Alliance Group Limited Submission

Action for healthy waterways – a discussion document on national direction for our essential freshwater

Introduction

Alliance Group Limited is a large meat processing and exporting company operating seven meat processing and export plants throughout the South Island, and the lower North Island.

The company was established in 1948 and is now a wholly farmer-owned co-operative company. On an annual basis, Alliance processes approximately 6 million lambs, 1 million sheep, 280,000 cattle, 100,000 deer and 270,000 calves.

As a wholly farmer-owned co-operative company, profits are returned to the company’s farmer shareholders or retained for growth. The company employs approximately 4,650 people (permanent and seasonal staff) and services 4,340 farmer shareholders.

Alliance’s annual turnover for the 2017/2018 financial year was $1.8 billion and is a significant player in New Zealand’s farming and rural landscape.

Our submission on the discussion document

Alliance supports the ambition of the discussion document to improve water quality where improvements are needed. Our submission covers two very connected, but different components of our business. These matters are those that affect our processing operations and those that affect our shareholder farmer suppliers.

Processing operations

As a large export food processor, that exports its products around the world, Alliance is subject to strict food regulatory hygiene requirements that enable it to access the markets in which it operates. As a result, Alliance is heavily reliant on freshwater resources for its operations. This includes using water from rivers, groundwater and town water supplies for its processes and the generation of electricity through hydro power. The water is used for a variety of purposes to comply with regulatory and overseas markets access requirements. These include stock washing, carcase washing, sterilisation of processing equipment, cleaning of processing rooms and cleaning of product among other things. Alliance also produces wastewater, which is treated in accordance with the requirements of resource consent conditions or Trade Waste permits, before being discharged either into District Council trade waste schemes, on to land or into surface water.

Alliance has an independently certified ISO 14001:2015 Environmental Management System. This means that Alliance has a commitment to continuously improve its environmental performance and a policy to operate in accordance with regulatory requirements, meet stakeholder expectations and monitor and manage its resource use.
Through the many years that Alliance has been operating, it has improved its efficiency of water use and progressively upgraded its wastewater treatment plants. In addition, Alliance has made a recent commitment to spend over $20 million on improved wastewater treatment at our largest processing site, Lorneville, and has a proposal through a consent application, to spend approximately $14 million on improved wastewater treatment at our largest beef processing site in Mataura. We are also proposing to make reductions in water use. Once these capital projects are complete, operating expenses will increase significantly. They are significant proposals and commitments for our business which will see us contribute to improved environmental outcomes within the catchments we operate.

Importantly the improvements to our wastewater discharge to date and commitments to future improvements have been made within the existing water management frame work.

The existing freshwater management framework ensures that not only significantly improved environmental outcomes from our plants are being achieved over time, but it places economic value on the ongoing operation of our processing plants. This is vitally important to the communities in which we operate, because in a number of cases we operate large plants in small towns, where we are often by far and away the largest single employer. Our farmers and rural communities need these plants.

Alliance is extremely concerned that these significant improvements and financial commitments would still not be enough to meet the requirements of the proposals put forward in the discussion document, and in some cases fall short by some margin. Our reliance on freshwater, means that we, the people we employ, the towns that we operate in and the farmers and businesses we support are put at significant risk by some of the proposals as they stand.

By way of example of the importance of our plants to a community, a recent economic study of our Mataura processing plant demonstrated that it employed 500 people at the peak of the season and paid $22 million per annum in wages and salaries and spent an estimated additional $12.3 million per annum in the Southland region on goods and services in the 2017/18 season. There are also indirect economic impacts from the plant for the Southland economy. When these indirect benefits are added, the plant contributes 595 full time equivalent roles for local Southland residents and $38.5 million in wages and salaries. This results in better businesses and public services operating in the community. The Mataura plant is located in a town with 700 households, so should there be an unequal prioritisation of the values of water, resulting in environmental challenges becoming too difficult to overcome for the plant forcing it to close, the impacts would undoubtedly be devastating for such a small community. This will be replicated elsewhere throughout New Zealand.

