Submission on Proposed Waikato Regional Plan Change 1 – Waikato and Waipa Catchments

By

Organisation: **Fertiliser Association of New Zealand**

Postal Address: PO Box 11519
Manners Street Central
Wellington, 6142

Phone : 04 473 6552

Contact name Greg Sneath

Email: greg@fertiliser.or.nz

The Fertiliser Association could not gain an advantage in trade competition through this submission.

The Fertiliser Association is not directly affected by an effect of the subject matter of the submission that:

(a) adversely effects the environment, and
(b) does not relate to the trade competition or the effects of trade competition.

The Fertiliser Association wishes to speak at the hearing in support of my submissions.

The Fertiliser Association would be prepared to joint case with others that have made a similar submission.

Signed: 

Date: 8th March 2017

Introduction

1. The Fertiliser Association of New Zealand ('**FANZ**' or 'the Association'), is a trade organisation representing the New Zealand manufacturers of superphosphate fertiliser. The Association has two 'member companies' – Ballance Agri-Nutrients Ltd and Ravensdown Ltd. Both these companies are farmer co-operatives with some 45,000 farmer shareholders. Between them these companies supply over 98% of all fertiliser used in New Zealand.

2. The member companies have invested significantly in systems and capability to reliably estimate and document nutrient cycling on farms, with the purpose of providing sound advice and recommendations for nutrient management to support viable economic production and environmental responsibility. The systems and procedures used are applied in the same way nationally, but recommendations are specific to farmer goals, industry targets and regional council regulation. National and in particular regional consistency in the approach and framework for nutrient management is highly desirable.

3. The Fertiliser Association, along with Ministry for Primary Industries and AgResearch, is a one-third owner of OVERSEER® Nutrient Budgets. The staff of the Association's member companies bring a collective wealth of extensive experience and technical expertise in nutrient management.

Certification of nutrient management advisers

4. The fertiliser industry funded Massey University to develop the intermediate and advanced 'Sustainable Nutrient Management in New Zealand Agriculture' courses which have become an industry standard for training of nutrient management advisers. This has now been taken further by FANZ, supporting and providing administrative services for the Nutrient Management Adviser Certification Programme (NMACP). In 2012, DairyNZ commissioned the assistance of the Fertiliser Association to establish the programme as part of a Ministry for Primary Industries' Primary Growth Partnership (PGP).

5. The NMACP was developed with the aim of building and upholding a transparent set of industry standards for nutrient management advisers to meet, so that they provide nationally consistent advice of the highest standard to farmers. The programme was developed with an Advisory Group, with pan sector representation, including regional council, university and primary sector representatives supporting recognised qualifications and ongoing proficiency of those who advise on nutrient use and management in the farming community. There is also an annual requirement to demonstrate currency in nutrient management with a framework for 'Continuing Professional Development' incorporated into the Nutrient Management Adviser Certification Programme. National consistency is seen as highly desirable.

6. There are currently approximately 160 certified nutrient management advisers throughout New Zealand.

7. FANZ takes a particular interest in regional policy statements and regional plans in terms of supporting provisions that enable the sustainable management of natural and physical resources, and ensuring any regulation of land use activities that may use fertilisers is appropriate and necessary.

8. The industry supports systems that provide flexibility for land users to engage appropriate tools and practices to responsibly apply appropriate farm system inputs required to meet commercially viable production while managing farm system losses. Indeed, this outcome is essential for the national and regional economy.

9. The fertiliser industry continually advocates for Policy and Plan processes which:

   a. are output based, (i.e. targeting achievable environmental outcomes, as is consistent with the RMA, and not regulate inputs or production limits). FANZ recognises that developing output based measures requires significant resources and a scientific basis.

   b. maintain flexibility and encourage innovation to avoid, remedy or mitigate environmental effects.

   c. pursue Industry Good Management Practices, using:

      - Codes of Practice
      - Education programs
      - Incentives for adoption

   d. encourage close collaboration and co-operation with industry bodies and sector representatives to find solutions to address land management issues.

   e. seek catchment based environmental targets and goals, which are consistent with National Policy Statement for Freshwater Management, as well as current and future land use and development to provide for the communities economic, social and cultural well-being.

Using OVERSEER in Regulation

10. FANZ considers the document '*Using OVERSEER® in Regulation - technical resources and guidance for the appropriate and consistent use of OVERSEER by regional councils, August 2016*' provides useful guidance. It discusses the issue and complexity of managing different and changing versions of OVERSEER®. It considers the use of a mechanism outside of, but linked to, the plan to minimise the impact of OVERSEER® version changes on regional rule thresholds, but recognises that (as at July 2016) there is no case law on this type of linked external mechanism. An example of a mechanism for accommodating version change in a nutrient threshold has been proposed in Bay of Plenty Plan Change 10 with 'reference files'. A similar approach is taken in Plan Change 3 to the Canterbury Land and Water Regional Plan. Numeric thresholds in kg N/ha/year are used to denote, for example, maximum loss rates.

When a new version of OVERSEER® is released, a suite of OVERSEER® files (>90 files) that are considered to be representative are re-run and the average percentage difference between versions is applied to the nutrient threshold for flexibility cap, and maximum cap, and in turn the catchment load limits.

11. The document "Using OVERSEER in regulation' acknowledges the value of reference files and not relying solely on one threshold condition for resource consents[1].

12. With all models there are levels of uncertainty. Uncertainty increases with poor quality data inputs, hence, OVERSEER® requires the appropriate use of 'good quality' data. Some of the 'uncertainty' arising from seasonal variation and consequential adjustments in farm practice can be overcome by using independent parallel sources of information and averaging data over a number of years to minimise variance. The document 'Using OVERSEER® in Regulation' suggests that a rolling average of a minimum of the previous 3-5 years of OVERSEER® outputs should generally be used to provide a less variable and more meaningful indication of long-term nutrient loss from a farm system. A practical example is Bay of Plenty Regional Council who proposed to estimate an average nitrogen loss over 3 consecutive years for livestock farming systems and 7 years for cropping systems due to the greater variability across crop rotations. This approach is supported by FANZ.

13. FANZ disagrees, however, with the document 'Using OVERSEER® in Regulation' where it implies that prohibited activity status may apply where there is a robust OVERSEER® version management mechanism.

14. While there is an uncertainty factor associated with nutrient loss estimates derived by OVERSEER, there is most likely a greater uncertainty in catchment modelling and even greater uncertainty in attenuation due to very little being known about attenuation factors. Therefore, the environmental impact of a mild variation in farm N loss estimates, relative to the uncertainties at catchment scale modelling, is likely to be small and uncertain.

15. For the farm systems, where the decision for permitted activity at farm scale is based on OVERSEER, the environmental risk associated with this uncertainty is small relative to the benefits of estimating farm system nutrient flows. However, that is not the case for decisions on prohibited activity status. Decisions being made on prohibited activity based on an OVERSEER value which might only be different by 1-2 kg N /ha/yr introduces potentially very significant economic and social costs, with very uncertain environmental benefits.

16. In saying that 'Prohibited Activity' status is inappropriate for a mild exceedance of the N loss limit, it might be considered appropriate for a gross exceedance (e.g. + 10 or 20 kg N/ha/yr above the modelled acceptable limit - but if written into the plan in this way, what signal would

[1] (page 39, Recommendation- resource consent conditions)

this send land managers about the N loss limits? FANZ considers a regulatory limit is useful, but discretion for mild exceedance of values based on modelled estimates is necessary where the potential social and economic consequences are significant and the potential environmental consequence is small and uncertain.

17. Using OVERSEER Nutrient Budget Model, or any other decision support tool, to determine prohibited activity status based on a mild exceedance of modelled N loss values, is in the opinion of the Fertiliser Association, an inappropriate use of the decision support tool.

18. FANZ supports a nationally consistent approach in the use of OVERSEER® with robust assessment of current experience of advisers producing N loss values for use in regulation.

19. FANZ supports that for use in regulation OVERSEER should only be used by, and outputs interpreted by a Certified Nutrient Management Adviser, under the Nutrient Management Adviser Certification Programme.

Key Submission points

20. A brief summary of key submission points is as follow:

- Support for the collaborative process
- Support for a stage approach to achieving the Plan's objectives, with realistic intergenerational timeframes
- Support for prioritised sub-catchment based approach
- Seeking that it is made clear that controls requiring a reduction in discharges of contaminants are a reduction in discharges to water, not a reduction in discharges per se., as discharge can be any application to land or water
- Seeking national consistency in certification programmes adopted, in particular, the Nutrient Management Adviser Certification Programme
- Caution on the implications of requiring a 75th%ile truncation of nitrogen loss with very modest expectation of overall N loss reduction, in advance of developing an allocation systems
- Not constraining land-use activities as an input based approach without direct reference to output or contaminant loss
- Not constraining land areas for commercial vegetable production as this is not an effects based measure.
- Caution about constraining land-use options due to "Land Use Suitability" definitions which do not provide for appropriate mitigation options and flexibility for new innovations
- Support for nationally consistent definitions for Good Management Practice, and standardise use and application of tools such as OVERSEER, using OVERSEER Best Practice Data Input Standards.

