially reduce losses further at a lower cost.

¹⁰ Waimakariri Land and Water Solutions Programme Options and Solutions Assessment: Nitrate Management p.44

- Measured nitrate trends are sometimes inconclusive, flat, or declining in some areas that are modelled to increase.
 - This is potentially due to inputs (Overseer)
- 31 The technical analysis carried out by ECan includes a comment that the role of attenuation has not been included, given the inability to include some biophysical processes. This supports the above comment that Overseer inputs may be erroneous.
- 32 Additionally, in terms of modelling effects of changed land use practices on surface water, we are not confident that all assumptions are correct. For example, it does not appear that the reduced contribution from a lowered permitted activity threshold has been factored in. This is a critical assumption which will impact on the modelled results in surface water.
- 33 DairyNZ does not believe that groundwater and land use modelling are sufficiently robust to justify the significant impacts on the farming community described above. However, we agree with the zone committee that there is sufficient information to start to act now. DairyNZ, along with other primary industry groups and Next Generation Farmers, believe that meeting bGMP by 2020, 15% N reductions by 2030, as well as implementing catchment-wide mitigations, will achieve measurable water quality improvements in surface water and reduce the loss of nitrates into groundwater. At the same time, more comprehensive water quality monitoring and further refinement of the hydrogeological model will provide improved information, on which decisions can be made to inform future plan reviews, including potential further N reductions.

Alternative approach

- 34 DairyNZ proposes an alternative 'adaptive management' approach, which aligns with future plan review and/or common consent expiry dates, whereby water quality monitoring results are used to determine subsequent plan requirements. This approach would balance the need to give certainty in terms of water quality outcomes, whilst avoiding farmer disengagement, loss of social cohesion, immediate reductions in property values and macro-economic impacts. Overall, DairyNZ believes this alternative approach would be more economically efficient whilst remaining effective in terms of providing for community values.
- 35 The alternative approach would also retain the intent of the plan change that full achievement of the Plan Change objectives for water quality improvement, is targeted for 2080, with this Plan Change being the first stage. Subsequent Plan Changes would respond to results of water quality modelling.
- 36 To enable this approach, we strongly support policy 8.4.35 which requires:
- Comprehensive surface and groundwater quality monitoring.
 - Regular analysis and evaluation of monitoring results.

- Subsequent plan changes, including potential further N reductions, based on the above monitoring results and trends in relation to water quality objectives set out in the LWRP.

- 37 This approach reflects the need for improved understanding of the connections between Waimakariri groundwater and the Christchurch aquifer and spring-fed streams identified by the zone committee, who made the following recommendation in its ZIPA:

'Rec 3.19 That Environment Canterbury makes sufficient resources available to enable significant improvements to continue to be made in the understanding of the Waimakariri Water Zone groundwater system and its connection with the Christchurch aquifer and spring-fed streams. The outcome of this work should be an updated assessment of the direction of travel and likely future nitrate concentrations provided to the committee, partners and stakeholders in 2025. The key areas for improvement of understanding include: a. Lag times between land use change and nitrate concentration changes in wells and spring-fed streams. b. Past and present rates of nitrate discharge to ground within the zone and trends in nitrate concentrations. c. Transport pathways between land and key receptors such as spring-fed streams, community water supply wells and the Christchurch aquifer system, so that recharge zones can be defined with more certainty. d. Nitrate attenuation. e. The effectiveness of actions (regulatory and non-regulatory) being taken. f. Nitrate discharges to Ashley Estuary (Te Aka Aka). g. Nitrate concentrations in private water supply wells.'

- 38 We seek that a partnership approach be taken with farmers, primary industry and other stakeholders, in the design, implementation, analysis, evaluation and reporting of water quality monitoring results to ensure buy-in and understanding by farmers and the wider community of water quality goals and progress towards meeting them and to inform future plan reviews.

Implementation issues

- 39 Whilst the ECan portal is part of Plan Change 5, which is beyond appeal, it does set the 'start line' for reductions beyond GMP proposed in this plan change.
- 40 We note and support the new policy in the plan change which recognises the work of the portal technical working group and allows for an 'equivalent pathway' to be used for determining baseline GMP. However, implementation issues remain with this approach. Firstly, the term 'erroneous' is not defined in the plan. Therefore, it will not be clear to farmers when this alternative pathway can be used, which is likely to cause confusion, uncertainty and additional cost in consultants fees.
- 41 At a minimum, the term 'erroneous' needs to be defined in this plan change. In the medium term, DairyNZ supports a plan change to implement the recommendations of the ECan portal working group, which were:
- Removal of the current N-fertiliser proxy.

- Develop farm-level N-fertiliser GMP standard.
- Replace with farm-level N-fertiliser standard to be used as a threshold/flag in the land use consenting and FEP auditing processes.
- Continue to advocate for implementation issues to be resolved.

