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# SUBMISSION

**Monday 21 October 2019**

**TO:**

Horizons Regional Council

**ON:**

One Plan Proposed Plan Change 2 – Existing  
Intensive Farming Land Uses

**BY:**

Beef + Lamb New Zealand

Contact for service

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**0800 BEEFLAMB (0800 233 352) | [WWW.BEEFLAMBNZ.COM](http://WWW.BEEFLAMBNZ.COM) | BY FARMERS. FOR FARMERS**

## **SUBMISSION TO HORIZONS REGIONAL COUNCIL ON THE PROPOSED PLAN CHANGE 2 TO THE ONE PLAN – EXISTING INTENSIVE FARMING LAND USES**

Submission on publicly notified proposal for policy statement or plan  
*Clause 6 of First Schedule, Resource Management Act 1991*

To: The Chief Executive of the Horizons Regional Council  
11-15 Victoria Avenue  
Private Bag 11025 Manawatu Mail Centre  
Palmerston North 4442

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Beef + Lamb New Zealand Limited could not gain an advantage in trade competition through this submission.

The specific provisions of the proposal that Beef + Lamb NZ Ltd submission relates to and the decisions it seeks from Council are as detailed on the following pages. The outcomes sought and the wording used is as a suggestion only, where a suggestion is proposed it is with the intention of 'or words to that effect'. The outcomes sought may require consequential changes to the plan or restructuring of the Plan, or parts thereof, to give effect to the relief sought.

Beef + Lamb New Zealand Ltd wishes to be heard in support of its submission, and will consider presenting a joint case at hearing with others presenting similar submissions.

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# Submission

## A. Introduction

1. Beef + Lamb New Zealand Ltd (B+LNZ) welcomes the opportunity to make a submission on Horizons Regional Council's proposed Plan Change 2 – Existing Intensive Farming Land Uses.
2. B+LNZ is an industry-good body funded under the Commodity Levies Act through a levy paid by producers on all cattle and sheep slaughtered in New Zealand. Its mission is to deliver innovative tools and services to support informed decision making and continuous improvement in market access, product positioning, and farming systems.
3. B+LNZ is actively engaged in environmental issues that affect the pastoral production sector, and in building farmer specific capability and capacity in these areas to ensure that the industry supports an ethos of environmental stewardship, together with a vibrant, resilient, and profitable sector.
4. B+LNZ has, through its Environment Strategy, committed to leading the sector towards its vision of sheep and beef farms in ensuring that land use is closely matched to soil potential and capacity, where farmers are working to improve soil health, carbon content and productivity, while minimizing soil loss.



Figure 1: B+LNZ Environment Strategy

5. Since 1990 sheep numbers have reduced by over 50%, while the volumes of production are just 8% less. This has been achieved through a range of improvements, termed eco efficiency gains, including improved genetics and breeding, feed management, reproductive rates, and increased individual animal size. Beef cattle numbers likewise have reduced by around 20% since 1990.

6. These reductions in capital stock while improving productivity have resulted in not only improvements in environmental performance such as 21% reduction in nitrate leaching per kg saleable product, but have been accomplished while the sector has increased its exports by 83% to over \$9 billion.
7. In relation to Nitrogen (N) emissions, annual N leaching from Sheep/Beef has reduced from 113 million kg/yr in 1990 down to 68 million kg/yr in 2017 (a 40% reduction). At the same time for intensive farming systems the annual N leached has significantly increased from 73 million kg/yr in 1990 up to 130 million kg/yr in 2017 (a 78% increase).<sup>1</sup>
8. At the management scale such as catchment or sub catchment, those that operate extensive farming systems or sheep and beef do not have a Nitrogen issue in that environmental bottom lines are met, or the catchment is in a healthier state than this.
9. The sheep and beef sector takes an integrated and holistic view to the sustainable management of natural resources. The sector is actively seeking solutions that enable and empower multiple benefits across New Zealand's range of natural assets including biodiversity, aquatic ecosystem health, soils, climate, and healthy vibrant communities.
10. One of the core tenets of B+LNZ's policy position is that the natural capital approach should be applied to the management of natural resources. Costanza and Daly<sup>2</sup> define natural capital as 'a stock of natural assets that yields a flow of ecosystem goods or services into the future'<sup>3</sup>. Dominati et al<sup>4</sup> further expand on this definition:

*The notion of natural capital comes from framing the contribution of natural resources alongside manufactured capital (factories, buildings, tools), human capital (labour, skills) and social capital (education, culture, knowledge) to the economy (Daly, 1995). The ecosystems approach has its origins in ecological economics, recognising that the economy is a subsystem of the ecological system and that sustainable economic activity needs to operate within the biophysical limits of the natural environment (Rockstrom, et al., 2009). Natural resource scarcity, which includes the ability of the environment to assimilate emissions, is nowadays the limiting factor of economic development and human wellbeing.*

11. B+LNZ's natural capital, ecosystem approach to resource management is based on the principles of:
  - a. maintaining healthy natural capital stocks for ecosystem services provision; and
  - b. land use and management within ecological boundaries,

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<sup>1</sup> Landcare Research, 2019

<sup>2</sup> Costanza, R. and H.E. Daly. 1992. 'Natural Capital and Sustainable Development'. *Conserv. Biol.* Vol. 6, pp37-46.

<sup>3</sup> Ibid, p38

<sup>4</sup> Dominati, E.J., Mackay, A. and Maseyk, F.J.F., 2018. Holistic farm planning – using an ecosystem approach to advance farm planning into the future (Eds L. D. Currie and C. L. Christensen). <http://flrc.massey.ac.nz/publications.html>. Occasional Report No. 31. Fertilizer and Lime Research Centre, Massey University, Palmerston North, New Zealand. 7 pages.

to ensure a thriving future for the sheep and beef sector and the ability of future generations to provide for their needs.

12. Maintaining, and where degraded enhancing the health of freshwater, aquatic habitats, and biodiversity across the region is important to the people of the Manawatu-Whanganui region, it is important for our economy, and it is important to farmers.
13. B+LNZ is actively building our work programme throughout the region to support the integrated and sustainable management of land and water resources. B+LNZ is:
  - a. Working with farmers to develop Land Environment Plans (LEP) through levy funded workshops;
  - b. Supporting farmer representatives to engage in the collaborative catchment plan development processes;
  - c. Working with the Regional Council to ensure that management frameworks developed through Regional Plans are fit for purpose, and enable flexibility in land use and management practices, while ensuring that environmental issues are addressed in a targeted, efficient and effective way;
  - d. Developing and implementing science and extension programmes to help identify, prioritise and implement on farm actions that will make a difference to improving water quality, aquatic habitats, and biodiversity; and
  - e. Working with farmer leaders throughout the region to support uptake of farm environment plans and to encourage and support the development of sub catchment approaches to managing water quality.
14. B+LNZ looks forward to continuing to build a positive and enduring relationship with the Council, and to work proactively on environmental initiatives of mutual interest and benefit for the people of the Manawatu-Whanganui region and farmers.