Shareholder farmer suppliers

As discussed above, Alliance services some 4,340 farmer shareholders. This includes sheep and lamb, cattle and deer farmers. Our farmers are very concerned about what the proposals might mean for them. The key concern is the proposed frameworks, rules, and standards which will lock in current levels of discharge into our waterways and lock-in existing land uses. This approach effectively rewards high intensity, high discharging systems (particularly high N leaching systems), while
penalising low intensity, low input, and low discharge systems that work within the physical environment of the farm.

Constraining low intensity farm systems will limit their capability to achieve the goals of the proposal or meet the additional costs of compliance because the costs of the proposed changes will need to be borne from within their existing system where costs will already be allocated. This would significantly disadvantage responsible farmers and proactive custodians of the land who have already sought out and achieved environmental innovations.

This blanket approach to “holding the line” could put low input systems under significant financial strain. Many farmers will be unable to afford the additional costs of mitigating the specific issues relating to their farming systems. This could make the businesses unviable with a significant loss of rural jobs, threatening our rural communities that are tight-knit and particularly vulnerable – especially when young families leave.

Alliance support a fair approach where each farmer is expected to do their bit in proportion to their impacts, in an effective and workable manner. Alliance requests that the government re-think its approach to restrictions on land-use change and to the grandparenting provisions in the freshwater module and hill country cropping. In particular, we request that there is recognition of low N leaching farms and some flexibility provided for them.

Further thoughts on the rest of the proposals, and suggested alternatives on the key matters to us are provided below.

**Te Mana o te Wai**

**Question 9**

We do not support the Te Mana o te Wai hierarchy of obligations.

New Zealand’s economic and social wellbeing is dependent upon a number of primary industries and existing infrastructure, some of which is dependent on the continued access to freshwater resources.

Any change in the way in which freshwater is managed in New Zealand as is clearly proposed via the hierarchical structure in the objective of the draft NPSFM will have significant implications for these activities and assets.

Water quality, ecological health, Te Mana o te Wai and human health should be considered equally alongside social and economic wellbeing as part of the sustainable management of natural and physical resources as per the purpose of the RMA.

The amendments proposed subordinate these matters to Te Mana o Te Wai values. This approach is inconsistent with the balance of enabling and protecting factors inherent in the notion of sustainable management in section 5 of the RMA.
The hierarchical nature of matters within the overarching objective is of significant concern to Alliance. While ecosystem health and other matters have been important considerations in decision making, prioritisation would represent a real shift in how freshwater is managed going forward to the point where we struggle to see how any development could proceed unless it has zero impacts on the ecological health or water quality within the receiving environment. This priority combined with emphasis on Te Mana o te Wai (in its current form) would mean that developers and decision makers would have a difficult time rejecting any submission or evidence made by iwi, Fish and Game and community groups, among others, who claim to represent Te Mana o te Wai. This being at the expense of the lives of every day New Zealanders.

We believe this issue could be better balanced by clearly linking the objectives and policies to the values in both Appendix 1A (compulsory matters) and 1B (other matters that must be considered).

**Question 11**

While there is some clarity around what is meant by Te Mana o te Wai in section 1.5 of the draft NPSFM, there will be difficulties for regional councils to ensure effect is given to an overarching concept that will undoubtedly have a different meaning / expectation for different groups. The ambiguity that exists will result in extended implementation timeframes, coupled with extensive litigation processes.

**New Planning process for freshwater**

**Question 17**

Alliance does provide conditional support for the proposal for a faster planning process. Having been witness to and part of the current plan change process, which will undoubtedly be replicated throughout New Zealand, we struggle to see good value for the time and resources. Current plan change processes can last for many months if not years.

It seems that the more efficient plan change process proposed might be achieved by restricting the ability to appeal hearing decisions. If that is the case, it is essential that Freshwater Commissioners are highly skilled and experienced, similar to that of an Environment Court judge, so that good plan change decisions are made.

It is acknowledged that there may be a limit to the number of people that fit those criteria throughout the country. However, there are also a limited number of Councils throughout NZ, and while there will be differences region to region, there will likely be more similarities where there must be opportunity to use a common approach to addressing relevant issues.

The final freshwater framework, in which Freshwater Commissioners will work, will also likely influence Alliances conditional support for a faster planning process.