Decision sought

42 DairyNZ seeks the following decision on its submission on the Plan Change:

- That ECan retains the Plan Change subject to the decisions sought that are referred to in Attachment 1 of this submission. Where text in the Plan Change is referred to, this is *italicised*. DairyNZ requests for deletions to existing text are ~~struck through~~ and new text is underlined, and;
- Any consequential amendments that may be necessary to give effect to the decision sought in this submission, and/or
- Any alternative relief that will give effect to this submission, including, where specific relief is sought, words or phrases to similar effect.

43 DairyNZ considers that the relief sought in **Attachment 1** is necessary to:

- Address various analytical errors and omissions;
- Ensure greater alignment with:
 - The region-wide provisions of the LWRP; and
 - The recommendations contained in the OTOPs and Waimakariri ZIPAs;
- Give effect to the National Policy Statement for Freshwater Management, while also providing for social, cultural and economic considerations;
- Improve the clarity of the policy framework; and
- Improve the workability of the rules.

44 DairyNZ wishes to be heard in support of its submission.

Signed on behalf of DairyNZ



Charlotte Wright
Senior Policy Advisor DairyNZ

Attachment 1

Page number	Section of Plan Change	Provision	Support Or Oppose	Decision Sought	Reason for submission
Region-wide provisions					
p.15	Section 4 Policies	Table 1a Freshwater Outcomes for Canterbury Rivers	Support in part	<u>E.Coli</u> Adopt the <i>E.Coli</i> NPS-FM attribute (i.e. 4 measures, instead of only median and 95 th percentile)	Disagree with recommendation to include 'for pragmatic reasons' only two of the measures (median and 95 th percentile). The technical report states <i>'... from a planning perspective it may be compulsory to ultimately use all four national prescribed metrics.'</i> Given this, the rationale for the ECan recommendation to depart from the 4x NPS-FM metrics used for grading the risk to humans of pathogen infection when swimming is not clear. It is a key attribute linked to important freshwater values.
p.17	Section 4 Policies	4.31 Livestock Exclusion form Water Bodies	Support	Retain policy	Amendments to policy are consistent with RMA
p.18	Section 4 Policies	4.61A Abstraction of Water	Support in part, Oppose in part	Amend the policy as follows: <u>'And the take would reduce the area of compromise the values ...'</u>	It is not clear what is meant by ' <i>Compromise the values</i> ' nor does not add any additional benefit to the policy. Reduction in habitat area on its own is a suitable proxy for impacts on values of indigenous species habitat.

Page number	Section of Plan Change	Provision	Support Or Oppose	Decision Sought	Reason for submission
p.19	Section 4 Policies	4.99 Managed Aquifer Recharge	Support in part, Oppose in part	<i>'a...have or will be implemented to improve water quality and quantity in the receiving water body, <u>or the benefits of MAR achieve the equivalent benefits of alternative mitigations;</u></i>	Enabling MAR as an alternative to other mitigations allows community outcomes to be achieved more efficiently, providing MAR achieves equivalent or better community outcomes.
p.19	Section 4 Policies	4.100	Support	Retain policy	Policy is consistent with RMA
p.20	Section 4 Policies	4.103 Submission of Water Quality Data	Support	Retain policy	Collection & centralised storage of water quality monitoring data is essential to understanding water quality state and trends as the basis for future plan reviews.
p.29	Section 5 Region Wide Rules	5.41 All Nutrient Allocation Zones	Support	Retain policy	It is appropriate to permit land use activities which are authorised through water use, either collectively or individually
p.32	Section 5: Region-wide rules	5.71 Stock Exclusion	Support	Retain policy	It is appropriate to protect drinking water, indigenous freshwater species habitat and freshwater bathing sites from stock access.
p.52	Section 5: Region-wide rules	5.191 Managed Aquifer Recharge	Support	Retain rule	Consent status, conditions and matters for discretion are appropriate.

Page number	Section of Plan Change	Provision	Support Or Oppose	Decision Sought	Reason for submission
Section 8: Waimakariri provisions					
p.57	Section 8 Waimakariri	Zone Committee: Community Outcomes	Support	Retain outcomes	DairyNZ is supportive of the broad range of outcomes sought by the Zone Committee.
p.62	Section 8.4: Policies	8.4.4 Freshwater Management Units	Support	Retain policy	Delineation of zone into two freshwater management units is appropriate.
p.65	Section 8.4: Policies	8.4.19 Targeted Stream Augmentation	Support	Retain policy	Retention of enabling policy for targeted stream augmentation is consistent with the RMA.
p.65	Section 8.4: Policies	8.4.20 Targeted Stream Augmentation	Support	Retain policy	DairyNZ supports a policy that prevents erosion of benefits of targeted stream augmentation.
p.66	Section 8.4: Policies	8.4.22 Efficient Use of Water	Support in part, Oppose in part	Retain Policy, subject to following amendments: Insert the following at the end of the policy:	The listed matters are important in the decision making on efficient use of water & will prevent perverse impacts arising. However, there is potential for contradiction between achieving good management practice for irrigation under Schedule 24 of the LWRP and this policy which requires the consideration of the