## B. General Submission on Plan Change 2

### B+LNZ generally supports proposed Plan Change 2 (PC2)

#### Reasons for the submission

1. B+LNZ's position is that this Regional Plan needs to give effect to the Resource Management Act 1991 (RMA), and is therefore required to, inter alia:
  - (i) include objectives which are the most appropriate way to achieve the purpose of the Act
  - (ii) include policies to implement the Objectives, and rules (which may also include methods) which implement the policies, such that the Objectives of the Plan are achieved;
  - (iii) give effect to the Operative Regional Policy Statement (RPS); and
  - (iv) give effect to the National Policy Statement Freshwater Management (NPSFWM 2014).
2. In order for the Regional Plan to give effect to the NPSFWM 2014, the Plan must establish a management framework that:
  - (i) Avoids over-allocation
  - (ii) Phases-out over-allocation over time where it exists.
3. In this light, B+LNZ supports the intent of the changes proposed in PC2, specifically the management of intensive land uses where over-allocation exists in order to reduce over-allocation so that the management framework achieves the freshwater quality outcomes sought over time.
4. In particular, B+LNZ supports the approach taken in the One Plan to manage the effects of intensive farming land uses through cumulative nitrogen maximums (in kg/ha/year) based on Land Use Capability (LUC) Classes as specified in table 14.2.
5. B+LNZ seeks to ensure that the intent of the amendments as proposed is retained, and specifically that a natural capital-based approach to allocation is retained. B+LNZ believes that such an approach, where the catchment load is attributed to land based on its productive capability using the LUC classification system is the most efficient and effective way of establishing an allocation mechanism for nutrient loss. Additionally, B+LNZ advocates for any framework for nitrogen management and allocation is in accordance with B+LNZ's principles for the allocation of nutrients as contained in Appendix A.
6. B+LNZ supports the new cumulative nitrogen leaching maximums proposed in the amended Table 14.2, to reflect version 6.3.1 of OVERSEER.
7. B+LNZ seeks to ensure that the scope of PC2 remains *intensive farming land use activities*, defined as commercial vegetable growing, cropping, dairy farming and intensive sheep and beef farming.
8. B+LNZ is supportive of reinforcing good management practices as part of intensive farming land use activities, but seeks to amend the definition of good management

practices to align it with the definition of good farming practice principles as set out in the Good Farming Practice Action Plan for Water Quality 2018.<sup>5</sup>

9. Additionally, B+LNZ supports the Council's intent to providing a workable pathway for farmers and landowners to apply for resource consent for existing intensive farming land use activities that do not, or cannot meet the maximum nitrogen leaching maximums set out in the updated Table 14.2.
10. B+LNZ notes that the Government has proposed changes to the National Policy Statement for Freshwater Management 2014 (NPSFWM 2014) through the Essential Freshwater package of policy proposals in September 2019. The Government has indicated that these changes will likely be finalised in early 2020, meaning that changes to the NPSFWM 2014 are likely to come into effect in 2020. B+LNZ seeks that PC2 gives effect to the NPSFWM, including amendments to the NPSFWM through the Essential Freshwater programme.

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<sup>5</sup> The Good Farming Practice Action Plan for Water Quality 2018 can be found here:  
[http://www.fedfarm.org.nz/FFPublic/Policy2/National/Good\\_Farming\\_Practice-Action\\_Plan\\_for\\_Water\\_Quality\\_2018.aspx](http://www.fedfarm.org.nz/FFPublic/Policy2/National/Good_Farming_Practice-Action_Plan_for_Water_Quality_2018.aspx)

## C. Specific Submissions

11. The specific provisions of the proposal that this submission relates to and the decisions it seeks from Council are as detailed in the following table. The outcomes sought and the wording used is a suggestion only, where a suggestion is proposed it is with the intention of 'or words to that effect'. The outcomes sought may require consequential changes to the Plan, including Objectives, Policies, or other rules, or restructuring of the Plan, or parts thereof, to give effect to the relief sought.