Alliance looks forward to seeing the full details of this proposal when the Resource Management Amendment Bill is made available for comment.
**Fish passage**

**Question 23**

We support Clause 19(1) which applies only in respect of structures constructed after the commencement date. In some cases a standard fish passage structure is not able to be established retrospectively.

As discussed earlier, Alliance generates some of its own electricity via a hydro-electric scheme. This scheme has been in place for over 100 years. This is a consented scheme and fish passage is already managed via resource consent. The scheme is considered to provide a partial barrier to fish passage for some species of fish, as fish passage may be restricted under some flow conditions.

In our case immediately below the scheme weir and race is a reasonably large waterfall. Given the height of the water fall, it makes it very difficult to get elvers (young eels) up the falls, then over the weir. Many attempts have been made to provide physical passage structure, but with no success. Therefore a Trap & Transfer scheme has been established, under the resource consent, which has been the most successful option at enhancing fish passage during some flow conditions. This solution would not fit with “Standard Fish Passage Structure Information”.

**Question 24**

We do not support applying the proposed fish passage requirements to structures constructed before the commencement date.

As discussed above, Alliance structures are already consented and modification is unlikely to be successful given the nature of the environment that the structure is located in. The existing consenting framework provides the flexibility needed to tackle the issue in the best way, ie Trap and Transfer.

**New bottom lines for nutrient pollution**

**Question 30**

Alliance supports the objective of having healthy freshwater. We support clear, science based environmental bottom lines that protect human and ecological health, and frameworks that empower communities to work together to achieve these.

New Zealand has a great diversity of unique ecosystems, which should be factored in when developing the goals of freshwater management. Freshwater attributes should provide for freshwater ecosystem health which reflects the characteristics of the waterbody in its catchment context, and account for natural variation and conditions such as erosion, nutrient levels, geology, geomorphology, and land type and cover. These attributes should be informed by the best available science.

We are broadly supportive of the setting of in-stream limits for dissolved inorganic nitrogen (DIN), dissolved reactive phosphorus (DRP), and sediment for ecosystem health. Clear numerical environmental bottom lines provide for business and community certainty in relation to the outcomes being sought and ensure equitable approaches across regions and catchments, but these
also need to represent local conditions, community aspirations and be set with necessary scientific rigour given the potentially significant practical and financial challenges of achieving them.

In terms of specific bottom lines and tables we have concerns about Tables 5, 7 and 8. While the attribute states and bottom lines appear reasonable in most cases they do not account for the variability found in our waterways (ie periphyton does not grow in all waterways) and the derivation of the attribute states and bottom lines are not always clear or the science is not necessarily accepted or properly reviewed.

**Table 5: Dissolved Inorganic Nitrogen**

<table>
<thead>
<tr>
<th>Attribute Band</th>
<th>Numeric State</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median</td>
</tr>
<tr>
<td>A</td>
<td>≤ 0.24</td>
</tr>
<tr>
<td>B</td>
<td>&gt; 0.24 and ≤ 0.50</td>
</tr>
<tr>
<td>C</td>
<td>&gt; 0.50 and ≤ 1.0</td>
</tr>
<tr>
<td>D (bottom line)</td>
<td>&gt; 1.0</td>
</tr>
</tbody>
</table>

From the documentation provided in the draft NPS-FM it was not immediately clear how the dissolved inorganic nitrogen (DIN) attribute states were derived. However, various documents can be found and are referred to in the Freshwater Science and Technical Advisory Group (STAG 2019) report that points to the science underpinning the DIN attribute states.

Hence, the focus of this submission with respect to DIN, is to seek that the approach is put on hold until clarification around the science behind the DIN attribute states is provided, and to request all background material be made available for full peer review. Some of the relationships in reports used for the STAG 2019 report appear tenuous, particularly when applied to the bottom lines, including the nutrient-periphyton relationship, and the reported relationship between DIN and Fish IBI. The relationships are heavily influenced by other factors such as grazing pressure, substrate and light availability in the case of periphyton and in the case of Fish IBI the relationship is not direct but mediated through other trophic levels and environmental factors, and is actually related to nitrate not DIN alone.