Page number	Section of Plan Change	Provision	Support Or Oppose	Decision Sought	Reason for submission
				<i>'In the event of a conflict between Schedule 24 and/or the ECan portal, Policy 8.4.22 shall prevail.'</i>	benefits of water losses to groundwater and surface water and how any effects will be managed.
p.66	Section 8.4: Policies	8.4.23 Efficient Use of Water	Support	Retain Policy	DairyNZ supports the need for water efficiency assessments alongside applications for water takes.
p.66	Section 8.4: Policies	8.4.25 Nutrient Management	Support	Retain policy, subject to amendments sought to Table 8-9 <i>'b. requiring within the Nitrate Priority Area, further reductions in nitrogen loss from farming activities (...) in accordance with Table 8-9, provided that any further stage of reduction required is greater than 3kg of nitrogen per hectare per year for dairy...'</i>	DairyNZ is supportive of nitrogen reductions beyond GMP where there is robust scientific evidence to support the degree of reductions needed. The timing of the reductions needed needs to be informed by the degree of economic and social impacts arising. Refer to Table 8-9 for further detail. DairyNZ supports a lower nitrogen loss floor, beyond which, further reductions would be particularly challenging to achieve.
p.66	Section 8.4: Policies	8.4.26 Nutrient Management	Support in part, oppose in part	Amend policy as follows: <i>'c. for properties within the Nitrate Priority Area, the applicant demonstrates through actions and a timeframe set out in the Farm</i>	It is not appropriate to require an FEP to include actions to meet a nitrogen loss reduction deadline beyond the next five to ten years. Currently unknown technologies and supporting Good Management Practices will continue to emerge, and results of scientific research

Page number	Section of Plan Change	Provision	Support Or Oppose	Decision Sought	Reason for submission
				<i>Environment Plan, how <u>steps towards any further stage 1 reductions required by Table 8-9 will be achieved.</u></i>	will continue to inform GMP. Some solutions are being investigated for potential benefit. However, the timeframes involved for development and testing of these solutions are long-term.
p.67	Section 8.4: Policies	8.4.27 Nutrient management	Support	Retain policy, subject to insertion: <i><u>'f. the extent to which the applicant is affected by additive impacts of increased minimum flows and nitrogen loss rate reductions.'</u></i>	It is critical that this policy be retained so that landowners can gain recognition of previous efforts and demonstrate a case for continued genuine efforts to work towards nitrogen loss reductions, within a timeframe that maintains financial viability. This also allows for a more equitable application of nitrogen reduction policies in instances where economic impacts disproportionately affect individual landowners.
p.67	Section 8.4: Policies	8.4.28 Nutrient management	Support	Retain policy	DairyNZ supports the development of Farm Environment Plans for identifying and managing environmental risks of activities where those activities have the potential to affect sensitive receiving environments.
p.67	Section 8.4: Policies	8.4.28B Nutrient management	Support, subject to amendments	Retain policy, subject to the following amendment: <i>Provide for the use of an Equivalent Baseline GMP Loss Rate or</i>	The work of N portal technical working group recommended that the portal cease to be used. However, Schedule 24 which stipulates use of the portal remains in the plan. Given the portal produces erroneous numbers, an alternative mechanism for

Page number	Section of Plan Change	Provision	Support Or Oppose	Decision Sought	Reason for submission
				<p><i>Equivalent Good Management Practice Loss Rate in those limited circumstances where it is demonstrated that the Farm Portal is unable to generate a Baseline GMP Loss Rate or Good Management Practice Loss Rate or the number generated is demonstrated to be erroneous.</i></p> <p>Insert criteria for determining when Farm Portal numbers are 'erroneous' and/or examples of where erroneous numbers may occur. For example, where there are heavy soils present or when cropping occurs.</p>	<p>assessing and prescribing required N losses, needs to be available. The equivalent pathway provides such a mechanism. However, the pathway outcomes are currently unknown, and additional costs of consultants' fees in working through this will likely be imposed on farmers.</p> <p>It is critical that examples/criteria for when portal numbers will be deemed 'erroneous' is provided in the plan.</p>
p.68	Section 8.4 Policies:	8.4.28C Nutrient Management	Oppose	Delete policy	Policy 8.4.28B provides for use of the Equivalent Baseline GMP Loss Rate or Equivalent Good Management Practice Loss Rate. Loss rates calculated by this method would be subject to rigorous review through the consent process. Any certainty provided by Policy 8.4.28B is removed if resource consents are to be reviewed when/if the Farm Portal can generate a Baseline GMP Loss Rate or Good Management Practice Loss Rate.