12. B+LNZ's textual amendment proposals are presented in red in the table below.

The specific provisions B+LNZ submission relates to are:	B+LNZ submission is that:		The decision B+LNZ would like the Horizons Regional Council to make is:
	SUPPORT / OPPOSE	REASON	
Policy 5-8	Support and retain as proposed		RELIEF SOUGHT
Policy 5-8 (a) (i) (A) and (B)	Support and retain as proposed		
Policy 5-8 (a) (i) (C)	Support in part	B+LNZ seeks to change the definition of good management practices to good farming practice principles as set out in the Good Farming Practice Action Plan for Water Quality 2018	(C) are achievable on most farms using <del>good management principles</del> <i>good farming practice principles*</i>
Policy 5-8 (a) (ii)	Support in part	B+LNZ seeks to ensure the wording of the numbering of the exceptions is amended pending any changes to (iia) and (iib)	Amend numbering as required pending changes to (iia) and (iib)
Policy 5-8 (a) (iia)(A)	Support in part	B+LNZ seeks to change the definition of good management practices to good farming practice	(iia) Existing intensive <del>land</del> <sup>^</sup> use activities which do not comply with (ii) must be regulated to reduce nitrogen leaching which is in excess of the nitrogen leaching maximums established under (a) by implementing

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	SUPPORT / OPPOSE	REASON	RELIEF SOUGHT
and (B)		<p>principles as set out in the Good Farming Practice Action Plan for Water Quality 2018.</p> <p>B+LNZ also does not think that the wording "[...] to minimise the degree of non-compliance [...]" is appropriate to be contained in a plan.</p>	<p><del>good management practice</del> <u>good farming practice principles*</u>, and additional measures to minimise the degree of non-compliance <u>become compliant over time</u>, having regard to:</p> <p>(A) <del>the feasibility, practicality, and cost of achieving the nitrogen leaching maximums specified in (i); and best practicable options towards achieving policies 5-1 and 5-2.</del></p> <p>(B) <del>the Land Use Classification of the property and its relation to Table 14.2</del></p> <p>(C) the strategy for surface water<sup>^</sup> quality set out in Policies 5-2, 5-3, 5-4 and 5-5, and the strategy for groundwater quality in Policy 5-6.</p>
Policy 5-8 (a) (iib)	Support and retain as proposed		
Policy 5-8 (d)	Support in part	B+LNZ seeks to change the definition of good management practices to good farming practice principles as set out in the Good Farming Practice Action Plan for Water Quality 2018.	<p><b><u>(d) Good management practices</u></b> <u>Good farming practice principles*</u></p> <p>(i) All intensive farming land<sup>^</sup> use activities must be regulated to manage nutrient leaching and run-off, faecal contamination, and sediment losses in accordance with <u>good management practices</u> <u>good farming practice principles*</u>.</p>
Method 5-13 "Target"	Oppose	<p>OVERSEER is a tool within the toolbox which can be useful in managing towards achievement of water quality outcomes.</p> <p>Uncertainties in relation to the model should be built into Plan</p>	<p>Delete the sentence "Horizons will consider whether it needs to respond to changes in Overseer through a plan change process".</p>

The specific provisions B+LNZ submission relates to are:	B+LNZ submission is that:		REASON	RELIEF SOUGHT	The decision B+LNZ would like the Horizons Regional Council to make is:
	SUPPORT / OPPOSE				
Policy 14-3	Support in part		<p>Change 2 and not left to future plan changes.</p> <p>B+LNZ seeks to change the definition of good management practices to good farming practice principles as set out in the Good Farming Practice Action Plan for Water Quality 2018.</p> <p>B+LNZ also seeks to ensure that the use of good farming practice principles lead to meeting the water quality outcomes set out in the plan in Schedule E.</p>	<p><b>Policy 14-3: Industry-based standards <u>Good management practices good farming practice principles</u>*</b></p> <p>When making decisions on resource consent<sup>a</sup> applications, and setting consent conditions, for activities affecting groundwater and surface water<sup>a</sup> quality, the Regional Council must have regard to <u>good management practices good farming practice principles</u>* will examine on an on-going basis relevant industry-based standards (including guidelines and codes of practice), recognising that such industry-based standards generally represent current best practice, and may accept compliance with those standards as being adequate to avoid, remedy or mitigate adverse effects<sup>a</sup> to the extent that those standards <u>good management practices good farming practice principles</u>* address the matters in Policies 14-1, 14-2, 14-4, and 14-5 and 14-6, and contribute to meeting the targets contained in Schedule E.</p>	
Policy 14-6 (b)	Support in part		<p>B+LNZ seeks to change the definition of good management practices to good farming practice principles as set out in the Good Farming Practice Action Plan for Water Quality 2018.</p> <p>B+LNZ also seeks to ensure that the use of good farming practice principles lead to meeting the water quality outcomes set out in the plan in Schedule E.</p>	<p>(b) Ensure implementation of <u>good management practices good farming practice principles</u>* to manage nutrient leaching and run-off, faecal contamination and sediment loss, as part of any intensive farming land<sup>a</sup> use, consistent with Objectives 5-1 and 5-2, and Schedule E.</p>	
Policy 14-6	Oppose		The concept of good farming	(i) Good management practices to minimise the loss of nitrogen,	