The DIN attribute bands require scrutiny because although they are stated as inherently underpinned by so-called eutrophication effects, they also include elements of nitrate toxicity. It is difficult to fully assess how the attribute states were derived. Some of this documentation appears inconsistent and confused, for example the document entitled ‘Nitrate-nitrogen and Dissolved Reactive Phosphorus’ (STAG 2019) discusses the quantile regressions between nitrate-nitrogen Fish IBI states, providing a figure and stating, ‘when the Fish IBI is calculated for sites from the NZFFD and correlated against predicted nitrate-nitrogen concentrations an upper limiting quantile is clear. The blue line represents the 85th percentile, red the 90th percentile and green the 95th percentile’. And yet the document ‘Proposed Nutrient Attribute tables for the NPS-FM’ (STAG 2019) provides the same figure and states ‘Quantile regressions between Fish IBI and nitrate-nitrogen at the 90th (green), 85th (red) and 80th (blue) percentiles.’
Even a cursory examination of the nitrate-nitrogen versus Fish IBI used shows lower Fish IBI and concentrations of nitrate nitrogen that exhibit toxic, not eutrophic, effects (NIWA, 2013). If a DIN level is set to protect against eutrophication then the nitrate toxicity attribute (Table 7 in the draft NPS-FM) is redundant as it is already protected by the eutrophication DIN attribute.

These inconsistencies suggest that some of the attributes were added in haste and should be properly peer reviewed before putting into the NPS-FM.

**Table 7: Ammonia Toxicity**

<table>
<thead>
<tr>
<th>Attribute Band</th>
<th>Median</th>
<th>95%-ile</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>≤ 0.03</td>
<td>≤ 0.05</td>
</tr>
<tr>
<td>B</td>
<td>&gt; 0.03 and ≤ 0.24</td>
<td>&gt; 0.05 and ≤ 0.40</td>
</tr>
<tr>
<td>C</td>
<td>&gt; 0.24 and ≤ 1.3</td>
<td>&gt; 0.4 and ≤ 2.2</td>
</tr>
<tr>
<td>D (bottom line)</td>
<td>1.3</td>
<td>2.2</td>
</tr>
</tbody>
</table>

The ammonia toxicity attribute states are considered scientifically flawed and Freshwater Solutions have commented on this previously (FWS 2014). The main issues with the ammonia toxicity attribute states centre around the fact they are:

a. Overly conservative, drawing from No Observed Effect Concentration (NOEC) data and/or estimates;
b. The A and B attribute states are applicable only to some water bodies in New Zealand, i.e., those that can sustain freshwater mussels.
c. The background documents are either not available or are based on a memo from an individual New Zealand Scientist that was not subjected to peer-review (NIWA 2014).

With respect to (a), as such the ammonia toxicity attribute states were developed using the same methodology used in the ANZECC (2000) guidelines and as such they are trigger values not fixed criteria that cannot be exceeded.

With respect to (b), the ammonia guidelines are based on 19 species, hence the A-band (99% protection) protects all species and it does so versus the most sensitive species (*Villosa iris*) at concentrations **10 times lower** than the NOEC for the species. In addition the B-band (95% protection) also protects all species and it does so at or below the NOEC for the most sensitive species (*Villosa iris*). At the C-band (80% protection) the only species not protected are four freshwater molluscs. Hence, based on NIWA (2014) the A and B-bands are protective of all species and the C-band is protective of all species except freshwater molluscs.

With respect to (c), alternative aquatic life criteria have been developed according to sound methodology are USEPA (2013). Compared with the NPS ammonia toxicity bands, the USEPA criteria are considered very robust, being a 69-page report with numerous appendices and tables, having been developed by a team of scientists and subjected to in-depth and lengthy peer-review.

The attribute bands need to be fully peer reviewed and revised before being included in the NPS-FM.
Question 31

In late 2015 Alliance Lorneville was granted a new wastewater discharge consent to discharge to the Makarewa River. This consent requires a significant upgrade of the existing treatment plant, at a capital cost of $20 million plus, so that the final discharge is to have concentrations of contaminants as follows:

- Total suspended solids < 50 mg/L
- Biochemical oxygen demand < 30 mg/L
- Total nitrogen < 45 mg/L
- Total Phosphorus < 11 mg/L

Implementation of the national bottom line as proposed in the NPSFM document, will mean that the proposed upgrade will not be sufficient to maintain concentrations in the Makarewa River at, or below, the national bottom line for DIN or DRP.