Page number	Section of Plan Change	Provision	Support Or Oppose	Decision Sought	Reason for submission
p.68	Section 8.4 Policies:	8.4.29 Irrigation Schemes	Support, subject to amendments to Table 8-9	Amend policy as follows: a. i. <i>'Describe the <u>range of methods that will be used to implement the Good Management Practices on any land...</u>'</i> iii. <i>describe how any <u>the next stage of</u> nutrient reductions will be achieved</i>	Good Management Practices will change over time and will need to be selected according to farm context. The policy needs to be clarified to reflect this intent, assuming this was the intent of the policy. Good Management Practices will continue to evolve, based on currently unknown technologies and results of scientific research. These novel technologies and GMPs will be needed in order to meet nitrogen loss reductions beyond the next five to ten years. It is therefore inappropriate to require the consent application to detail these yet unknown GMPs to meet nitrogen loss reductions beyond the next five to ten years.
p.68	Section 8.4 Policies:	8.4.30 Livestock Exclusion from Waterbodies	Support	Retain policy	DairyNZ is supportive of additional stock exclusion in the Waimakariri Zone to include additional types of water bodies listed.
p.69	Section 8.4 Policies:	8.4.32 Wetlands & Riparian Margins	Support	Retain policy	It is appropriate to provide an enabling pathway for these activities.

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p.69	Section 8.4 Policies:	8.4.33 Wetlands & Riparian Margins	Support, subject to amendment	Retain policy, subject to following amendment: <i>'Enable catchment restoration activities that focus on the protection of springs...removal of fine sediment from waterbodies... or any other targeted activities to improve water quality'.</i>	There may be other activities that have the potential to improve water quality. A 'catch-all' should be added to capture and enable these other activities. A clause may need to be added to stipulate that the policy is subject to meeting other parts of the plan.
p.69	Section 8.4 Policies:	8.4.35 Current Information, Monitoring and Review	Support	Retain policy	Plan monitoring and review is critical to ensure future land management frameworks are fit for purpose, i.e.: that are effective and efficient. For example, it is important that the current level of uncertainty associated with groundwater modelling is reduced so that future land management actions, and associated potentially economic costs, are appropriately targeted and justified.
p.70	Section 8.4 Policies:	8.4.36 Consent expiry & duration	Support	Retain policy	Support basis for common expiry date. Proposed expiry date is reasonable, providing common expiry dates align with water quality & plan review dates.
p.70	Section 8.4 Policies:	8.4.37 Consent expiry & duration	Support	Retain policy	Support basis for common expiry date. Proposed expiry date is reasonable, providing common expiry dates align with water quality & plan review dates.

Page number	Section of Plan Change	Provision	Support Or Oppose	Decision Sought	Reason for submission
p.75	Section 8.5 Rules:	8.5.6 Take & Use Surface Water	Support	Retain rule	The consent status and listed discretionary matters for takes for enhancement of mahinga kai are appropriate.
p.77	Section 8.5 Rules:	8.5.12 Take & Use Groundwater	Support, subject to amendments	<p>Retain rule subject to the deletion of clause 5.</p> <p>'The surface water or groundwater permit that is being replaced is for a take from an over-allocated surface water allocation zone; and'</p> <p>Add clause to specify that new takes should not be from over-allocated zones if it is not already provided for under cross-references to this rule.</p>	<p>It does not seem necessary for the proposed take to replace a take from an over-allocated zone. The intent of the rule is presumably to reduce the impact of hydraulically connected surface or groundwater takes on surface water. Over-allocation should be dealt with under separate rules.</p> <p>New takes should not be from over-allocated zones.</p>
p.79	Section 8.5 Rules:	8.5.18 Targeted Stream Augmentation	Support	Retain rule	Consent status, conditions and matters for discretion are appropriate.
p.80	Section 8.5 Rules:	8.5.22 Nutrient Management	Support, subject to amendments to Table 8-9.	Retain rule, subject to amendments to Table 8-9.	
p.82	Section 8.5 Rules:	8.5.24 Nutrient Management	Support		5 ha/5% area threshold for wintering ensures N loss associated with winter grazing is fairly & consistently managed across the zone.

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p.88	Section 8.6 Freshwater Outcomes Tables	Table 8a Freshwater Outcomes for Waimakariri Sub-region rivers	Support, subject to clarification & amendments	Retain table, subject to clarification and amendments: <ul style="list-style-type: none"> • Replace 'QMCI' with 'MCI' • Adopt the <i>E.Coli</i> NPS-FM attribute (i.e. 4 measures, instead of only median and 95th percentile) 	<p>Freshwater outcomes are generally consistent with community, fisheries, cultural values & the NPS-FM.</p> <p>Cyanobacteria mat cover</p> <p>Maintaining current state means a need to be explicit about what maintaining current state means - presumably cover is highly variable , and so 'maintain' needs to take into account for 'current' variability.</p> <p>Macroinvertebrates</p> <p>2007 MfE macroinvertebrate monitoring guidelines recommend MCI for SoE monitoring and QMCI is not recommended</p> <p>Periphyton</p> <p>Define what 'maintain' is - i.e. current median will have natural variability, e.g.: if median , 25th and 75th percentile concentrations are 80, 65 and 100 mg/m2 , then if 5 year median is used to determine current state, then if 2010-14 median is 80 , and 2020-2024 is 91 mg/m2 – then need to have clear definition as to what value (i.e. absolute deviation from the median)</p>