Plan Provision	Oppose/support (in part or full)	Submission	Decision Sought
GENERAL COMMENTS			
General Comment on Background and Explanation (Pages 13 – 16)	Support in part	FANZ support the collaborative approach toward achieving the Plans Objectives and complying with the National Policy Statement for Freshwater Management. FANZ supports the approach that recognises that the impacts of land use activities on the natural environment have been gradual and increased over many generations of development, and as such, solutions being implemented to achieve the Water Quality objectives will be intergenerational, require a long time-frame, such as 80 years. Recognition of the need for new innovation to achieve water quality goals over this period is supported. It is also supported that a staged approach is taken to achieve meaningful improvements in environmental wellbeing, such as an improvement of 10 % of the required change within 10 years, while still providing for the economic, social and cultural well-being of the community. FANZ supports an approach which manages and controls farm system losses which are likely to have an adverse effect on the environment, while providing for innovation and flexibility in farm system inputs. In this regard, FANZ cautions against the approach where land use change is constrained as a simplistic	Retain the overall principles provided for in the Background and Explanation, with a caution about: o Waikato developing its own certification schemes which will lead to confusion, conflicting standards, and duplication in cost and effort. FANZ seeks utilisation of national certification schemes o Not constraining land use activity as a blunt input control, but rather link policies and controls to effects based on farm system loss of contaminants.

		input control. Constraints on land use change should be clearly linked to controlling output loss limits for contaminants of concern- which are understood to be nitrogen, phosphorus, sediment and microbial pathogens (estimated by E.coli CfU). Accreditation of people assisting land managers to prepare Farm Environment Plans and certified agricultural industry schemes are supported, provided they are consistent nationally with nationally recognised schemes. FANZ is opposed to regionally specific certification schemes, because, for the practitioners who must comply they create unnecessary duplication, confusion, increased compliance costs and inconsistencies in approach if separate schemes are developed by each unitary authority. FANZ is prepared to work proactively with Regional Councils and primary sector groups to support a nationally consistent programme. Periodic review of the effectiveness of the plan is supported, provided that review includes a measure of the on-going impact of the plan on the economic, social and cultural wellbeing of the community and not simply review the Vision and Strategy against water quality measures alone.	

General comment on the use of the term **Discharge** (numerous pages)	Oppose in part	In numerous provisions throughout the Proposed Plan the term 'discharge' is used in relation to reducing discharge of contaminants, (nitrogen phosphorus sediment or microbial pathogens), without specifically being clear the intention is to refer to reducing discharges to water. Where it is intended to refer to reducing discharge to water it should be stated as such so that it is not misconstrued to apply to reducing inputs (discharges to land per se) or in preference, FANZ considers the term "losses" or "losses to water" is less ambiguous and consistent with an outputs and effects based provisions, and should be used where appropriate.	Where the term "reduce diffuse discharge" is applied with reference to contaminants and it is intended to mean reduce losses to water, the term "losses" or "losses to water" should be utilised where appropriate. Currently there is a definition for "Diffuse discharge" which applies specifically for the purpose of Chapter 3.11 but that definition is ambiguous as it refers to: "*results from land use activities .....and includes non-point source discharges,"* thereby implying it includes other, direct discharges also. When reading the Plan change it is not clear if the plan intends to reduce discharges to land (regardless of whether it may find its way to water) or reduce discharges to water, or both in unison. Furthermore, FANZ seeks national consistency in terms and is opposed to adapting the definition of relatively commonly used terms exclusively for chapters or sections of a Regional Plan only).
OBJECTIVES			
Objective 1: Long-term restoration and protection of water quality for each sub-catchment and Freshwater Management Unit (Page 27)	Support in part	The principle of long term (80 year) timeframes to achieve the agreed water quality attributes for each sub-catchment and Freshwater management unit is supported. It is understood this requires staged improvements, showing demonstrable progress towards this goal. Where water quality meets required standards, maintaining water quality rather than restoring water quality should apply.	Amend Objective 1 as follows: *Objective 1: Long-term <u>maintenance, </u>restoration and<u>/or</u> protection of water quality <u>as relevant </u>for each sub-catchment and Fresh Water Management Unit*. *By 2096, discharges of nitrogen, phosphorus, sediment and microbial pathogens to land and water result in achievement of the <u>maintenance, </u>restoration and<u>/or</u>*

			protection of the 80-year water quality attribute^ targets^ in Table 3.11-1.
Objective 2: Social, economic and cultural wellbeing is maintained in the long term (page 27)	Support in part	The wording of Objective 2 States: *"Waikato and Waipa communities and their economy benefit from the restoration and protection of water quality in the Waikato River catchment, which enables the people and communities to continue to provide for their social, economic and cultural wellbeing."* FANZ considers this wording is slightly ambiguous in that it implies either: -support only for the water quality attributes which enable social economic and cultural well-being, or -it could imply that economic, social and cultural well-being is only enabled by water quality. The tensions in the management of natural resources arise because there is a need to manage water quality sustainably, meaning managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety. FANZ considers that Objective 2 would benefit from wording which is consistent with the RMA definition of sustainable management.	Amend the wording of Objective 2 as follows: ***Objective 2: Social, economic and cultural wellbeing is maintained in the long term*** *Waikato and Waipa communities and their economy benefit from the <u>maintenance,</u> restoration and<u>/or,</u> protection of water quality in the Waikato River catchment, <u>in a way and at a rate</u> which enables the people and communities to continue to provide for their social, economic and cultural wellbeing.*
Objective 3: Short-term improvements in water quality in	Support -in - part	The principle of Objective 3 is supported. It is noted that in water bodies were water quality targets are already met the required change will be zero percent change. For water bodies where more than 10 percent of the	Amend Objective 3 as follows: ***Objective 3: Short-term improvements in water quality in the first stage of restoration and protection of water***

the first stage of restoration and protection of water quality for each sub-catchment and Freshwater Management Unit (page 27)		required change can be made, the Objective should provide for more than 10 % of the required change.	***quality for each sub-catchment and Freshwater Management Unit*** *Actions put in place and implemented by 2026 to reduce discharges of nitrogen, phosphorus, sediment and microbial pathogens <u>to water</u>, are sufficient to achieve <u>at least</u> ten percent of the required change between current water quality and the 80-year water quality attribute^ targets^ in Table 3.11-1. A ten percent change towards the long term water quality improvements is indicated by the short term water quality attribute^ targets^ in Table 3.11-1.*
Objective 4: People and community resilience (page 27)	Support- in part	A staged approach to change enabling adaptive management to continue to provide for social, economic, and cultural well-being in the short term is supported. It is recognised that under a staged, inter-generational approach, further contaminant reductions will likely be required in subsequent regional plans, however in some sub-catchments (e.g. some priority 3 sub-catchments) where targets may be met, further contaminant reductions may not be necessary. This is also indicated in the Reasons for adopting Objective 4, where it says the future property level allocation of contaminant discharges 'may' be required. Objective 4 assumes further future reductions will be required in all cases, but should provide for the diversity in management outcomes at the sub-catchment levels under adaptive management where future reductions may not be required in some cases.	Amend Objective 4 (b) as follows: *b. recognising that further contaminant reductions <u>to water</u> ~~will~~ <u>may</u> be required by subsequent regional plans and signalling anticipated future management approaches that will be needed to meet Objective 1.*

Objective 5: Mana Tangata – protecting and restoring tangata whenua values (page 28)	Support	The principles of protecting and restoring tangata whenua values and co-management of the Waikato and Waipa river catchments is supported.	Retain Objective 5 as notified
POLICIES			
Policy 1 Manage diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens (page 30)	Support in part	FANZ supports the general intent of Policy 1 – in that it is understood to require no further degradation of water quality and require a reduction in contaminant loss from those activities contributing to higher contaminant loss. However, FANZ opposes the wording as notified as it addresses inputs not losses, and is not effects based. Reductions in contaminant losses are required where there is overallocation, while Policy 1 requires a blanket reduction in discharges of contaminants. At the same time, Policy 1 enables low level contaminant discharge without any increase in discharges. Comment: Where contaminant losses from a land use activity are within the assimilative capacity of the sub-catchment, reductions in discharges of contaminants should not be required. Where increases in the discharge of the contaminant remain within the assimilative capacity of the sub-catchment and do not lead to overallocation of the contaminant losses, the increase in discharges should be provided for, particularly if required for social cultural and economic well-being.	Amend Policy 1 as follows: *Manage ~~and require reductions in~~ sub-catchment-wide <u>diffuse</u> discharges of nitrogen, phosphorus, sediment and microbial pathogens <u>to water and where the sub-catchment is over-allocated require reductions in these losses</u>, by:* *a. Enabling activities with a low level of contaminant discharge to water bodies provided those ~~discharges~~ <u>losses</u> do not ~~increase~~ <u>reduce water quality or compromise achievement of the water quality attribute targets in Table 3.11.1</u>; and* *b. Requiring farming activities with moderate to high levels of contaminant discharge to water bodies to reduce their ~~discharges~~ <u>losses where required so as not to compromise achievement of the water quality attribute targets in Table 3.11.1</u>; and* *c. Progressively excluding cattle, horses, deer and pigs from rivers, streams, drains, wetlands and lakes.*