The DIN and DRP concentrations in the Makarewa River, upstream of the Alliance Lorneville discharge point, suggest that in-stream concentrations are not currently able to meet the proposed national bottom line levels for DIN or for DRP, with monitoring data indicating upstream median levels of 1.16 g DIN/m³ and 0.026 g DRP/m³ against bottom lines of 1 g/m³ and 0.018 g/m³ respectively. This means that regardless of the concentrations of wastewater discharged from the Alliance Lorneville plant, the proposed national bottom line levels for DIN and DRP cannot be met downstream of the discharge unless the concentrations in the Makarewa River decrease upstream of the discharge.

Alternatives were considered during the consenting process, but for different reasons, including what was considered unnecessary extra cost (ie the environmental benefits didn’t justify the additional expense) for some of the options, they were not selected. It is worth mentioning that this was an upgrade that was considered acceptable not only by the regulator, but significant stakeholders in the catchment including Iwi, only three years ago. Details of some of the other options considered, and what it would mean for upstream concentrations are described below.

As part of the options assessment to determine the Best Practicable Option for the upgrade at Lorneville, an option was identified that could achieve a total nitrogen\(^1\) median concentration of 15 g TN/m³. Based on a normal peak daily wastewater volume from the plant, the upstream median DIN concentrations in the Makarewa River would need to decrease to approximately 0.6 g DIN/m³ to enable this option to be discharged and to maintain the national bottom line of 1.0 g DIN/m³, downstream of the discharge.

If there was no phosphorus in the Makarewa River upstream of the discharge, then the maximum available median concentration for discharge in the wastewater would be a median of 0.7 g/m³, to maintain the national bottom line of 0.018 g DRP/m³. This may be possible with the upgrade described in the paragraph above, with additional lime precipitation pre-treatment for some waste streams, along with tertiary filtration and high rates of alum dosing for effluent polishing. The minimum reasonably expected phosphorus concentration that could be expected from a treatment

\(^1\) This assessment assumes that total nitrogen and total phosphorus in the treated wastewater becomes completely available (ie DIN and DRP) in the receiving environment.
plant of this nature would be 0.5 g TP/m³, which would require the upstream phosphorus concentration to be reduced to 0.005 g DRP/m³. This would represent an 80% reduction in DRP in the Makarewa River upstream of the plant.

The estimated capital costs for the implementation of the upgraded facility will be in the order of $30 million, with annual operating costs in the order of $2 million. This would be $10 million more that the substantial $20 million proposed to be spent and assumes significant improvement in the Makarewa River upstream of the discharge, ie nitrogen would need to improve by 50% and phosphorus 80%.

If improvements to the catchment upstream of the discharge decrease the DIN concentrations to below 1.0 g DIN/m³ but not as low as 0.6 g DIN/m³, then the lowest total nitrogen concentration that could reasonably be expected from a wastewater treatment system would be 5 g TN/m³, however, this would require additional upgrades to the wastewater treatment plant to that described above. This would require an addition $8 million capital cost above the $30 million outlined above, along with additional external carbon source dosing at an additional operating cost of approximately $0.5 million/yr. At this median rate of discharge (5g TN/m³) the DIN concentration upstream of the discharge would need to reduce to approximately 0.87 g DIN/m³ to maintain the proposed national bottom line for dissolved inorganic nitrogen. This still represents a required decrease in DIN of 25% in the catchment above the discharge point.

In summary, the challenges for the Makarewa catchment and Alliance in achieving the bottom lines could represent a capital spend of almost $40 million for one processing plant. Additional operational expenses would represent a significant portion of our operating profit. This would be on top of the $14 million proposed at out Mataura plant. It is unclear how these limits would affect our other plants which discharge into Council Trade Waste systems and water races, but it is possible that Alliance may have to contribute to upgrades elsewhere. Combined, the costs of achieving bottom lines could be economically crippling for the future of some of our processing plants and likely see Alliance and other companies close plants and meaningfully impact unemployment in local communities and farming families.

**Reducing sediment**

**Question 33**

We oppose the five-year audit and measurement on the programme’s success for sediment reduction in all catchments. Improvements in water quality, including sediment levels, are related to the state and trends in the health of the freshwater system and not all estuaries will need a reduction in sediment.