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					<p>constitutes a deviation (whether positive or negative) from the median value .</p> <p>E.Coli</p> <p>Disagree with recommendation to include ‘for pragmatic reasons’ only two of the measures (median and 95th percentile). The technical report states</p> <p><i>‘... from a planning perspective it may be compulsory to ultimately use all four national prescribed metric.’</i></p> <p>Given this, the rationale for the ECan recommendation to depart from the 4x NPS-FM metrics used for grading the risk to humans of pathogen infection when swimming is not clear. It is a key attribute linked to important freshwater values.</p>
p.89	Section 8.6 Freshwater Outcomes Tables	Table 8-6 Freshwater Outcomes for Waimakariri Sub-region Lakes	Support	Retain table	Outcomes are generally consistent with the NPS-FM & community values
p.93	Section 8.7.3 Catchment Water	Table 8-5 Water Quality Limits and Targets for	Support	Retain table	Limits & targets are generally consistent with the NPS-FM & community values

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	Quality Limits	Waimakariri Rivers			
p.94	Section 8.7.3 Catchment Water Quality Limits	Table 8-6 Water Quality Limits and Targets for Waimakariri Lakes	Support	Retain table	Limits & targets are generally consistent with the NPS-FM & community values
p.94	Section 8.7.3 Catchment Water Quality Limits	Table 8-7 Waimakariri Nitrate-nitrogen limits for drinking water supplies from groundwater	Support	Retain table	Limits are consistent with the NZ Drinking Water Guidelines of ½ MAV 11.3 mg/L.
p.95	Section 8.7.3 Catchment Water Quality Limits	Table 8-8 Waimakariri Water Quality Limits and Targets for Groundwater	Support	Retain table	Limits & targets are generally consistent with the NPS-FM & community values
p.95	Section 8.7.3 Catchment Water Quality Limits	Table 8-9 Nitrate Priority Area Staged Reductions in N	Oppose	Retain 2030 reductions as set out in table Delete 2040 reductions and all subsequent reductions	A target of 15% beyond GMP is likely to have a range in impacts on farm businesses, with significant impacts on the profitability of some, depending on the bGMP starting point and the level of debt servicing. Given these potentially significant impacts on some farm

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		loss for Farming Activities...			<p>businesses, DairyNZ submits that 15% beyond bGMP constitutes a stretch goal for many dairy farmers, and that any greater reduction may threaten the viability of some farms and have macro impacts that can be minimised by retaining the 2030 reduction target of 15% beyond bGMP.</p> <p>DairyNZ opposes setting a N reduction target for 2040 (and beyond) based on likely severe economic impacts on the profitability and viability of these farms.</p> <p>DairyNZ is not confident that all modelling assumptions and conclusions reached as part of land use change impacts on water quality are correct. For example, it appears that the reduced contribution from a lowered permitted activity threshold has not been factored in. This is a critical assumption which will impact on the modelled results in surface water.</p> <p>DairyNZ does not believe that groundwater and land use modelling are sufficiently robust to justify the significant impacts on the farming community described above.</p>
p.189	Schedule 7 Farm	Management Area	Support	Retain insertion of 'springs'	Springs are important receptors that need to be identified & managed

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	Environment Plan				
p.194	Schedule 7 Farm Environment Plan	Waimakariri – Additional requirements	Support, subject to amendments to Table 8-9 & consequential amendments	Retain objectives & targets subject to any consequential amendments sought regarding Table 8-9	It is appropriate to identify plan objectives and targets to guide management under FEPs
p.195	Schedule 7 Farm Environment Plan	OTOPs – additional requirements	Support, subject to amendments to Table 14(zc) & consequential amendments	Retain objectives & targets subject to any consequential amendments sought regarding Table 14(zc)	It is appropriate to identify plan objectives and targets to guide management under FEPs
p.200	Schedule 8 Region-wide Water Quality Limits	Rivers	Support, subject to amendments	<p>Apply the NPS-FM DO attribute to all stream/river reaches</p> <p>Amend nitrate concentrations to 6.9 mg/L annual median where current concentrations are above this. otherwise maintain current concentrations.</p>	<p>This attribute should not solely apply downstream of point-source discharges</p> <p>In agriculturally modified catchments, 3.8 mg/L may be difficult to achieve.</p>