Policy 2: Tailored approach to reducing diffuse discharges from farming activities (page 30)	Support in part	FANZ supports the general intent of Policy 2, in that is it understood to require targeted management of reduction in contaminant losses utilising farm management plans and industry certification schemes, with proportional reductions from by those activities leading to greatest loading on the sub-catchments. However as with Policy 1, the notified wording of Policy 2 requires a blanket reduction in contaminant losses, whether over-allocated or not. FANZ opposes the blanket requirement. Policy 2 (d) is broadly supported but targets for reduction in contaminant loss should also be linked to good management practice. FANZ notes that in the absence of a definition for "stock exclusion" Policy 2 (e) relies entirely on Schedule C for interpretation. The intent should be clear in the policy.	Amend Policy 2 as follows: *Manage ~~and require reductions in~~ sub-catchment-wide diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens to water from farming activities on properties and enterprises and where the sub-catchment is over-allocated require reductions in these losses by:* *a. Taking a tailored, risk based approach to define mitigation actions on the land that will ~~reduce~~ control diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens to water, with the mitigation actions to be specified in a Farm Environment Plan either associated with a resource consent, or in specific requirements established by participation in a Certified Industry Scheme; and* *b. Requiring the same level of rigour in developing, monitoring and auditing of mitigation actions on the land that is set out in a Farm Environment Plan, whether it is established with a resource consent or through Certified Industry Schemes; and* *c. Establishing a Nitrogen Reference Point for the property or enterprise; and* *d. Requiring the degree of reduction in diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens to water to be proportionate to the amount of current diffuse discharge to water, (those losing ~~discharging~~ more are expected to make greater reductions), and proportionate to the scale of water quality improvement required in the sub-catchment with reductions guided by mitigations set out in specified a Farm Environment Plan and through implementation of Good Management Practice; and*

			e. Requiring stock exclusion from water bodies, as identified in the Schedules to this Plan, to be completed within 3 years following the dates by which a Farm Environment Plan must be provided to the Council, or in any case no later than 1 July 2026.
Policy 3: Tailored approach to reducing diffuse discharges from commercial vegetable production systems (page 31)	Support in part	FANZ supports a tailored approach to management of contaminant losses from commercial vegetable production systems, however, the management should be consistent with the principle of addressing farm system losses and be effects based. As with Policies 1 and 2, Policy 3 requires a reduction in contaminant loss whether the sub-catchment is over allocated or not. Flexibility for cropping based on 10 year annual average contaminant losses, as provided for in Policy 3 (a) is supported. Policy 3 (b) requires an input limit with the maximum area being capped. This is not effects based and is opposed. FANZ considers that it is the contaminant losses which should be controlled. Policy 3 (c) establishing a Nitrogen Reference Point is supported as this supports controls based on farm system losses, and effects based provisions. Policy 3 (d) 10 % reduction is required with no reference period, and requires context if tailored to vegetable cropping and different to the short-term targets	Amend Policy 3 as follows: ***Policy 3: Tailored approach to reducing diffuse discharges to water from commercial vegetable production systems*** *Manage ~~and require reductions in~~ diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens to water from commercial vegetable production, and where over-allocated require reductions in these losses through a tailored, property or enterprise-specific approach where:* *a. Flexibility is provided to undertake crop rotations on changing parcels of land for commercial vegetable production, while reducing average contaminant discharges over time; and* *b. The maximum ~~area in production~~ estimated contaminant loss for a property or enterprise is established and capped, utilising commercial vegetable production data from the 10 years up to 2016; and* *c. Establishing a Nitrogen Reference Point for each property or enterprise; and* *d. A 10% decrease in the diffuse discharge of nitrogen and a tailored reduction in the diffuse discharge of phosphorus, sediment and microbial pathogens is achieved across the sector for each sub-catchment by*

		represented in Table 3.11-1 for all other farming activities. Policy 3 (e) is supported in principle, subject to what constitutes a Certified Industry Scheme (to be addressed in the definitions section) Policy 3 (f) is supported in principle Policy 3 (g) is broadly supported but targets for reduction in contaminant loss should also be linked to good management practice	*2026, through the implementation of ~~Best or~~ Good Management Practices; and* *e. Identified mitigation actions are set out and implemented within timeframes specified in either a Farm Environment Plan and associated resource consent, or in specific requirements established by participation in a Certified Industry Scheme.* *f. Commercial vegetable production enterprises that reduce losses of nitrogen, phosphorus, sediment and microbial pathogens are enabled; and* *g. The degree of reduction in diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens is proportionate to the amount of current discharge (those discharging more are expected to make greater reductions), and the scale of water quality improvement required in the sub-catchment with reductions guided by mitigations set out in specified a Farm Environment Plan and through implementation of Good Management Practice.*
Policy 4: Enabling activities with lower discharges to continue or to be established while signalling further change may be required in future (page 31)	Support in part	The intent of Policy 4 is supported however, minor amendment to text are required to make the policy clear. Where the term 'discharge' is used, it should be clear that contaminant loss to water is intended. The policy refers to activities and land use currently defined as 'low dischargers', yet this term does not appear elsewhere in the plan and it is not clear which activities will meet this definition.	Amend Policy 4 as follows: ***Enabling activities with lower discharges of contaminant to water to continue or to be established while signalling further change may be required in future*** *Manage sub-catchment-wide diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens, and enable existing and new activities with low discharge~~ing activities~~ to water to continue provided that cumulatively the achievement of Objective 3 is not compromised. Activities and uses currently defined as low dischargers to water may in the future need to take*

			mitigation actions that will reduce diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens <u>to water</u> in order for Objective 1 to be met.
Policy 5: Staged approach (page 31)	Support in part	Policy 5 is supported with minor amendment to acknowledge that in some sub-catchment further reductions in contaminant loss in subsequent regional plans may not be required.	Retain Policy 5, with minor amendment as follows: *Recognise that achieving the water quality attribute^ targets^ set out in Table 11-1 will need to be staged over 80 years, to minimise social disruption and allow for innovation and new practices to develop, while making a start on reducing discharges of nitrogen, phosphorus, sediment and microbial pathogens, and preparing for further reductions that ~~will~~ <u>may</u> be required in subsequent regional plans.*
Policy 6: Restricting Land use change (page 32)	Oppose in part	While FANZ is sympathetic to the intent and recognises that for the catchment as whole, the Plan seeks to prevent any increase in contaminant loss which is likely to cause further deterioration in water quality. However, a blanket policy to restrict land use change is not effects based management and does not provide for flexibility of an integrated approach for the best social, cultural and economic outcomes. An increase in contaminant loss in an under-allocated sub-catchment does not necessarily lead to unacceptable water quality outcomes, and an increase in contaminant losses which are offset by reductions of the same magnitude or greater would not necessarily result in deterioration in water quality.	Amend Policy 6, as follows: *Except as provided for in Policy 16, land use change consent applications that demonstrate an increase in the diffuse discharge of nitrogen, phosphorus, sediment or microbial pathogens <u>to water which will potentially result in deterioration of water quality</u> will generally not be granted.* *Land use change consent applications that demonstrate clear and enduring decreases in existing diffuse discharges of nitrogen, phosphorus, sediment or microbial pathogens <u>to water</u> will generally be granted.*

		This policy as a blanket requirement to generally not grant resource consent for land use change does not provide for flexibility in approach and is not specifically effects based. The policy should be explicitly addressing effects.	
Policy 7: Preparing for allocation in the future (page32)	Oppose in part	FANZ accepts that under the principles of adaptive management there must be an element of implementing change, monitoring of results and adapting processes, including allocation of contaminant loss, to ensure the objectives of the Plan are going to be achieved. FANZ supports the gathering of information on contaminant losses and developing appropriate research and tools to enable this process. However, Policy 7 introduces principles which apply to a separate (future) planning process, and increases uncertainty for land managers by reference to 'future allocation' with no indication of timeframes, and by reference to "land suitability" with no reference to how that might be assessed and what impact it may have on current or future investment in land development. FANZ cautions against limiting innovation and flexibility in farming practices by restricting land use based solely on current perception of "land use suitability" without linking it to an effects based measure.	Amend Policy 7 as follows: *Prepare for further ~~diffuse discharge~~ reductions in diffuse contaminant loss and any future property or enterprise-level allocation of diffuse losses ~~discharges~~ of nitrogen, phosphorus, sediment and microbial pathogens that ~~will~~ may be required by subsequent regional plans, by implementing the policies and methods in this chapter. To ensure this occurs, collect information and undertake research to support this, including collecting information about current discharges, developing appropriate modelling tools to estimate contaminant discharges, and researching the spatial variability of land use and contaminant losses and the effect of contaminant discharges in different parts of the catchment that will assist in understanding land and land use characteristic affecting contaminant loss ~~defining 'land suitability'~~. Any future allocation, taking effect from July 2026, should consider the following principles:* *a. Land and land use characteristics ~~suitability~~ (5) which reflects the biophysical and climate properties, the risk of contaminant discharges from that land, and the sensitivity of the receiving water body, as a starting point (i.e. where the effect on the land and receiving waters will be the same, like land is treated the same for the purposes of allocation); and*

		Controls based on current perceptions of land use suitability are in effect, input controls, not necessarily based on outcomes. By way of example: a strong argument could be made that steep, erodible hillsides in tropical climates are entirely unsuitable for flood irrigation - however, mitigations in the form of terracing have demonstrated sustainable land use of paddy fields for rice production on these steep slopes for centuries, if not millennia. Policy 7 introduces considerable uncertainty for land users with no time frames indicated and references limits and controls base on land and climate information with no indication of whether flexibility and innovation through mitigations to address system effects will be provided for. In fact, footnote 5, to Policy 7 states explicitly that land use suitability criteria excludes moderating effects of potential mitigations as well as excluding economic social and cultural criteria. Policy 7 introduces doubt about whether current or even future investments in development will be provided for or enabled.	*b. Allowance for flexibility of development of tangata whenua ancestral land; and* *c. Minimise social disruption and costs in the transition to the 'land suitability' approach; and* *d. Future allocation decisions should take advantage of new data and knowledge~~.~~ <u>, including mitigation potential</u>* --- *5 Future mechanisms for allocation based on land suitability will consider the following criteria:* *a) The biophysical properties of the land that determine productive potential and susceptibility to contaminant loss (e.g. slope, soil type, drainage class, and geology); and* *b) the local climate regime that determines productive potential and the likelihood of water storage and runoff patterns (e.g. frost, rainfall and its seasonal distribution); and* *c) The natural capacity of the landscape to attenuate contaminant loss; and* *d) the Objective 1 water quality limits^ related to nitrogen, phosphorus, microbial pathogens and sediment for the surface waters that the land is hydrologically connected to; and* *e) the desired values^ in those receiving waters (ecological and human health) and how they are influenced by the four contaminants.* *The future weightings are to be determined.* *For the avoidance of doubt, land suitability criteria ~~exclude~~ <u>include</u> current land use and current water quality, the moderating effects of potential mitigations, and non-biophysical criteria (economic, social and cultural). ~~Instead~~ T~~t~~hese factors <u>are</u> ~~will be~~ of importance in analysing the implications of a completed land suitability classification.*

