Submission on the Essential Freshwater Package

Background:

This submission is from Southland’s Mid-Aparima Catchment Group. This group is a sub-catchment of the Aparima Freshwater Management Unit (FMU) and was formed in early 2016. We are predominately farmers but our membership is open to all community members within our area. Our group fits between the Upper and Lower Aparima Catchment groups, and represents stakeholders from Otautau, north to Wreys Bush Nightcaps Road to the Wreys Bush bridge, encompassing the Bayswater area. We are passionate about where we live and contributing sustainably to our community. We value water quality, as well as the economic, social and cultural progression of our community, the whole of Southland and New Zealand.

At the last census approximately 700 people lived in Otautau, its population and livelihood are strongly influenced by the prosperity of agriculture and forestry. Prior to the dairy expansion the major type of agriculture was sheep farming. There are now approximately 65 dairy farms within our catchment as well as some sheep and some support farms.

1. The values of our Catchment Group include:
   (a) Improving water quality in the Mid-Aparima catchment area
   (b) Building relationships within our community – we are in this together
(c) To increase awareness and interest around water quality, and interest in local and national policies regarding this
(d) To provide creditable education, based on science, to promote best practice management
(e) To work productively with all other organisations involved with water quality

2. The goals of our Catchment Group include:
(a) To have an inclusive group that includes members from all sectors of our community
(b) To represent the interests of members of our group to local and national policy makers
(c) To build and maintain good working relationships with policy makers and a good reputation amongst the community
(d) To encourage our members to be leaders with respect to technology adoption and good practice management
(e) To investigate and improve water quality and the environment at a catchment level

Trade Competition:
We could not gain an advantage in trade competition through this submission.

Our Submission:

General Responses to the Proposals:

Consultation Process and Detail:

- Overall we are disappointed with the lack of robust science and economic analysis behind the plan. The changes discussed are significant and within a short time frame and deserve much more thorough economic analysis and scientific investigation.
- We are disappointed with the process around this consultation or lack of consultation. The initial six-week timeframe is too short for such a significant policy proposal. Spring is a busy and stressful time for farmers, and this — alongside the Zero Carbon Bill, Mycoplasma bovis and the pricing of agricultural emissions — has made things more stressful for farmers. Also not having a select committee process and proper economic analysis makes us question the legality of this process and how it complies with the RMA.
The “Magnitude of the Benefits and Costs” and the three “Impact Scenarios” are weak, overly simplistic and lack detail. Consent costs in Southland are significantly higher than $3000 (it is not uncommon for the consent process to cost more than $100,000). Some farms already have telemetry devices and the information from these is not utilised by the Regional Council effectively. Below are the calculated costs for re-fencing a 270ha dairy farm within our catchment:

- Re-fencing waterways (10,495m to re-fence) – between $49,011 and $90,047
- To plant out the 5ha in riparian plants - $122,000
- The value of the 5ha that is out of production - $246,632
- Total cost of re-fencing and riparian planting for the 270ha dairy farm is $307,843 to $458,679. This farm owns two runoffs which will cost approximately half of this again to do. This doesn’t include consenting, farm plan or telemetry costs.

Importance of Community:

- Rural mental health is a significant problem. There are far too many rural suicides already and it is important that this process has enough support for farmers and the rural community.
- The Aparima Community and Environment (ACE) project is focussed on both improving the environment and helping the community. It is important that any incoming regulations do not stifle this farmer-led project.
The Southland community as a whole has greatly benefited from the intensification/land change that has happened in the last 20-30 years so it is unfair to target agriculture excessively.

Existing Regulations:

- A lot of work (and expense) has gone into the Southland Water and Land Plan – we don’t want this to be thrown out. One size doesn’t fit all and rules/regulations need to be targeted at a regional level and at a catchment level.
- We need to reward those that are already doing the right thing and focus on the laggards
- There are some quite strict environmental regulations from milk/meat companies already and we don’t need to double up on these
- NZ is an efficient protein producer – if regulations significantly impact our production then this shortfall will be made up by less efficient producers
- Any prescriptions/regulations need to be practical and workable at a farm level. They also have to allow for the use of current and future innovation.

Responses to Specific Points:

- Freshwater Farm Environmental Plans – we agree that these should be mandatory but want them to be overseen by industry e.g. peer reviewed rather than nationally regulated. There is a benefit to the environment to having them – this was shown in the baseline survey for ACE where farmers that had farm environmental plans (FEP) were considering environmental factors in their daily farm decisions as shown in the figure below.
Farm environment plans need to include a nutrient budget from Overseer. There needs to be funding/support to increase capability of suitably qualified people to ensure timeline (by 2025) is achievable. Also we don’t want to punish farmers that already have plans e.g. Appendix N in Southland Water and Land Plan – additions to these need to be practical.

- **Stock Exclusion** – over 98% of waterways on dairy farms are already fenced (water accord at 3m). Moving these existing fences to a 5m width would be a large cost with no scientifically proven benefit. Requiring re-fencing also punishes farmers who have been proactive and fenced off their waterways already. Fencing and/or allowing buffers at critical source areas is more important than the average width. The width should be measured from edge of water. Small (non-accord) waterways should be addressed through farm plans. We need clarification around how gradient is measured.