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Section 14 Orari -Temuka-Opihi-Pareora Provisions					
p.130	Section 14.3	Freshwater outcomes	Neutral	Retain Section 14.3 Freshwater Outcomes as notified	DairyNZ neither supports nor opposes Section 14.3 but notes its opposition to various aspects of Tables 14(a) to (g) of Section 14.6.1 <i>Freshwater Outcomes</i> as discussed later in this submission.
p.130	Section 14.4 Policies	Policy 14.4.1 (Freshwater Management Units)	Support	Retain policy 14.4.1 as notified	DairyNZ supports the proposed framework for managing freshwater in the OTOP sub-region through the establishment of FMUs and attaining improvements in freshwater through water quality and quantity limits and targets.
p.130	Section 14.4 Policies	Policy 14.4.19 (water quality)	Support with amendments	Amend Policy 14.4.19 as follows: <i>Water quality targets in the Rangitata Orton High Nitrogen Concentration Area, Fairlie Basin High Nitrogen Concentration Area and Levels Plain High Nitrogen Concentration Area are achieved by:</i>	Subject to DairyNZ's submissions on Table 14(zc), DairyNZ supports the intent of this policy but seeks that the 10-year duration limit be deleted. Policy 4.74 of the LWRP provides for up to 15-year

Page number	Section of Plan Change	Provision	Support/Oppose (in part or full)	Decision Sought	Reason for submission point
		targets in HNCA's)		<p><i>a. all resource consents granted for farming activities that require the preparation of a nutrient budget, being subject to consent conditions requiring further reductions in nitrogen loss beyond Baseline GMP Loss Rates, or consented nitrogen loss rates, in accordance with Table 14(zc), <u>until the water quality targets in Table 14(g) are achieved</u>; and</i></p> <p><i>b. limiting the duration of for any resource consent for a farming activity that is required to make further reductions in nitrogen loss (beyond Baseline GMP Loss Rates or consented nitrogen loss rates) in accordance with Table 14(zc), to no more than ten years and only imposing one reduction beyond Baseline GMP Loss Rates or consented nitrogen loss rates per consent term, <u>until the water quality targets in Table 14(g) are achieved</u>; and</i></p> <p><i>c. avoiding the grant of any resource consent that will result in a farming activity not reducing nitrogen losses beyond Baseline GMP Loss Rates or consented nitrogen loss rates; <u>and</u></i></p> <p><i>d. <u>if the water quality targets in Table 14(g) are achieved, the further reductions in nitrogen loss beyond Baseline GMP Loss Rates, or consent nitrogen loss rates, in accordance with Table 14(zc), do not apply to a resource consent for a farming activity.</u></i></p>	<p>durations, which will give farmers more certainty to invest in the infrastructure required to reduce nutrient losses.</p> <p>In addition, DairyNZ also seeks amendments to ensure that the percentage reductions set by Table 14(zc) will not apply to farming activities if the water quality targets of Table 14(g) are being achieved.</p> <p>DairyNZ considers that the 5-year interval between the two percentage reductions in nitrogen loss is not long enough see benefits in the environment. While one reduction per consent term is supported, this links closely to DairyNZ's submission on Table 14(zc).</p>

Page number	Section of Plan Change	Provision	Support/Oppose (in part or full)	Decision Sought	Reason for submission point
	Section 14.4 Policies	New policy (monitoring and reporting)		<p>Insert new Policy 14.4.19A as follows:</p> <p><u>Inform successive plan review cycles and consenting requirements by reporting every 5 years on:</u></p> <p><u>a. the current state of freshwater quality and ecosystem health, and any trends observed; and</u></p> <p><u>c. the results of any relevant investigations carried out in relation to the groundwater system; and</u></p> <p><u>d. progress made towards freshwater outcomes and limits, including an assessment of the effectiveness of the framework, (including any non-statutory actions) in achieving those outcomes and limits.</u></p>	DairyNZ support the use of real data and consider a new policy setting out a requirement to report on the state of freshwater quality in the OTOP region is a key aspect of ensuring long-term desired catchment outcomes are met. A monitoring and reporting programme is anticipated in the section 32 report ¹¹ and recommendation 4.8.3 of the OTOP ZIPA, and a similar policy is proposed in the notified Part C of PC7 (Waimakariri) as Policy 8.4.35.
p.136	Section 14.4 Policies	Policy 14.4.20 (land use consent)	Support with amendments	<p>Amend Policy 14.4.20 (c) as follows:</p> <p><i>c. for properties within the Rangitata Orton High Nitrogen Concentration Area, Fairlie Basin High Nitrogen Concentration</i></p>	As set out above, DairyNZ seeks further linkage between the water quality targets in Table

¹¹ Section 32 Report for Plan Change 7 to the Canterbury Land and Water Regional Plan, Page 204.