Policy 8: Prioritised implementation (page 32)	Support	FANZ recognises the importance of having priority sub-catchments, and the importance of scrutiny of the land use activities with higher contaminants losses. This approach is consistent with the intent of Policies 2(d) and 3(g). Policy 8 indicates the 75%'ile nitrogen leaching loss represents a threshold for scrutiny, with prioritised Farm Environment Plans. FANZ considers the choice of 75% nitrogen leaching loss as an "indictor" for priority is arbitrary, but accepts that position. However, FANZ has reservations about the use of the 75 % 'ile nitrogen loss values as a loss limit in resource management (other than providing an arbitrary threshold for selection for scrutiny.)	Retain Policy 8, recognising it provides for information gathering only. Minor amendment to wording is recommended for clarity as follows: *In addition to the priority sub-catchments listed in Table 3.11-2, the properties which exceed the 75th percentile nitrogen leaching value ~~dischargers~~ discharges will also be prioritised for the completion and implementation of Farm Environment Plans.*
Policy 9: Sub-catchment (including edge of field) mitigation planning, co-ordination and funding. (page 33)	Support	FANZ supports the principles represented in Policy 9	Retain Policy 9 as worded
Policy 10: Provide for point source discharges of regional significance (page 33)	Support in part	FANZ supports the principle that regionally significant infrastructure and industry which provides for the social and economic wellbeing of the community must be provided for. However, FANZ also notes that the Plan envisages an intergenerational timeframe to achieve the Plan Objectives, and when considering point source discharges of contaminants, improvements over the long term should be required where mitigations are	Retain Policy 10, however amend the Policy title as follows: ***Provide for point source discharges of regionally significant ~~cc~~ infrastructure and industry***

		viable, - as is required from agriculture (a regionally significant industry giving rise to diffuse losses). It is noted the Policy 10 title refers to point source discharges of regional significance, when the text refers to regionally significant infrastructure and industry. These are not equivalent statements.	
Policy 11: Application of Best Practicable Option and mitigation or offset of effects to point source discharges (page 33	Support	FANZ supports the principle of providing for the Best Practicable Option, as defined in the RMA, and also supports offsets as a practical and reasonable method of addressing contaminant losses as a whole within the same sub-catchment, catchment or freshwater management unit. It is notes the principles apply specifically to point source discharges in Policies 11, 12 and 13. FANZ sees no reason why the same principles cannot apply to diffuse discharges from land-use activity related to primary production.	Retain Policy 11 as worded.
Policy 12: Additional considerations for point source discharges in relation to water quality targets (page 34)	Support in part	FANZ supports the principles of evaluating the contribution of point source discharges of contaminants to the catchment loads and impact of contribution on the likely achievement of short term targets in Objective 3 and long term targets in Objective 1, ensuring that these objectives are not compromised.	Amend Policy 12 as follows: *Consider the contribution made by a point source discharge to the nitrogen, phosphorus, sediment and microbial pathogen catchment loads and the impact of that contribution on the likely achievement of the short term targets^ in Objective 3 or the progression towards the 80-year targets^ in Objective 1, so that these objectives are not compromised, taking into account:* ....Etc.

Policy 13: Point sources consent duration (page34)	Support	The measures provided for on Policy 13 to support business management and confidence in investment are supported. Many land use activities giving rise to non -point sources losses of contaminants are also vital to the regional economy. Confidence in business management and investment applies equally to non-point source consents.	Retain Policy 13 as worded, but include a new policy to provide equally for non-point source consents, as follows: ***Policy 13A: Non-point sources consent duration*** *When determining an appropriate duration for any consent granted consider the following matters* *a. A consent term exceeding 25 years, where the applicant demonstrates the approaches set out in Policies 1 to 4 will be met; and* *b. The magnitude and significance of the investment made or proposed to be made in contaminant reduction measures and any resultant improvements in the receiving water quality; and* *The need to provide appropriate certainty of investment where contaminant reduction measures are proposed (including investment in treatment plant upgrades or land based application technology).*
Policy 14: Lakes Freshwater Management Units (page34)	Support	A staged approach, specific to each lake Fresh Water Management Unit for restoring where required, and protecting lake water quality is supported.	Retain Policy 14 with minor amendment as follows: *~~Restore and~~ ~~p~~ Protect and where degraded restore lakes by 2096 through the implementation of a tailored lake-by-lake approach, guided by Lake Catchment Plans prepared over the next 10 years, which will include collecting and using data and information to support the management of activities in the lakes Freshwater Management Units^.*

Policy 16: Flexibility for development of land returned under Te Tiriti o Waitangi settlements and multiple owned Māori land/Te Kaupapa Here (page 35)	Support	The flexibility provided by Policy 16 while providing for the objective of the Plan is supported. The Fertiliser Association believes the reference to Best Management Practices, should be worded Good Management Practice to be consistent with terminology used in industry guidelines and other regional plans.	Retain Policy 16 with a minor amendment to refer to Good Management Practice actions rather than Best Management Practice actions.
Policy 17: Considering the wider context of the Vision and Strategy (page 35)	Support	Consideration of the wider objectives and goals of the Vision and Strategy for the Waikato and Waipa Rivers is supported.	Retain Policy 17 as worded.
IMPLEMENTATION METHODS			
Method 3.11.4.1 Working with others (page 36)	Support	Working collaboratively with all stakeholders is supported.	Retain Method 3.11.4.1 as worded
Method 3.11.4.2 Certified Industry scheme (page 36)	Support in part	Waikato Regional Council working with industry to develop and implement an industry certification process, consistent with standards outlined in Schedule 2 is supported. Within the Proposed Plan Change, Methods 3.11.4.1. and 3.11.4.2, support working with others and using an industry certification scheme, however, Waikato specific criteria for Certified Farm Environment Planner, and Certified Farm Nutrient Adviser potentially undermine and create conflict with the industry schemes, in particular, the Nutrient Management Adviser	Retain Method 3.11.4.2, but amend as shown below, to ensure the method can be implemented as intended, working with approved, nationally consistent industry certification schemes, and by addressing the definitions within this Plan Change relating to certification programmes so that they are consistent with this approach. ***Method 3.11.4.2: Certified Industry Scheme*** *Waikato Regional Council will ~~develop an~~ work collaboratively with industry to ensure an agreed certification process is applied ~~for industry bodies~~ as per*

		Certification programme which was developed by the primary industry with multi-stake holder advisory groups, including support from Regional Council representatives.	*the standards outlined in Schedule 2. The Certified Industry Scheme will include formal agreements between parties. Agreements will include:* ...etc.
Method 3.11.4.3 Farm Environment Plans (page36)	Support in part	FANZ supports the general intent of using Farm Environment Plans which meet agreed standards, and working with industry bodies for a certification and monitoring scheme. As with certification schemes discussed in relation to Method 3.11.4.2, FANZ is concerned that Waikato Regional Council engages nationally consistent certification and does not create duplication and conflict by introducing Waikato Region specific certification.	Retain Method 3.11.4.2, but ensure it can be implemented as intended, working with approved, nationally consistent industry certification schemes, and addressing the definitions within this Plan Change relating to certification programmes so that they are consistent with this approach FANZ seeks opportunity to work collaboratively with regional council to achieve nationally recognised certification.
Method 3.11.4.4 Lakes and (page36)	Support	FANZ supports the general intent of Method 3.4.11.4	Retain Method 3.11.4.4 as worded.
Method 3.11.4.5 Sub-catchment scale planning (page37)	Support	FANZ supports the general intent of Method 3.4.11.4	Retain Method 3.11.4.5, with minor edit as follows: *a. Identify the causes of current water quality decline, identify cost-effective measures to bring about reductions in contaminant discharges <u>to water</u>, and coordinate the reductions required at a property, enterprise and sub-catchment scale (including recommendations for funding where there is a public benefit identified).*
Method 3.11.4.7 Information needs to support any future allocation	Support	FANZ recognises the need for good information and data to inform the process utilised for sustainable use and management of natural resources.	Retain Method 3.11.4.7 with minor amendments as follows:

(page 37)			*Gather information and commission appropriate scientific research to inform any future framework for the allocation of diffuse discharges including:* *a. Implementing processes that will support the setting of property or enterprise-level <u>limits in the future for</u> diffuse discharge <u>to water</u> ~~limits in the future~~.* *b. Researching:* *i. The quantum of contaminants that can be <u>lost to water</u> ~~discharged~~ at a sub-catchment and Freshwater Management Unit^ scale while meeting the Table 3.11-1 water quality attribute^ targets^.* *ii. Methods to categorise and define 'land suitability'.* *iii. Tools for measuring or modelling discharges <u>to water</u> from individual properties, enterprises and sub-catchments, and how this can be related to the Table 3.11-1 water quality attribute^ targets^.*
Method 3.11.4.8 Reviewing Chapter 3.11 and developing an allocation framework for the next Regional Plan (page37)	Support in part	FANZ recognises the value of reviewing the information gathered and the implementation of Chapter 3.11 and developing property specific allocation for contaminant losses. (It is noted Method 3.11.4.11 also includes review of Chapter 3.11)	Retain Method 3.11.4.8 with amendments as follows: *Waikato Regional Council will:* *<u>a. Review information gathered under Method 3.11.4.7 and factors arising during implementation of Chapter 3.11</u>* *~~a.~~ <u>b.</u> Develop ~~discharge~~ allocation frameworks for <u>discharge to water for</u> individual properties and enterprises based on information collected under Method 3.11.4.7, taking into account the best available data, knowledge and technology at the time; and* *~~b.~~ <u>c.</u> Use this to inform future changes to the Waikato Regional Plan to manage discharges <u>to water</u> of nitrogen, phosphorus, sediment and microbial*

			pathogens at a property or enterprise-level to meet the targets^ in the Objectives.
Method 3.11.4.9 Managing the effect of urban development (page38)	Support in part	FANZ supports equal emphasis on managing the impact of urban development on waterways, as these impacts can be significant if not addressed. It is not clear to FANZ what "ef*fective solutions for the urban context*" requires. With the intergenerational scope of the plan, the urban solutions should be comparable to rural solutions to meet water quality attributes targets required by the Plan.	Retain Method 3.11.4.9 with minor amendment as follows: *Waikato Regional Council will:* *a. Continue to work with territorial authorities to implement the Waikato Regional Policy Statement set of principles that guide future development of the built environment which anticipates and addresses cumulative effects over the long term.* *b. When undertaking sub-catchment scale planning under Method 3.11.4.5 in urban sub-catchments engage with urban communities to raise awareness of water quality issues, and to identify and implement effective solutions <u>to meet the 80-year water quality attribute^ targets^ in Table 3.11-1 and the objectives of this plan.</u> ~~for the urban context~~*
Method 3.11.4.10 Accounting system and monitoring (page38)	Support	FANZ supports a sub-catchment scale accounting system with monitoring and reporting on progress towards the Table 3.11-1 water quality attribute targets. It is accepted that monitoring and reporting must be consistent with national monitoring and reporting protocols as required by the NPS-FM. (FANZ notes as a matter of consistency that references in the Plan Change refer to Table 11.1 and Table 3.11.1 interchangeably, and one or the other should be used.	Retain Method 3.11.4.10 with minor amendment to bullet (d) as follows: *d. An information and accounting system for the diffuse discharges from properties and enterprises that supports the management of nitrogen, phosphorus, sediment and microbial pathogens diffuse discharges <u>to water</u> at an enterprise or property scale.*

Method 3.11.4.11 Monitoring and evaluation of implementation of Chapter 3.11 (page38)	Support in part	The general intent of Method 3.11.4.11 is supported, however, it is noted the title of Method 3.11.4.8 also stated an intent for review of Chapter 3.11.	Retain Method 3.11.4.11
Method 3.11.4.12 Support research and dissemination of best practice guidelines to reduces diffuse discharges. (page38)	Support in part	The general intent of Method 3.11.4.12 is supported however, as discussed under Method 3.11.4.2 above, FANZ cautions that Waikato regional Council should work with industry in developing and disseminating good management practices which are agreed through working collaboratively with all stakeholders and which are nationally consistent.	*Retain Method 3.11.4.12 but amend as follows:* *Waikato Regional Council will:* *a. Work with stakeholders to ~~D~~ develop and disseminate ~~best~~ industry agreed good management practice guidelines for reducing the diffuse discharges to water of nitrogen, phosphorus, sediment and microbial pathogens; and* *b. Support research into methods for reducing diffuse discharges of contaminants to water.*
RULES			
Rule 3.11.5.1 Permitted Activity Rule - small and low intensity farming activities (page39)	Oppose in part	FANZ recognises the intent of Rule 3.11.5.1 to provide a simple criteria to provide for permitted activity for land use activities perceived to be at low risk of contaminant losses (at a scale which have significant adverse effects on water quality). FANZ supports permitted activity for land use activity which is considered to present low risk of adverse environmental effects. However, the Proposed Rule 3.11.5.1 dictates input limits with no reference or correlation to the acceptable levels of contaminant loss they represent.	Amend Rule 3.11.5.1 to refer to a schedule which is introduced into the Plan to provide contaminant loss levels which are considered acceptable to provide for permitted activity, and correlate the acceptable loss thresholds to the simple input parameters listed in Rule 3.11.5.1 For a property which is greater than 4.1 ha, any input limit for permitted activity should be directly correlated to the acceptable contaminant loss threshold it represents.

		These limits appear arbitrary and do not represent an effects based control, unless they are correlated to an acceptable contaminant loss threshold.	
Rule 3.11.5.2 Permitted Activity Rule – other farming activities (page 40)	Support in part	FANZ recognises and supports permitted activity for farming land use activity for properties. However, as for Rule 3.11.5.1 the controls should be clearly output based, not simply input limits and so the permitted activity conditions should be correlated to the contaminant loss values they represent. The permitted activity status under Rule 3.11.5.2. (3)(b)(ii) for farms under 20 ha requires assessment of diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens for the land use at 22 October 2016. It remains unclear how this is to be achieved by managers of small holdings, unless there is a schedule as described to provide a description of anticipated loss values (as an output based approach) as discussed above in relation to permitted activity loss threshold for Rule 3.11.5.1 FANZ is concerned about the grandparenting of very low nitrogen loss properties, i.e. below 15 kg /ha/yr as required by Rule 3.11.5.4 (4)(b). This undermines business confidence and particularly with the Nitrogen Reference Point, developed according to Schedule B, based on just 2 years data, with little latitude for seasonal variation. The resources required to deliver consent for each property with a mild increase in nitrogen loss under 15 kg/ha/yr seems unlikely to be	Retain Rule 3.11.5.2 but amend as follows: Introduce a schedule to provide for an estimation of the contaminant loss values, represented by the input limits required by this rule. And, *4. Where the property or enterprise area is greater than 20 hectares:* *b. The diffuse discharge of nitrogen from the property or enterprise does not exceed <u>the greater of</u> either:* *i. the Nitrogen Reference Point; or* *ii. 15kg nitrogen/hectare/year; ~~whichever is the lesser~~, over the whole property or enterprise when assessed in accordance with Schedule B; and* *c. No part of the property or enterprise over 15 degrees slope is cultivated or grazed <u>except where the activity is managed in accordance with industry agreed good management practices;</u> and* *d. No winter forage crops are grazed in situ <u>except where the activity is managed in accordance with industry agreed good management practices</u>; and*

		available or warranted, during the period prior to an allocation scheme being determined. FANZ recommends the Rule 3.11.5.2 (4) (b) is amended to provide for up to 15 kg N loss/ha/yr. This would be achieved by providing for whichever is greater, over the whole property, the nitrogen reference point of or the 15 kg /ha/yr value. To provide for variation in OVERSEER N loss estimates with new versions of OVERSEER, a reference file approach should be considered, which would allow for the amendment of this 15kg N/ha/yr threshold value. In addition, for Rule 3.11.5.2 (4)(c) and (4) (d), FANZ considers greater flexibility should be provided for a risk management based approach for cultivation and grazing of forage crops, subject to following industry agreed good management practices. These provisions apply to: cultivation on sloping land greater than 15 degrees and winter grazed forage crops (grazed in situ).	
Rule 3.11.5.3 Permitted Activity rule – Farming activities with a Farm Environment Plan under a Certified Industry Scheme (page 41)	Support in part	The general intent of the permitted activity rule 3.11.5.3 is supported (subject to amendment in Schedules referenced in this rule) A staged approach based on priority catchments is supported to provide for implementation. Management of contaminant loss based a Farm Environment Plan and industry agreed good management practices such as would be applied in a Certified Industry Scheme is supported	Retain 3.11.5.3 as worded:

Rule 3.11.5.4 Controlled Activity rule – Farming activities with a Farm Environment Plan not under a Certified Industry Scheme (page 42)	Support in part	A staged approach based on priority catchments is supported to provide for implementation. Management of contaminant loss based a Farm Environment Plan and industry agreed good management practices, such as would be applied in a Certified Industry Scheme is supported. Under 'Matters of Control' for Rule 3.11.5.4, bullet iv is opposed. Although requiring all farms with N loss greater than the 75th percentile to truncate their N loss to below the 75th Percentile by 2026 will provide a reduction in N loss of the catchment, FANZ considers it is a less fair and less efficient approach than simply requiring a uniform percentage reduction by all land users. This consideration is particularly relevant while the allocation system is yet to be determined. The principle of "shifting the bell curve" can be achieved by truncating all high N loss properties, regardless of their level of productivity, climate and soil characteristics, however this approach does not take into consideration that not all land users should be compared to the mean N loss for the region/ catchment. Farm systems fall into different categories of soil drainage, rainfall and production systems. Some of those land users may well be operating a very good management practice for their particular soil and rainfall conditions and production systems with little scope to reduce N loss to a 75th%iles other than by changing their farm system. If they are also performing very well for	Retain 3.11.5.4 as with amendment to 'Matters of Control' as follows: *iv. Where the Nitrogen Reference Point exceeds the 75th percentile nitrogen leaching value, actions, timeframes and other measures to ~~ensure~~ reduce the diffuse losses ~~discharge~~ of nitrogen to water using best practicable options in keeping with industry agreed good management practice, prior to a nitrogen loss allocation system being decided and introduced ~~is reduced so that it does not exceed the 75th percentile nitrogen leaching value by 1 July 2026~~.*