Sediment levels should be managed over time if they are excessive to achieve the community’s aspirations for a desired level of ecosystem health, swimability, or cultural values. They should be reduced where sediment levels exceed national bottom lines, or the current state is worse than what is desired by a community. Numerical attribute states need to consider natural processes and be tailored to the specific freshwater body type in its catchment context, and tailored to local communities.
Question 34

The suspended and deposited sediment attributes are based on the River Environment Classification (REC) and there are concerns about how these are applied to main stems of rivers, such as the Mataura which is all classified as “upland”, and whether they account fully for natural variability down a catchment. The attribute band classification is complicated and the tables should be removed until fully assessed. It is also not clear whether the limits apply to medians or some other form of statistic. If they remain then both tables should be in the Appendix 2B which initiate action plans if below the required attribute state.

Higher standard for swimming

Question 36

Alliance agrees with the recommended approach to managing water quality at swimming sites, and has some comments generally about what is proposed.

Having the standards set for times when people may swim in water, ie summer, is appropriate, as opposed to having standards all year around under a variety of different flow conditions when people are unlikely to be swimming.

Alliance is supportive of the proposal to use quantitative microbial risk assessments to obtain a more thorough assessment of risk. Without these assessments, Regional Councils will have no option to set subjective thresholds based on e. coli targets with no scientific basis or correlation with infection risk, which would likely lead to risk being underestimated (at the peril of public health protection) or overestimated resulting in wasted resource.

Draft NPS-FM

Question 40

There is a requirement for every Regional Plan to include the following objective:

The management of freshwater in our region must be carried out in a manner that give effect to Te Mana o te Wai, as it is described in the National Policy Statement for Freshwater Management 2019 and understood locally.

The objective and other similar directions within the draft NPS are superfluous as the RMA (i.e. Policy 1) already requires that National Policy Statements be given effect to. This clause simply repeats the legislative requirement and is therefore unnecessary. It is also our view that councils should be giving effect to the NPS, rather than Te Mana o te Wai and on that basis councils and regional plans need to ensure they understand what Te Mana o te Wai means within their regions and then develop objectives and policies to fit this appropriately.

Without greater direction or specificity as what exactly the Te Mana o te Wai is within each catchment or region, this objective could be interpreted as an “avoid” type objective. There will be varying views as to how Te Mana o te Wai is to be given effect to throughout various groups of the community, and there will be difficulties in water users providing evidence that this objective is able to be achieved if there remains discrepancies in views throughout the community.
We consider that references to giving effect to Te Mana o te Wai throughout the draft NPS should be removed.

**Better managing stormwater and wastewater**

**Question 46**

Alliance opposes wastewater discharge standards being prescribed by a National Environmental Standard and does not believe it will necessarily achieve better environmental performance, but will certainly significantly increase the risk of wasted resources.

Wastewater treatment is a very technical and costly exercise with probably all wastewater treatment plants across New Zealand being uniquely designed to recognise the specific environmental requirements of their discharge location, wastewater treatment space constraints, location constraints, technical constraints and financial constraints.

Having prescribed performance measures without consideration of any other factors is a significant concern to Alliance.

As is currently the case, all discharges should be subject to a Best Practicable Option assessment through the existing consenting framework. This allows the discharge solution to be tailored to the specific requirements of the receiving environment so that the effects of the activity are acceptable.

Over time, the current approach has resulted in Alliances discharges achieving increasingly better environmental outcomes to the point in some cases where ecological effects are so minor as to be not apparent. Where there are remaining effects, Alliance is already committing significant capital to address them.

The National Environmental Standard is unnecessary for Alliance and this should be the case for other operators if consent application are prepared appropriately and then assessed by regulatory authorities appropriately.

**Restricting further intensification**

**Question 51**

The proposals to restrict any land use change, regardless of existing levels of discharge, will effectively lock in current land uses. This is essentially a form of grand-parenting which will reward high intensity, high discharge systems, while penalising low input, low discharge systems. High intensity systems will be rewarded with the greatest flexibility and choice in how to adapt their farming systems, while low intensity systems will be given virtually none.