The specific provisions B+LNZ submission relates to are:	B+LNZ submission is that:		RELIEF SOUGHT	The decision B+LNZ would like the Horizons Regional Council to make is:
	SUPPORT / OPPOSE	REASON		
(b) (i) and (ii)		practice principles to minimise the loss of contaminants should be retained. Also edge of field mitigation such as the creation of wetlands and riparian strips should be provided for in the policy framework and subsequent methods, including rules.	phosphorus, faecal contamination and sediment are implemented.  (i) <del>Good management practices</del> <b>good farming practice principles</b> to minimise the loss of nitrogen, phosphorus, faecal contamination and sediment are implemented.  Retain (ii)	
Policy 14-6 (d) (i) and (ii)	Support in part	B+LNZ seeks to change the definition of good management practices to good farming practice principles as set out in the Good Farming Practice Action Plan for Water Quality 2018.	(i) <del>Good management practices</del> <b>Good farming practice principles</b> * are implemented in accordance with a <u>nutrient management plan*</u> , along with additional innovations and measures to further reduce nutrient leaching and run-off, faecal contamination and sediment losses from the <u>land^ progressively over time; or</u>	
Policy 14-6 (e) and (f)	Support in part	B+LNZ seeks to ensure the Land Use Classification of property is given regard to explicitly.  B+LNZ also seeks to ensure that existing land-uses are not grand-parented to historical emission levels.	(e) <u>When determining whether to enable an existing intensive farm land^ use to continue under (d)(i) have regard to:</u>  [...]  (iii) <u>The nature and characteristics of the land^, having regard to physical characteristics of the soil including in terms of attenuation capacity, climatic conditions, <del>and</del> topography and Land Use Capability units of the property.</u>  Also delete (f)(i), and ensure that existing land uses are not grand-parented to historical emissions profiles, and that emissions are required to reduce over time.	

The specific provisions B+LNZ submission relates to are:	B+LNZ submission is that:		REASON	RELIEF SOUGHT	The decision B+LNZ would like the Horizons Regional Council to make is:
	SUPPORT / OPPOSE				
14.1 Rules – Agricultural Activities Table 14.2	Support		B+LNZ's position is set out in paragraphs 4 and 5 of the general submission above.	Ensure that the maximum nitrogen leaching numbers in Table 14.2: - are based on LUC - relate to the natural capital of soils - apply to intensive systems as defined by the One Plan - set a trajectory of improvement towards the water quality outcomes as set out in Schedule E.	
Rule 14-1 Existing intensive farming land <sup>^</sup> use activities	Support in part		B+LNZ seeks to change the definition of good management practices to good farming practice principles as set out in the Good Farming Practice Action Plan for Water Quality 2018	(b) compliance with the cumulative nitrogen leaching maximum* specified in Table 14.2 <del>good management practices</del> <u>good farming practice principles*</u> to avoid, remedy or mitigate nutrient leaching and run-off, faecal contamination and sediment losses from the land <sup>^</sup>	
Rule 14-2 Existing intensive farming land <sup>^</sup> use activities not complying with any of the conditions, standards and terms (a), (b) and (d) to (i) of Rule 14-1	Support in part		B+LNZ seeks to change the definition of good management practices to good farming practice principles as set out in the Good Farming Practice Action Plan for Water Quality 2018	(b) (c) measures <del>good management practices</del> <u>good farming practice principles*</u> to avoid, remedy or mitigate nutrient leaching and runoff, faecal contamination and sediment losses from the land <sup>^</sup>	
Glossary	Support in part		B+LNZ seeks to change the definition from good management	<del>Good management practices</del> <u>Good farming practice principles</u> refers to the <u>agreed national good farming practice principles contained in the</u>	