		the N loss per unit of production, then cutting these farms back may be the more expensive option for achieving a relatively modest overall regional N loss reduction in advance of establishing an allocation system. In the absence of data with which to decide an allocation system the decision to truncate N loss above the 75%iles seems to be a significant step toward allocation already. Page 11 of document # 6551310, by Doole, Quinn, Wilcock and Hudson, titled 'Simulation of the proposed policy mix for the Healthy Rivers Wai Ora process,' states that: "*... reductions for mean leaching in the Waipa/Franklin and Upper Waikato districts associated with the enactment of the 75th percentile policy being estimated at 4% and 5%, respectively*." On the face of it, this seems a very modest reduction in average N loss when it might result in significant cutting back of some of the higher producing farms in the region, depending on their ability to implement mitigations for their soil and rainfall conditions. The reports of Doole, "Description of mitigation options defined within the economic model for HRWO- Project description of options and sensitivity analysis", Doc # 3606268 says that for representative dairy farm in Waipa -Franklin catchment: "*Average nitrogen leaching was 30 kg N/ha. Based on the above mitigations this farm can achieve a 10%*	

		reduction in nitrogen leaching per hectare with a minimal impact on profit and production. This level of nitrogen reduction would reduce operating profit per hectare by 2% and production in milksolids by 3%. Any further mitigation measures beyond this 10% level of nitrogen reduction impacts operating profit and production more significantly" [page 25, Appendix 1] And for the Upper Waikato catchment: *"Average nitrogen leaching was 40± kg N/ha on the baseline. Based on the above mitigations, a 10% reduction in nitrogen leaching per hectare can be achieved with a 5% reduction in profit and 3% reduction in production. A further 10% nitrogen loss reduction impacts operating profit and production by a similar proportion. Reductions in nitrogen leaching of greater than 20% generally have an impact on operating profit and production of more than 10%. "* [page 29, Appendix 1] Given that a typical dairy farm may find it difficult to reduce N loss by more than 10 -20 %, caution is raised about the requirement to truncate the top 25 % of N leaching properties to achieve a very modest 5% reduction across the board. Particularly so, if it is considered this requirement is in effect a significant step in allocation, in advance of any allocation process being evaluated or decided.	

Rule 3.11.5.5 Controlled Activity Rule – Existing commercial vegetable production (page 44)	Oppose in part	FANZ is opposed to Rule 3.11.5.5 (f) and (g) where the rule requires no increase in land area for commercial vegetable production. The reasons given in the Section 32 report [page 155] for a different approach for vegetable production are as follows: *".. there are several factors that require consideration of a different approach to pastoral farms (dairy, drystock and mixed farms, which also have a significant amount of land in crops):* *1. Vegetable crops are frequently rotated where crops may differ from year to year and also a number of crops grown on the same land in one year. This creates technical difficulties in modelling nutrient losses using Overseer.* *2. Land used for vegetable crops also changes, where the extent and location of land leased by growers may change from year to year.* *For these reasons, separate policy provisions relating to Commercial Vegetable Production land use and discharges are appropriate, although all will require a Farm Environment Plan. As with the policy provisions for pastoral and mixed farms, the Farm Environment Plan is the mechanism that existing landowners would use to demonstrate compliance and to form part of the basis for consent (that is, actions and timeframes become part of resource consent conditions). There is no permitted activity pathway suggested for commercial vegetable producers due to the complexity of these operations and the potential for high per-hectare discharges of sediment and nutrients.*	Amendment to Rule 3.11.5.5 is sought, as follows, with deletion of bullets (f) and (g) entirely, and deletion of bullet ii) of the Matters of Control, plus any consequential changes required: *The use of land for commercial vegetable production and the associated diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens onto or into land in circumstances which may result in those contaminants entering water, is a permitted activity until 1 January 2020, from which date it shall be a controlled activity (requiring resource consent) subject to the following standards and terms:* *a. The property is registered with the Waikato Regional Council in conformance with Schedule A; and* *b. A Nitrogen Reference Point is produced for the property or enterprise in conformance with Schedule B and provided to the Waikato Regional Council at the time the resource consent application is lodged; and* *c. Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C; and* *d. The land use is registered to a Certified Industry Scheme; and* *e. The areas of land, and their locations broken down by sub-catchments [refer to Table 3.11-2], that were used for commercial vegetable production within the property or enterprise each year in the period 1 July 2006 to 30 June 2016, together with the maximum area of land used for commercial vegetable production within that period, shall be provided to the Council; and* *~~f. The total area of land for which consent is sought for commercial vegetable production must not exceed the~~*

		FANZ considers that as part of the farm business operation, commercial vegetable farmers should have the flexibility to change crops and land area based on market signals provided they can demonstrate no additional N loss to the sub-catchment or Fresh Water Management Unit. The justification provided above for no increase in land area, assumes that land area is the dominant factor for contaminant loss or at least a better measure than what is currently available. However, it well known that soil and climate and crop type are the significant drivers for nitrogen loss and FANZ does not agree that land area is a suitable measure for assessing and controlling risk of contaminant loss. The provision is not effects based. Land area could be maintained but on different soil, location and different crop resulting in a significant increase in nitrogen leaching, and vice versa, under other circumstances it is entirely possible nutrient losses could be reduced despite increased cropping area. The rule requires a Nitrogen Reference Point to be produced, but then uses land area as blunt input limit without reference to contaminant losses. FANZ is opposed to capping the maximum land area as matter of control for contaminant loss.	~~*maximum land area of the property or enterprise that was used for commercial vegetable production during the period 1 July 2006 to 30 June 2016; and*~~ ~~*g. Where new land is proposed to be used for commercial vegetable production, an equivalent area of land must be removed from commercial vegetable production in order to comply with standard and term f.; and*~~ *h. A Farm Environment Plan for the property or enterprise prepared in conformance with Schedule 1 and approved by a Certified Farm Environment Planner is provided to the Waikato Regional Council at the time the resource consent application is lodged.* ***Matters of Control*** *Waikato Regional Council reserves control over the following matters:* *i. The content of the Farm Environment Plan.* ~~*ii. The maximum area of land to be used for commercial vegetable production.*~~ ~~*Iii*~~ *ii. The actions and timeframes for undertaking mitigation actions that maintain or reduce the diffuse discharge of nitrogen, phosphorus or sediment to water or to land where those contaminants may enter water, including provisions to manage the effects of land being retired from commercial vegetable production and provisions to achieve Policy 3(d).* ~~*Iv*~~ *iii. The actions and timeframes to ensure that the diffuse discharge of nitrogen does not increase beyond the Nitrogen Reference Point for the property or enterprise.* ~~*V*~~ *iv. The term of the resource consent.* ~~*Vi*~~ *v. The monitoring, record keeping, reporting and information provision requirements for the holder of the resource consent to demonstrate and/or monitor compliance with the Farm Environment Plan.*

			~~*Vii*~~ *vi. The time frame and circumstances under which the consent conditions may be reviewed.* ~~*Viii*~~ *vii. Procedures for reviewing, amending and re-certifying the Farm Environment Plan*
Rule 3.11.5.6 Restricted Discretionary Activity Rule – The use of land for farming activities (page 45)	Support	FANZ supports the intent and process of Rule 3.11.5.6	Retain 3.11.5.6 as worded.
Rule 3.11.5.7 Non-Complying Activity Rule – Land Use Change (page 45)	Oppose	FANZ understands the rationale for Rule 3.11.5.7 is to seek control of nitrogen losses from land use change from land use which might be typically considered to have a lower nitrogen leaching risk, to land use which might be typically considered to have a higher nitrogen leaching risk. FANZ does not considered that 'Non-complying activity' is the appropriate activity status to exercise this control. Non-complying activity should be reserved for exceptional circumstances not readily addressed otherwise. FANZ considers that land use change from one primary industry production system to another primary industry production should not be considered as a rare exception, but rather part of viable, sustainable land use in response to market conditions. Particularly in consideration that until 2016, it is still an information gathering phase, and allocation systems are	Retain Rule 3.11.5.7, but amend the activity status from 'Non-complying' to 'Discretionary consent'.

		still being developed, non-complying activity based on catchment effects presents a very high bar for any resource consent application. In contrast, Regional Council should be in a position based on information being reported to provide discretionary consent for land use change of the nature described in Rule 3.11.5.7. FANZ notes Ravensdown provides an alternative set of rules with discretionary activity status to provide for land use change that might cause an increase in diffuse discharges of nitrogen, phosphorus, sediment, or microbial pathogens, but does not result in deterioration of water quality. This option is also supported.	
SCHEDULES			
Schedule A Registration with Waikato Regional Council (page 46)	Support	FANZ supports the general intent of Schedule A, but notes several administrative amendments sought by Ballance Agri-nutrients, e.g. a definition for 'urban properties'	Retain Schedule A as described, subject to administrative amendments as sought by Ballance Agri-nutrients These are understood to be; • Provide a definition for the term 'urban properties'; • Provide a clear overview of the registration process, and how property owners can gain access to an interactive web-based page; • Make Schedule A sub-clause 4 clear as to what registration information must be updated, when and how frequently.
Schedule B Nitrogen Reference Point (page 47)	Support in part	FANZ supports the overall intent of Schedule B to develop a Nitrogen Reference Point using certified advisers and robust data collection.	Retain Schedule B, subject to suggested amendments as follows: *a. The Nitrogen Reference Point must be calculated by a Certified ~~Farm~~ Nutrient <u>Management</u> Adviser to*