It is akin to trying to reduce speeding on our roads by making everyone drive slower by the same amount, rather than the smarter approach of getting speeding drivers to reduce to the speed limit while allowing those driving more slowly to continue within safe speed limits.

For example, the average nitrate leaching for a sheep and beef farm is 17kgN/ha/yr, while more intensive farming systems leaching can average 50kg/ha/yr or even significantly more. Under the
current proposals, those leaching at the higher end of the scale while be allowed to remain at these extremely high rates while adjusting to the new regulations, while low input systems will be restricted ability to adapt to newly created costs of implementing the proposal.

Given the significant costs for low intensity systems to meet other regulatory proposals and the inability to change land use, due to being restricted to a very low base system, farmers would have no ability to adapt to the new extra costs created by in the proposal. As Local Government New Zealand modelling has shown, it will result in a significant number of sheep and beef farms becoming unviable due to an external imposition.

These grandparenting provisions put in place a de facto allocation system that will have long term impacts beyond those recognised by the Government’s analysis so far. These include changing land values based on the allocation of nitrate leaching, reducing the viability of extensive sheep and beef farming systems – as well as other low intensity systems. They will remove their ability to innovate and adapt their farming systems to match the natural capital of the land. Constraining these rural businesses would drive rural communities closer to or over tipping points to maintain social cohesion and support, as isolated communities drop below a critical mass.

These policies will not improve freshwater health, as nitrate leaching’s impact on freshwater health is determined by concentration. While hill country headwaters would be ecologically healthy, further downstream the same problems would persist with no meaningful improvement to freshwater health. Extensive farm businesses would be decimated and rural communities would be isolated and socially impoverished.

Any changes to nitrate leaching must bear reality to an individual farm’s nitrate leaching intensity, with allowances made within the broader context of other proposed changes, so that low input farming systems can afford to achieve the goals of the proposal.

Farm plans

Question 54

We support farmers having a tailored land and environment plan that targets the key issues on any farm, and advocate for their use through the Alliance Farm Assurance Program. However we do not support this being used as a regulatory tool or sitting within national regulations.

Having a compulsory freshwater module in compulsory farm plans, with the associated support structures, will create expensive overheads for farmers which will distract and detract from on the ground environmental activities. Essentially, a tool that enables farmers to set and achieve goals based on needs tailored to their farm business becomes an expensive process that emphasises on bureaucracy, losing focus on, and commitment to, achieving an intended environmental goal.

Freshwater module farm plans will grandparent emissions to historic levels, without regard to impact or contribution to the state of the freshwater system, then seek reductions from this state. This is inefficient and likely to be ineffective at addressing specific freshwater issues that relate to the farm.
For example, for an extensive farming operation in a catchment where sediment is an issue, it would be effective and efficient to focus action on erosion control and mitigation rather than diluting resources across all four potential contaminants.

The cost of compliance or the level of on farm action should be proportional to the environmental impact of the farm on freshwater health, and the freshwater module farm plan approach fails to take account of this.

As an alternative, Alliance would like to see the Government provide additional support for industry-led farm assurance schemes or their Land and Environment Plans and activities to support catchment initiatives.

**Immediate action to reduce nitrogen loss**

**Question 58 – 64**

Alliance supports option one for a nitrogen cap and high discharging land uses be required to reduce to this cap. However, the actual threshold should be proportionate to the level of overallocation of nitrogen. High intensity systems that have high nitrate leaching rates are required to make more of a reduction while low intensity systems are given flexibility within the cap to offset increased costs. Alliance also support an exemption for hill country pastoral farms.

Alliance opposes option two, as the proposed cap on total nitrogen applied in fertiliser per hectare per year would lock in land uses and is unlikely to achieve improvements in reductions in nitrate leaching. Essentially, removing any subtlety for appropriate applications and use that are suitable and relevant to farming systems and their environment.

Alliance also opposes option three, which would grandparent all current land uses while requiring mandatory freshwater modules in farm plans for the listed catchments without setting specified reductions based on the proportional contribution of any farming activity.

**Excluding stock from waterways**

**Questions 65 - 68**

Alliance supports the focus on freshwater bodies that are permanently flowing and greater than 1 m wide on low sloping land that is of a 5 degree slope or under, but oppose the use of a stocking intensity proxy, and seek this be deleted.