The specific provisions B+LNZ submission relates to are:	B+LNZ submission is that:		The decision B+LNZ would like the Horizons Regional Council to make is:
	SUPPORT / OPPOSE	REASON	
		practices to good farming practice principles as set out in the Good Farming Practice Action Plan for Water Quality 2018	RELIEF SOUGHT  <u>document Good Farming Practice Action Plan for Water Quality 2018</u> <u>evolving practical measures and methods, including those established in industry-based standards, which are used at a sector or community level to minimise the effects of discharges to land<sup>^</sup> and water<sup>^</sup>.</u>

## **APPENDIX A: B+LNZ PRINCIPLES FOR THE ALLOCATION OF NUTRIENTS**

### **Principle 1 Like land should be treated the same**

Allocation should be based on the intrinsic qualities of the land. Two pieces of land with the same qualities should receive the same allocation. This principle recognises that allocation regimes should not be overly influenced by existing land use.

### **Principle 2 Those undertaking activities that have caused water quality problems should be required to improve their management to meet water quality limits**

All New Zealanders have a responsibility to manage their activities to maintain or improve water quality. This principle reflects the need for those who have caused water quality problems or who are contributing a greater amount to them to take a greater responsibility for meeting the costs of reducing nutrient loss to water. It also reinforces that those who have managed responsibly should not be required to have their land use constrained as a result of others' activity.

### **Principle 3 Flexibility of land use must be maintained**

Land owners need to have the ability to respond to changes in climate, input costs, markets and technological innovation in order to maintain a profitable and sustainable farming enterprise. Allocating nutrients in such a way that unnecessarily limits land use change constrains the ability of land users to respond to those changes and optimally utilise the land resource.

### **Principle 4 The allocation system should be technically feasible, simple to operate and understandable**

A high level of technical feasibility is fundamental to a successful allocation approach. The simpler the system, the more likely it is to be able to operate effectively. The approach must also be understandable by land users and the wider community. It must be able to be administered fairly and at minimum transaction costs to users and the regulator.

### **Principle 5 The natural capital of soils should be the primary consideration when establishing an allocation mechanism for nutrient loss**

A natural capital approach allows for an economically efficient allocation of nutrients. Those soils with the greatest ability to retain nutrients and optimise nutrient use give land users the greatest flexibility to optimise production, respond to markets and technology while managing potential effects on water quality. Allocation systems should reflect the ability of these soil types to optimise production and land use flexibility.

### **Principle 6 Allocation approaches should provide for adaptive management and new information**

Allocation decisions are primarily made on the information we know now and modelled future scenarios. Our understanding and the availability of both catchment and farm systems will change over the life of an allocation system as will possible management techniques. Allocation systems should provide sufficient flexibility to provide for adaptive management and be reviewed regularly to incorporate new information. Adequate transition times should be provided to incorporate new information where allocation changes as a result.

### **Principle 7 Appropriate timeframes must be set to allow for transition from current state to one where allocation of nutrients applies**

Timeframes should take account of the degree to which any waterway is over-allocated (if that is the case), the period over which this state has come about and the costs for businesses and the current ability to manage to that allocation.