		However, there are a number of more technical aspects to the content of Schedule B which FANZ considers must be addressed. As raised in the general comments above, FANZ is opposed to the development by Waikato Regional Council of a separate, regionally specific 'Certified Farm Nutrient Adviser' scheme and definition, and requests that instead a nationally accepted certification scheme is inserted. Currently this is provided by the Nutrient Management Adviser Certification Programme Ltd., (NMACP). This programme was developed with pan sector representation, including regional council, university and primary sector representatives supporting recognised qualifications and ongoing proficiency of those who advise on nutrient use and management in the farming community. It is administered by a Management Board with representation from dairy industry, red meat industry, fertiliser industry and rural professionals. It is noted that monthly livestock data is required to best represent the farm using OVERSEER® Nutrient Budgets Model, and so amendment, also sought by Ballance Agri-nutrients to specify monthly stock number is supported for Bullet (g) (i), and "farm diary" or similar may be need to be referenced in addition to annual accounts and stock sale and purchase invoices Schedule B (f) requires a reference period of two financial years in 2014/15 and 2015/16. FANZ is concerned this is too short to provide for variability	*determine the amount of nitrogen being leached from the property or enterprise during the relevant reference period specified in clause f), except for any land use change approved under Rule 3.11.5.7 where the Nitrogen Reference Point shall be determined through the Rule 3.11.5.7 consent process.* (include in the definitions; Certified Nutrient Management Adviser means a Nutrient Management Adviser Certified under the Certified Nutrient Management Adviser Programme Ltd.) *f. The reference period is the ~~two~~ four financial years covering ~~2014/2015~~ 2012/2013 ~~and~~to 2015/2016, except for commercial vegetable production in which case the reference period is 1 July 2006 to 30 June 2016.* *g. The following records (where relevant to the land use undertaken on the property or enterprise) must be retained and provided to Waikato Regional Council at its request:* *i. Stock numbers as recorded in annual accounts together with stock sale and purchase invoices, or for monthly stock records, farm diary or similar;* *Table 1: Data input methodology for ensuring consistency of Nitrogen Reference Point data using the OVERSEER Model* *~~Location~~ ~~Pastoral and Horticultural~~* | *~~Select Waikato Region~~* | *~~This setting has an effect on climate settings and some animal characteristics and is required to~~*

		expected in farming and it should be extended at least to four years, or farmers be provided the flexibility to choose the 2 year period most representative of their farm system. Schedule B: Table 1 specifies requirement for a number of inputs which may be different to those specified in the OVERSEER Best Practice Data Input Standards. Comments received from an expert user of OVERSEER includes the following: i. Clarity on how to address lease blocks under Farm model pastoral and horticulture is sought. ii. Intuitively, location might be expected to be Waikato, however, because OVERSEER boundaries do not strictly follow Unitary Authority boundaries, in some cases deviation from the recommendation of Best Practice Data Input Standards could create inconsistencies. Following the Best Practice Data Input Standards is recommended.	~~*ensure consistency.*~~
Schedule C Stock Exclusion (page 50)	Support in part	The general intent of Schedule C is supported. Amendments are sought to address inconsistencies within Schedule C compared to the proposed plan under the following provisions: Rule 3.11.5.2 (3) (e) applies a 3m setback distance, and Schedule 1 (2)(ii) provides for alternative mitigations where a slope is >25 ° and stream fencing is impractical	Retain Schedule C with amendments as follows: 2. *New fences installed after 22 October 2016 must be located to ensure cattle, horses, deer and pigs cannot be within ~~one~~ <u>three</u> metre<u>s</u> of the bed of the water body (excluding constructed wetlands).* *Exclusions:* *The following situations are excluded from clauses 1 and 2:*

			I. Where the entry onto or passing across the bed of the water body is by horses that are being ridden or led. *II. Where the entry onto or passing across the bed of the water body is by a feral animal.* *III. Areas with a slope exceeding 25 ^{o} and where stream fencing is impracticable*
Schedule 1 Requirements for Farm Environment Plans (page 51)	Support in part	The Intent of Schedule 1 is supported. Some minor amendments are required for clarity and consistency with other parts of the Proposed Plan Change. It is noted Schedule 1 (2) (d) (i) requires: "matching land use to land capability" Comment: In the absence of defining a robust and preferred method by which this should be achieved and given land use "suitability" is still a concept being developed under the National Science Challenge, and also referenced for a later stage in the Regional Plan, FANZ considers this bullet should be deleted. Effects based assessments are addressed adequately by the requirements listed in the remaining bullets. Schedule 1 (2) (e) references "OVERSEER use protocols". For consistency, this should be referenced as "OVERSEER® Data Input Standards 2016, with the exceptions and inclusions set out in Schedule B, Table 1" FANZ is opposed to the requirement to truncate nitrogen leaching to 75% ile N loss values in advance of developing allocation systems, as discussed above under Rule 3.11.5.4. As is consistent with this view, FANZ seeks	Retain Schedule 1 with minor amendments as follows: *2. (d) An assessment of appropriate land use and grazing management for specific areas on the farm in order to maintain and improve the physical and biological condition of soils and minimise the diffuse discharge of sediment, nitrogen, phosphorus and microbial pathogens to water bodies, including:* *~~(i) matching land use to land capability; and~~* *~~(ii)~~ (i) identifying areas not suitable for grazing; and* *~~(iii)~~ (ii) stocking policy to maintain soil condition and pasture cover; and* *~~(iv)~~ (iii) the appropriate location and management of winter forage crops; and* *~~(v)~~ (iv) suitable management practices for strip grazing.* *2. (e) A description of nutrient management practices including a nutrient budget prepared by a Certified Nutrient Management Adviser for the farm enterprise calculated using the model OVERSEER® in accordance with the OVERSEER® ~~use protocols~~ Data Input Standards 2016, with the exceptions and inclusions set out in Schedule B, Table 1, or using any other model or method approved by the Chief Executive Officer of Waikato Regional Council.*

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<td>amendment to Schedule 1 (5)(b) as per the submission points raised above for Rule 3.11.5.4.

In addition, amendment to reference to ‘N discharges’, is sought to refer instead to ‘N losses’ or ‘N discharges to water’

Under Schedule 1: Vegetable Growing Minimum Standards,
Item 7 requires:
“Adoption and use of improved fertiliser products proved effective and available such as formulated prills, coatings and slow release mechanisms”

Comment:
FANZ is opposed to input limits which are not effects based. The adoption of, for example, slow release or coated controlled release fertiliser products should not be a requirement unless they are a necessary mitigation introduced to remain below the required levels of contaminant loss. Under the wording of Schedule 1, the adoption of these products is a minimum standard for vegetable growing, with no reference to contaminant loss levels or effects. Farmers should be afforded the flexibility to choose appropriate mitigation and choose innovative products which will address the environmental effects where and as appropriate.
FANZ seeks item 7 be deleted, as appropriate products will be documented in a nutrient budget and Farm Environment Plan where necessary to demonstrate adherence to nitrogen/phosphorus loss limits.</td>
<td>5. (a) Actions, timeframes and other measures to ensure that the diffuse <u>loss</u> <s>discharge</s> of nitrogen from the property or enterprise, as measured by the five-year rolling average annual nitrogen loss as determined by the use of the current version of OVERSEER®, does not increase beyond the property or enterprise’s Nitrogen Reference Point, unless other suitable mitigations are specified; or

(b) Where the Nitrogen Reference Point exceeds the 75th percentile nitrogen leaching value, actions, timeframes and other measures to ensure the diffuse discharge of nitrogen <u>to water</u> is reduced <u>using best practicable options in keeping with industry agreed good management practice, prior to a nitrogen loss allocation system being decided and introduced.</u> <s>so that it does not exceed the 75th percentile nitrogen leaching value by 1 July 2026, except in the case of Rule 3.11.5.5.</s>

Vegetable Growing Minimum Standards
<table>
<tr><td><s>7</s></td><td><s>Nitrogen Phosphorus</s></td><td><s>Adoption and use of improved fertiliser products proved effective and available such as formulated prills, coatings and slow release mechanisms</s></td></tr>
<tr><td><s>8</s> <u>7</u></td><td>Nitrogen Phosphorus</td><td>Evidence available to demonstrate split applications by block/crop <u>in accordance with the Code of Practice for Nutrient Management (with emphasis on fertiliser use),</u> which includes calibration of application equipment, <s>following</s></td></tr>
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		Under Schedule 1: **Vegetable Growing Minimum Standards,** Item 8 requires: "Evidence available to demonstrate split applications by block/crop following expert approved practice." Comment: It is not clear to FANZ how "expert approved practice" is to be determined or defined. Preference is to refer to "...in accordance with the Code of Practice for Nutrient Management (with emphasis on fertiliser use), which includes calibration of application equipment."			~~*expert approved practice*~~ *relating to:* ○ *form of fertiliser applied* ○ *rate of application* ○ *placement of fertiliser* ○ *timing of application*
Schedule 2 Certification of Industry Schemes (page 54)	Support in part	FANZ supports the clear reference to and use of nationally consistent industry certification schemes, however, as discussed above, FANZ is concerned about Waikato Regional Council establishing regionally specific certification schemes creating duplication, conflict and confusion. FANZ recognises that Schedule 2 lists a set of criteria Waikato Regional Council seeks for a certification scheme to be deemed appropriate to meet the needs of the proposed Plan Change. With this in mind, FANZ supports the principles of Schedule 2, but seeks some minor amendment. Under Schedule 2, A 1.a. , The Certified Industry Scheme must be consistent with "*the achievement of water quality standards.*" Comment: It should be clear that a certification scheme does not achieve water quality standards or environmental	Retain Schedule 2 with minor amendments as follows: *A. Certified Industry Scheme System* *The application must demonstrate that the Certified Industry Scheme:* *1. Is consistent with <u>standards necessary for the professional consultancy services and auditing services to support</u>:* *a. the achievement of the water quality targets referred to in Objective 3; and* *b. the purposes of Policy 2 or 3; and* *c. the requirements of Rules 3.11.5.3 and 3.11.5.5.* *and* ~~*C. Farm Environment Plans*~~ ~~*The application must demonstrate that Farm Environment Plans are prepared in conformance with Schedule 1.*~~		