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		for farming activity)		<i>Area and Levels Plain High Nitrogen Concentration Area, <u>until the water quality targets in Table 14(g) are achieved</u>, the applicant commits to achieving the percentage-based nitrogen loss reductions in Table 14(zc).</i>	14(g) and the percentage reductions in Table 14(zc).
p.136	Section 14.4 Policies	Policy 14.4.20A	Support with amendments	<p>Amend Policy 14.4.20A as follows:</p> <p><i>Where an application for a land use consent for a farming activity <u>or a holder of an existing land use consent for a farming activity</u> demonstrates the nitrogen loss rate reductions required by Policy 14.4.20(c) are unable to be achieved by the dates specified in Table 14(zc), any application for an extension of time to achieve those reductions will be considered having regard to:</i></p> <p><i>a. the Baseline GMP Loss Rate and the level of any enduring nitrogen loss rate reduction already achieved; and</i></p> <p><i>b. the nature and extent of any mitigations implemented during the nitrogen baseline period that are better than Good Management Practice, and the extent to which these have been effective in minimising nitrogen losses; and</i></p> <p><i>c the capital and operational costs of achieving the nitrogen loss rate reductions and the benefit (in terms of maintaining a farming activity's financial viability) of spreading that investment over time; and</i></p>	<p>DairyNZ supports the intention of proposed Policy 14.4.20A to enable farmers to extend the date by which the staged reductions required by Policy 14.4.20(c) must be achieved, but as notified, Policy 14.4.20A would only enable a request for an extension to be made at the time that an application for land use consent was made to ECan. DairyNZ considers that a consent holder should be able to request an extension at any time during the duration of consent, as circumstances may change.</p> <p>DairyNZ seek that an additional clause be added to allow the</p>

Page number	Section of Plan Change	Provision	Support/Oppose (in part or full)	Decision Sought	Reason for submission point
				<p><i>d. the nature, sequencing, measurability, effectiveness and enforceability of any steps proposed to achieve the nitrogen loss rate reductions; and</i></p> <p><i>e. progress made towards achieving nitrate-nitrogen limits and targets in Tables 14(a) to 14(g); and</i></p> <p><i><u>f. the effects of achieving the environmental flow and allocation regimes set out in tables 14(h) to 14(za).</u></i></p>	combined effects of the nutrient reductions and environmental flow and allocation regime to be considered.
p.137	Section 14.4 Policies	Policy 14.4.20B (equivalent pathway)	Support with amendments	<p>Amend Policy 14.4.20B as follows:</p> <p><i>Provide for the use of an Equivalent Baseline GMP Loss Rate or Equivalent Good Management Practice Loss Rate in those limited circumstances where it is demonstrated that the Farm Portal is unable to generate a Baseline GMP Loss Rate or Good Management Practice Loss Rate or the number generated is demonstrated to be erroneous.</i></p>	DairyNZ supports the provision of an alternate methodology where the Farm Portal is unable to generate a Baseline GMP Loss Rate or Good Management Practice Loss Rate. As previously discussed, the Farm Portal fails to deliver a robust loss rate number for a number of farm systems, and it cannot be assumed that this can or will be fixed.
p.137	Section 14.4 Policies	Policy 14.4.20C	Oppose	Delete Policy 14.4.20C	Policy 14.4.20B provides for use of the Equivalent Baseline GMP Loss Rate or Equivalent Good Management Practice Loss Rate.

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					<p>Loss rates calculated by this method would be subject to rigorous review through the consent process. Any certainty provided by Policy 14.4.20B is removed if resource consents are to be reviewed when/if the Farm Portal can generate a Baseline GMP Loss Rate or Good Management Practice Loss Rate.</p> <p>DairyNZ does not support Policy 14.4.20C and seeks that it be deleted.</p>
p.149	Section 14.5 Rules	Rule 14.5.15 (HNA nitrogen loss reductions)	Support	Retain Rule 14.5.15 as notified	DairyNZ supports the nitrogen loss reductions in Table 14(zc) only applying to the part of a property that is within the HNCA.
p.149	Section 14.5 Rules	Rules 14.5.16 to 14.5.18	Support	Retain Rules 14.5.16 to 14.5.18 as notified	DairyNZ supports the approach set out in Policy 14.4.20B which provides a methodology where the Farm Portal is unable to generate a Baseline GMP Loss

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					Rate or Good Management Practice Loss Rate. DairyNZ supports Rules 14.5.16 to 14.5.16B, which give effect to that policy and are consistent with the region-wide approach set out in section 5 of the LWRP.
p.151	Section 14.5 Rules	Rule 14.5.19	Support with amendments	Amend matter 8 of Rule 14.5.19 as follows: <i>8. For properties within a High Nitrogen Concentration Area, the methods and timeline within the Farm Environment Plan for achieving the nitrogen loss reductions set out in Table 14(zc) <u>until the water quality targets in Table 14(q) are achieved</u>; and</i>	DairyNZ supports the inclusion of Rule 14.5.19 but, consistent with amendments requested to policy 14.4.20, seeks the requirement to meet the percentage reductions in Table 14(zc) be linked to the water quality targets of Table 14(g).
p.152	Section 14.5 Rules	Rules 14.5.20 to 14.5.22	Support	Retain Rules 14.5.20 to 14.5.22 as notified	DairyNZ supports the inclusion of Rules 14.5.20 to 14.5.22 and considers that they appropriately give effect to the policies proposed in Section 14.4 and the