It should be recognised that current water quality issues are sometimes the result of many years of land use within catchments and may have developed over generations. Consideration needs to be taken of the legitimate expectations of people and natural justice. Accordingly time should be provided for them to adjust. There needs to be a balanced approach and recognition of the uncertainty associated with water science versus the likely economic impact on businesses and the

region. The primary objective should be to set an appropriate direction of travel that will see a steady improvement in water quality.

**Principle 8 Long term investment certainty is a critical feature of a viable nutrient management system**

Changes to nutrient allocation regimes must be signalled as far out as possible. Refinements to those systems must be managed to minimise their impacts on business viability, land value and the flexibility of land use. The aim must be to reflect the underlying elements of sustainable management in achieving improved water quality outcomes including reducing those adverse impacts on social and economic outcomes.

**Principle 9 Improvement in water quality must remain the primary objective of adopting any nutrient allocation regime**

When exploring the adoption of methods to achieve water quality improvements and manage to limits, the focus of community debates, modelling and discussion of allocation of nutrients can distract from the primary goal – maintaining and improving water quality. This principle emphasises that allocating nutrients to a property level doesn't in itself result in improved water quality; it is the actions of land users that ultimately result in improved nutrient management.

**Principle 10 In under-allocated catchments, where property based nutrient allocation has not been adopted in setting water quality limits, the system for allocating nutrients must be determined well before the limit is reached, be clear and easy to understand, and designed to avoid over-allocation**

The mechanism for allocating nutrients, even if it does not have immediate effect, should be clear from the time when water quality limits are set. Allocation mechanisms should reflect the level of risk that the catchment will become over allocated. This may include the adoption of a pre-agreed catchment-specific environmental threshold (e.g. 75%-90% of a limit) to determine when an allocation regime should be adopted.

**Principle 11 In designing the allocation system the benefits of a nutrient transfer system within the catchment or water management unit should be considered**

Maximum economic efficiency of land use could be assisted by a mechanism for transferring nutrient discharge allowances within the same catchment. Nutrient transfer systems are only appropriate where:

- (i) the initial allocation system meets all of the allocation principles;
- (ii) only occurs within a sub-catchment or watershed and enables and supports Catchment Collective Groups;
- (iii) the transferable portion of the resource (e.g. nitrogen) only pertains to the load which achieves the desired environmental outcome;
- (iv) be a transfer within an established sub catchment programme that's based on allocation of a load consistent with these principles; and
- (v) results in improved economic outcomes and land use optimisation.

**Principle 12 Regulation, monitoring, auditing and reporting of nutrients within an allocation regime needs to relate to the degree of environmental impact and pressure**

If there is limited environmental pressure and if an activity has a low impact then regulation – and the financial cost of complying with that regulation – should be commensurate with the degree to which the activities are causing an adverse effect on water quality.

**Principle 13 As a minimum expectation, in all catchments, all land users should be at or moving towards (industry defined) Good Management Practice (GMP), recognising that GMP is constantly evolving and continuous improvement is inherent in GMP**

In many catchments, lifting everyone to GMP is likely to go a long way towards achieving community objectives for managing to water quality limits. In catchments where nutrients are not over allocated, requiring good management practice is a sound alternative method to allocating nutrients to a farm (property based) level.

**Principle 14 Nutrient allocation must be informed by sound science and stable and reliable catchment and farm system modelling and measurement**

Modelling nutrient loss is important to inform nutrient allocation, but all models have limitations. Overseer is a key tool for understanding and managing nutrients on farms and to inform nutrient allocation decisions. In the short term there are significant limitations that need to be catered for in determining any regulatory or nutrient allocation regime (e.g. assumptions in Overseer regarding GMP, modelling of cropping regimes, ability of Overseer to estimate nutrient loss from the adoption of certain mitigations and the validation of Overseer estimates). Other measures may need to be included in the approach to managing nutrient loss to ensure innovative change is incentivised and that the focus remains on promoting good practice. Over time modelling designed to estimate nutrient loss will improve. Modelled estimates will change, so allocation regimes should account for modelling uncertainty and provide for appropriate transition periods.