		outcomes, but supports the professional advice and audit of actions taken in support of achieving the objectives of the Plan. Under Schedule 2, C, it is required that an application to approve an industry certification scheme must "*demonstrate that Farm Environment Plans are prepared in conformance with Schedule 1*" Comment: FANZ considers that the requirements of C, are in fact the audit outcomes of an approved Certified Industry Scheme, and C is not a requirement for application to approve a Certified Industry Scheme. The other matters addressed by Schedule 2, are sufficient to provide confidence that the Farm Environment Plans can be prepared and audited proficiently for compliance with Schedule 1.	If not deleted, the wording should be amended to: The application must be able to demonstrate that Farm Environment Plans can be prepared and /or assessed for their ~~are prepared in~~ conformance with Schedule 1.
ADDITION TO GLOSSARY OF TERMS			
Best management practice/s: (page 79)	oppose	FANZ supports the term 'Good Management Practice' as has been adopted in most other regional plans, and FANZ seek national consistency in terms. FANZ is concerned about introducing a chapter specific definition for such a generic term which is widely used. Furthermore: 'Good' or 'Best' management practices for farming systems are not only about maximum mitigation for contaminant losses. The industry supports the "Industry Agreed Good Management Practices relating to Water quality" –	Delete the definition for Best Management Practice Or in the alternative, adopt a generic definition for Good Management Practice, in preference to a specific interpretation for Chapter 3.11 alone. The industry supports the "Industry Agreed Good Management Practices relating to Water quality" – dated September 2015, developed under the Canterbury Matrix of Good Management project.

		dated September 2015, developed under the Canterbury Matrix of Good Management project. This Code of Practice also itemises a range of sector specific Codes of Practice which are also supported.	
Good Management Practice /s (page 82)	oppose	FANZ supports the term 'Good Management Practice' as has been adopted in most other regional plans, and FANZ seek national consistency in terms. FANZ is concerned about introducing a chapter specific definition for such a generic term widely used. Furthermore: 'Good' or 'Best' management practices for farming systems are not only about maximum mitigation for contaminant losses. The industry supports the "Industry Agreed Good Management Practices relating to Water quality" – dated September 2015, developed under the Canterbury Matrix of Good Management project. This Code of practice itemises a range of sector specific Codes of Practice which are also supported.	Adopt a generic definition for Good Management Practice, in preference to a specific interpretation for Chapter 3.11 alone. The industry supports the "Industry Agreed Good Management Practices relating to Water quality" – dated September 2015, developed under the Canterbury Matrix of Good Management project.
Certified Farm Environment Planner; (page 79)	Support in part	FANZ believes the qualifications for a Certified Farm Environment Planner should include as a minimum the Certificate in "Advanced Course in Sustainable Nutrient Management in New Zealand Agriculture", as this course which requires the student to produce and critique a number of nutrient management plans to address challenging nutrient loss limits, using OVERSEER® Nutrient Budgets Model and has become a recognised industry standard.	Amend the definition for Certified Farm Environment Planner as follow: *Certified Farm Environment Planner:* *is a person ~~or entity~~ certified by the Chief Executive Officer of Waikato Regional Council and listed on the Waikato Regional Council website as a Certified Farm Environment Planner and has as a minimum the following qualifications and experience:* *a. five years experience in the management of pastoral, horticulture or arable farm systems; and*

		The definition should be amended to explicitly include this qualification.	*b. holds a certificate in the Advanced Sustainable Nutrient Management in New Zealand Agriculture Course, or completed equivalent advanced training or a tertiary qualification in sustainable nutrient management (nitrogen and phosphorus); and* *c. experience in soil conservation and sediment management.*
Certified Farm Nutrient Advisor: (page 80)	Oppose	FANZ is opposed the definition of "Certified Farm Nutrient Advisor" as it is inconsistent with the industry certification scheme; the "Nutrient Management Adviser Certification Programme Ltd". FANZ is very concerned that a regionally specific definition for a "Certified Nutrient Adviser" will create confusion, duplication in compliance costs and conflict in the accepted standards required for certification. This industry certification programme was developed with wide consultation and engagement, is a pan-sector programme with pan-sector governance and has been applied nationally. Successful implementation of the Regional Council rules dependent heavily on OVERSEER Nutrient Budget modelling and the aim of the industry certification programme is to build and uphold a transparent set of industry standards for nutrient management advisers to meet, so that they provide nationally consistent advice of the highest standard to farmers. FANZ is pleased to work collaboratively with Waikato Regional Council to ensure that the definition and	FANZ seeks further consultation with Waikato Regional Council to ensure a nationally consistent certification programme which meets regional council requirements is adopted for nutrient management advisers. As matters currently stand FANZ seeks to: Amend the Definition for Certified Farm Nutrient Adviser as follows: ~~*Certified Farm Nutrient Advisor: is a person certified by the Chief Executive Officer of Waikato Regional Council and listed on the Waikato Regional Council website as a certified farm nutrient advisor and has the following qualifications and experience:*~~ ~~*a. Has completed nutrient management training to at least intermediate level, and*~~ ~~*b. Has experience in nutrient management planning.*~~ ***Certified Nutrient Management Adviser****: is a nutrient management adviser certified under the Nutrient Management Adviser Certification Programme Ltd, or approved by the Chief Executive Officer of Waikato Regional Council as equivalent.* (see http://www.nmacertification.org.nz for details.)

		requirements for a certified nutrient management adviser meet the needs of the Regional Plan. At the present point in time FANZ believes this is best achieved through the Nutrient Management Adviser Certification Programme, and FANZ is open to further consultation and collaboration on ensuring it meets the necessary requirements. If Waikato Regional council seeks a regionally specific solution for capability to deliver plans in a short space of time, it could in the alternative, simply provide a list Waikato Regional Council approved providers, without reference or conflict with the nationally applied industry certification schemes. However, preference very much remains with a robust, nationally applied certification scheme.	or in the alternative, Waikato Regional Council amend the definition to; *"Approved Nutrient Advisers: means Waikato Regional Council approved nutrient advisers listed on a register of approved providers on the Waikato Regional Council web site,"* (in this way confusion and conflict arising from the term 'Certified Nutrient Adviser' is avoided, however, first preference remains with a nationally recognised and robust, industry certification programme.
Certified Industry Scheme/s (page 80)	Support in part	Having a Certified Industry Scheme approved by Regional Council is supported, but the definition should be clear that it is adopted in collaboration with industry and is nationally consistent.	Amend the definition for Certified Industry Scheme/s, as follows: *is a scheme adopted in collaboration with industry and ~~that~~ has been ~~certified~~ approved by the Chief Executive Officer of Waikato Regional Council and listed on the Waikato Regional Council website as meeting the assessment criteria and requirements set out in Schedule 2 of Chapter 3.11.*
Diffuse discharge/s (page 80)	Oppose in part	FANZ is concerned that commonly used terms should be applied consistently nationally, with its application made clear in the provisions of the plan.	Amend the definition of Diffuse discharge/s as follows: *~~For the purposes of Chapter 3.11, means the discharge of contaminants that results from land use activities~~*

		FANZ interprets that the current proposed definition for Diffuse Discharges is uniquely for the purposes of Chapter 3.11, and that it "means the discharge of contaminants that results from land use activities..... ....(including non-point discharges)". FANZ is concerned that the proposed definition is ambiguous, and at face value it applies to all discharges. Clarity on this meaning is particularly important when many of the proposed Objectives, Policies and Rules, as notified, compel land managers to reduce these discharges.	~~*including cropping and the grazing of livestock and includes non-point source discharges.*~~ *Means losses to the environment which are not from a point source, and have potential to contribute to a cumulative impact on the receiving environment.* If deemed necessary to have unique definition for Chapter 3.11, then FANZ suggests the following option: *For the purposes of Chapter 3.11, means the ~~discharge of contaminants~~ losses that result~~s~~ from land use activities, including cropping, forestry and the grazing of livestock, ~~and includes~~ which are not from ~~non-~~point source discharges and have potential to contribute to a cumulative impact on the receiving environment*.
Drain (page 81)	Support in part	FANZ considers the definition for drain intends that it only apply to open channels, designed to lower the watertable or reduce surface flooding	Amend the definition of drain as follows: ***Drain:*** *For the purposes of Chapter 3.11, means an artificially created open channel designed to lower the water table and/or reduce surface flood risk but does not include any modified (e.g. straightened) natural watercourse.*
Nitrogen Reference Point (page 82)	Support in part	The definition for Nitrogen Reference Point requires some minor amendments to: a) reference the Overseer Data Input Standards, and b) reference Certified Nutrient Management Adviser Programme, if FANZ submission points on the certification scheme are accepted.	A minor amendment is sought for the definition of 'Nitrogen Reference Point' to reference the Overseer Data Input Standards, and, amendment to reference to Certified Nutrient Management Adviser, if the FANZ submission points on the certification scheme are accepted.
			End.

Thank you for the opportunity to make this submission on the “Proposed Waikato Regional Plan Change 1 – Waikato and Waipa Catchments”

Greg Sneath
Executive Manager
The Fertiliser Association of New Zealand
8th March 2017.