Excluding stock will not fix water fowl or human contamination. The recent ESR “Sources of Pollution in the Aparima Freshwater Management Unit” Report used faecal source tracking (FST) to determine the source of the contamination (wildfowl, ruminant and human) at nine sites within the Aparima FMU. Conclusions include:

(a) Waterways in the Aparima FMU are vulnerable to high levels of faecal contamination, particularly following rainfall. Under base flow conditions, wildfowl appear to be the dominant source of pollution, likely due to direct defecation into the water and along banks and verges.

(b) Ruminant signatures were detected at all sites for which base flow samples were collected, although at times only at trace levels. This suggests that direct deposition by livestock, either as a result of free access to the stream or wash in at dairy crossings, and/or the discharge of farm effluents to the water are routes of transmission for faecal material to waterways. Following rainfall, ruminant animals are the dominant faecal source, with both overland flow/surface runoff and subsurface flow through tile drains being significant routes of transmission of faecal materials to waterways.

(c) Human faecal contamination was identified at six sites, with repeated detection at two of these. Potential sources are difficult to identify, but may include failing septic tanks, stormwater and urban run-off, or leaking or cross-connected sewerage infrastructure. Human faecal contamination is considered to pose the greatest risk to human health, and further investigations at these sites should be undertaken to identify the specific source(s) and transmission routes. This could include the inspection of sewerage infrastructure and/or the use of tracers such as synthetic DNA.

The below graph from the report shows the dominance of wildfowl as a contributor of faecal contamination.
- **Reduce Nitrogen Loss** – our catchment group is within one of the catchments that would be targeted (Aparima River). We don’t want input based rules (e.g. a nitrogen cap) but agree with using farm plans (with nutrient budgets) and targeting the highest nitrogen leachers (e.g. 90th percentile) within in a catchment (option 1) as this would lead to immediate reduction in nitrogen loss within a catchment.

- **Standards for Stock Holding Areas** - there are already regulations around feed pads within the Southland Water and Land Plan – we do not want duplications. We agree with sacrifice paddocks being excluded and also request that calf sheds be listed as an exclusion.

- **Standards for Intensive Winter Grazing** – these need to be location specific and not “one size fits all”. There are different challenges with intensive winter grazing in Southland compared to the rest of the county. Therefore, we support industry-set standards and believe that a lot of the appropriate standards are already covered in the Southland Water and Land Plan. We do not support the pugging rule as this would be impossible to measure practically. We disagree with eliminating any winter grazing on soil that may be mole or tiled drained as this would be near impossible to restrict practically in Southland. A lot of these tiles have been in place for 30 plus years and their exact locations are unknown. Instead, we support the use of good management practices and industry-set standards to significantly decrease the risk of intensive winter grazing on soils that may be drained. Also the requirement to get winter grazing paddocks re-sown within a month is not practical and farmers in Southland already re-sow as soon as possible to minimise the length of time that the paddock is out of rotation for.
It is also important to consider the impacts on the community if intensive winter grazing is unduly regulated, as income from this is a significant contributor to the Southland economy.

- **No Further Intensification** – we support this being output based e.g. further intensification is allowed if activity does not increase nitrogen, phosphorus, sediment or bacterial discharges. This allows the use of innovation to reduce one’s footprint. We need clarification around how sediment and bacteria discharges would be quantified as current tools (e.g. Overseer) do not allow this.

- **New Bottom Lines for Nutrients** – we are against the proposed bottom lines for nutrients as these are not based on science and will have significant economic impacts on the community which have not been addressed. There is a very poor correlation between nitrogen (DIN), phosphorus (DRP) and Macroinvertebrate Community Index (MCI). The independent Local Government New Zealand report ‘Initial Economic Advisory Report on the Essential Freshwater Package’ reported:
  
  (a) “not only is there little evidence of a causal link, there is little evidence of a strong correlation between nutrients and MCI. Consequently, the cost effectiveness of policies targeting nutrients is likely to be questionable.”
  
  (b) “A dollar spent on reducing nutrients may be expected to achieve less improvement in MCI scores than a dollar spent on other actions (e.g. riparian shade, sediment reduction, or stream habitat restoration).”

  (c) “DIN and DRP as policy targets would be expected to fail the efficiency test for policy. This would imply that even if the targets for DIN and DRP may be suitable in some locations, they will not be in others again implying a policy that is neither cost effective nor efficient.”

Modelling work referred to in this report shows that to achieve the new DIN and DRP bottom lines in the 1.1 million ha Waikato/Waipa catchment, it would require 68% less area in drystock and 13% less in dairy. This area would need to go to forestry. It is likely that similar land change would be needed in Southland which would have a significant impact on the community.

The proposed approach to suspended sediment is overly complex and has resulted in national bottom-lines that are well below any peer-reviewed effects-based levels of turbidity. We support measuring ecosystem responses (namely, periphyton and macroinvertebrates) and taking an adaptive management approach where community-set outcomes are not met.

Any nutrient limits should be regionally decided (as was the plan in Southland after the Water and Land Plan) and based so that local communities can be involved with the process and decide what limits they want.

Thank you for considering our submission. We ask that you work with farmers, the rural community and catchment groups, not against us, to continue our commitment to improved water quality outcomes for all New Zealanders.
Signature:

Personal details removed

Date:  30th October 2019