

Appendix B: Beef and Lamb NZ Principles for Allocation of Nutrients.

Principles for the Allocation of Nutrients

These principles have been developed to guide decisions on nutrient allocation. They seek to ensure that nutrient allocation is fair, equitable, recognises the complexity of farming systems, and provides for continued flexibility of land use. They support catchment specific solutions to nutrient management and that different allocation regimes will be established that reflect differences between communities and their catchments, and to meet water quality objectives in those catchments. These principles should be considered carefully when forming any nutrient allocation policies or methods to achieve them. Each principle is important but they should be considered as a whole to inform allocation discussions.

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:

The initial allocation system meets all of the required allocation principles.

Only occurs within a subcatchment or watershed and enable and support Catchment Collective Groups .

The transferable portion of the resource (eg nitrogen) only pertains to the load which achieves the desired environmental outcome.

Be a transfer within an established sub catchment programme that's based on fair allocation of a load.

Result 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.

Estimates of nutrient loss are a necessary input to decisions on nutrient management but broader catchment-scale modelling is critical if these decisions are to be robust. There is an urgent need to increase the emphasis placed on catchment-scale modelling.

Note: The principles have been adopted by the Board of Beef + Lamb New Zealand.