Alliance opposes requirements to fence extensively farmed animals out of waterbodies, particularly on hill country properties where fencing is prohibitively expensive due to the terrain, length of fencing required, and significant maintenance costs due to extreme weather conditions.

Alliance oppose the blanket 5 m setback and the requirement to move existing fences due to the significant loss of productive land on farmer shareholder farms, and the sizeable costs of moving all fences to comply.

For more extensive farming systems like sheep and beef farms on more diverse landscapes, the risk to freshwater health is from the overland flow of contaminants into a waterbody, not livestock directly being in the waterbody due to the lower stocking rates. In these situations, fences would do nothing to stop overland flows. In these circumstances, the identification and management of critical
source areas and overland flow are a more efficient and effective way to manage the risk, rather than blanket fencing and blanket riparian setback distances.

In short, a blanket requirement to fence may be easy to measure, but has the significant potential to divert resources away from activities that would achieve a greater environmental benefit (e.g., erosion control).

**Controlling intensive winter grazing**

**Question 69**

Alliance supports the establishment of standards based on Industry Good Management Practice Principles, such as the application of ‘strategic grazing principles’.

However, Alliances opposes the inequitable treatment of low slope and other land in relation to winter grazing on forage crops that permits winter grazing on forage crops for low slope land, but requires a consent for land which is above 10 or 15 degrees in slope. Environmental risks associated with winter grazing on forage crops relate to the intensity of the operation, the soils it occurs on, the way the activity is being undertaken and the proximity to a receiving freshwater body. Slope alone is too simplistic.

In relation to land above 10 or 15 degrees slope, the risk to the environment is not greater than on flat land, and should be able to be managed through a permitted activity consent – e.g. the risk to the environment of winter grazing on forage crops could be less than if the activity is undertaken on flat land with flow pathways such as on gravels, or where it drains through the soil.

Alliance also opposes the pugging standard in the permitting activity rule for winter grazing on forage crops, as the standard would effectively render most winter grazing activities non-compliant regardless of the actual impact on soil health or loss, or animal welfare.

Alliance also opposes grand-parenting standards such as “no greater than 2013/14 to 2018/19 years” through consent, as the additional and significant costs required to get resource consent will lock in existing land uses and not allow for the flexibility required in farming systems to meet the other additional costs from these policies.

**Feedlots and stock holding areas**

**Question 71**

Alliance supports the definition of feedlots, and in general the identification and management of activities which can pose a higher environmental risk when not adequately managed.

**Summary**

Alliance supports the ambition of the discussion document to improve water quality where improvements are needed, however the discussion document has the potential to impact on two very connected, but different components of our business. These being matters that affect our
processing operations and those that affect our shareholder farm suppliers. Some matters impact on both.

Key points from our submission are:

- Water quality, ecological health, Te Mana o te Wai, human health should be considered equally alongside economic and social wellbeing as part of the sustainable management of natural and physical resources as per the purpose of the RMA.
- Alliance does not believe a National Environmental Standard for wastewater or stormwater discharges is needed. These are already consented activities, and if done properly, should be appropriately managed through the Best Practicable Option assessment as part of the consenting process.
- The nutrient bottom lines are not based on sound science. They are going to be extremely challenging, and maybe be impossible to meet while maintaining viable processing plants, including one of the largest processing sites in New Zealand.
- The attribute bands for sediment, nutrients and ammonia need to be fully peer reviewed and revised before being included in the NPS-FM.
- Bottom lines for nutrients, sediment and ammonia will not be appropriate for all freshwater sites, meaning an unnecessary use of significant resources to achieve the proposed bottom lines.
- Alliance does support the approach to managing swimming sites and there are a number of good features in the methods proposed.
- In regards to our farmer shareholders, Alliance supports a fair approach where each farmer is expected to do their bit in proportion to their impacts, in an effective and workable manner. Alliance requests that the government re-think its approach to restrictions on land-use change and to the grand-parenting provisions in the freshwater module and hill country cropping. In particular, we request that there is recognition of low N leaching farms and some flexibility provided for them.

David Surveyor

Chief Executive

Alliance Group Limited
References