Page number	Section of Plan Change	Provision	Support/Oppose (in part or full)	Decision Sought	Reason for submission point								
					region-wide policies and objectives of the LWRP.								
p.160		Table 14(b) Water Quality Limits for OTOP Lakes	Support with amendment	Amend Table 14(e) as follows: <table><tr><th rowspan="2"><u>Lake name and measurement location</u></th><th colspan="2"><u>Ammoniacal Nitrogen</u></th></tr><tr><th><u>Annual median¹</u> <u>[mg/L]</u></th><th><u>Annual maximum²</u> <u>[mg/L]</u></th></tr><tr><td><u>Lake Opuha</u></td><td><u>0.03 ≤0.224</u></td><td><u>0.05 >0.03</u></td></tr></table>	<u>Lake name and measurement location</u>	<u>Ammoniacal Nitrogen</u>		<u>Annual median¹</u> <u>[mg/L]</u>	<u>Annual maximum²</u> <u>[mg/L]</u>	<u>Lake Opuha</u>	<u>0.03 ≤0.224</u>	<u>0.05 >0.03</u>	DairyNZ considers that the ammoniacal nitrogen concentration for Lake Opuha is too high, being consistent with that for a pristine rather than an artificial lake. DairyNZ seeks that the limit reflects the 95% protection limit, rather than the 99% limit.
<u>Lake name and measurement location</u>	<u>Ammoniacal Nitrogen</u>												
	<u>Annual median¹</u> <u>[mg/L]</u>	<u>Annual maximum²</u> <u>[mg/L]</u>											
<u>Lake Opuha</u>	<u>0.03 ≤0.224</u>	<u>0.05 >0.03</u>											
p.163		Table 14(g) Water quality limits and targets for OTOP groundwater	Support	Retain Table 14(g) as notified	DairyNZ considers that the limits and targets contained in Table 14(g) are appropriate and consistent with the Drinking Water Standards for New Zealand.								

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p.173		Table 14(zc) Staged Reductions in Nitrogen Loss for Farming Activities in HNCA	Support with amendments	<p>Replace the existing Table 14(zc) and replace with the following:</p> <table><tr><th></th><th><u>Farming land use activity</u></th><th><u>Total reductions in nitrogen loss to be achieved by 1 January 2030</u></th></tr><tr><td rowspan="2">High Nitrogen Concentration Area (see planning maps)</td><td><u>Dairy</u></td><td><u>10%</u></td></tr><tr><td><u>All other</u></td><td><u>5%</u></td></tr></table> <p>Amend the notes to Table 14(zc) as follows:</p> <p><i>The starting point for applying each percentage reduction in nitrogen loss in Table 14(zc) is generally the Baseline GMP Loss Rate except as otherwise provided for in Policy 14.4.20.</i></p> <p><i>For the purposes of applying the nitrogen reductions in 14(zc), 'Dairy' farming does not include 'Dairy Support' activities. 'Dairy Support' is classified under 'All other' farming activities.</i></p> <p><u>The percentage reductions required by Table 14(zc) are only to be applied to farming activities that require resource consent for individual farming land use activities and where the required</u></p>		<u>Farming land use activity</u>	<u>Total reductions in nitrogen loss to be achieved by 1 January 2030</u>	High Nitrogen Concentration Area (see planning maps)	<u>Dairy</u>	<u>10%</u>	<u>All other</u>	<u>5%</u>	<p>As set out previously, DairyNZ has significant concerns with Table 14(zc).</p> <p>DairyNZ supports the inclusion of reductions for 2030 but does not consider that adequate assessment has been undertaken to support the inclusion of the 2035 reductions.</p> <p>The reference to “[c]umulative” reductions is also unclear and in contrast with the notes, which provide for a starting point for each reduction of generally the Baseline GMP Loss Rate. DairyNZ seeks that this is deleted.</p> <p>DairyNZ also seek amendments to ensure that reductions are only required to be achieved if the water quality targets are not being met.</p>
	<u>Farming land use activity</u>	<u>Total reductions in nitrogen loss to be achieved by 1 January 2030</u>											
High Nitrogen Concentration Area (see planning maps)	<u>Dairy</u>	<u>10%</u>											
	<u>All other</u>	<u>5%</u>											

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				<p><u>reduction for each stage is greater than 3 kg nitrogen per hectare for dairy, and 1 kg per hectare for all other farming activities.</u></p> <p><u>If the ground water quality targets in Table 14(g) are achieved by either 1 January 2030 or 1 January 2040, the percentage reductions required by Table 14(zc) do not need to be met by farming activities.</u></p>	

ENDS