WAIKATO REGIONAL COUNCIL PROPOSED WAIKATO REGIONAL PLAN CHANGE 1 - WAIKATO AND WAIPA RIVER CATCHMENTS

Submission Form

Submission on a publically notified proposed Regional Plan prepared under the Resource Management Act 1991.

On: The Waikato Regional Councils proposed Waikato Regional Plan Change 1 - Waikato and Waipa River Catchments

To: Waikato Regional Council
401 Grey Street
Hamilton East
Private bag 3038
Waikato Mail Center
HAMILTON 3240

Complete the following[j1]

Full Name(s): Dr Christopher Joseph Lovell

Phone (hm): 07 8767503

Phone (wk): 07 8767503

Postal Address: Moeatoa Station, 1056 Mangatoa Road, RD 5, Te Kuiti

Phone (cell): n/a

Postcode: 3985

Email: lovell.family@farmside.co.nz

I am not a trade competitor for the purposes of the submission but the proposed plan has a direct impact on my ability to farm. If changes sought in the plan are adopted they may impact on others but I am not in direct trade competition with them.

I wish to be heard in support of this submission.

If others make similar submissions, I would consider presenting a joint case with them at the hearing.

WAIKATO REGIONAL COUNCIL PROPOSED WAIKATO REGIONAL PLAN CHANGE 1 - WAIKATO AND WAIPA RIVER CATCHMENTS

Signature date

Signature date

WAIKATO REGIONAL COUNCIL PROPOSED WAIKATO REGIONAL PLAN CHANGE 1 - WAIKATO AND WAIPA RIVER CATCHMENTS

Introduction

Thank you for the opportunity to submit on the Waikato Regional Councils proposed Plan Change 1.

My name is Dr Chris Lovell. My wife is Caroline Lovell and we have one son, William, in his final year at school. We are sheep and beef farmers in the West Coast Catchment.

We have been farming in New Zealand for 15 years, 4 years at the present address and 11 years in Marlborough. Prior to that, I worked for 15 years as an Environmental Scientist for the British Government Natural Environment Research Council. Through the Institute of Hydrology and as part of the British Aid Programme, I was involved in planning and managing water resource and integrated catchment management projects in Africa, working at National Government, Provincial, District, and Community levels. I hold a PhD in Soil and Water Conservation obtained in Australia in the 80's. It is with this mix of scientific and practical farming experience that I offer the following observations and suggestions.

In summary, the following might help going forward:

- Base regulations on actual water quality data measured and monitored at appropriate scales, not on model outputs *per se*, and not on blanket or region-wide proposals which are inefficient, inequitable and untested scientifically.
- If you are starting to see that a large proportion of the problem comes from a small proportion of the area and water quality data highlights hotspots, work on these first while gathering more information at a finer scale for the remaining areas and land uses.
- Hold *"Water Quality Day"* – a region-wide day for on-farm collection of water quality data. Self-test kits or at least sample bottles for farmers to get them involved and start to feel ownership of the process on their own farms. A simple stream sample taken at the exit of a land use or farm is the incoming water for the next. Yes, there will be cheats and gaps and anomalies, but a picture of the range and types of problems will start to emerge and provide a base from which to work further with these people on the ground.
- Initiate several instrumented small catchment studies representative of our primary land uses (dairying, hill-country sheep and beef, forestry, urban, and native bush) measuring all four primary pollutants and quantifying the cost-effectiveness of different land and water management options to control these pollutants. Develop appropriate extension materials based on this science, and use these catchments as training grounds for extension staff and demonstration sites for farmer groups.
- Ensure sufficient feedback loops to allow integrated appraisal of social, economic and environmental costs and benefits as the Plan proceeds, and meaningful two-way dialogue between all levels (National, Provincial, District and Community), to allow requests for help or more information or to report honestly on lessons learnt, both successes and failures.

WAIKATO REGIONAL COUNCIL PROPOSED WAIKATO REGIONAL PLAN CHANGE 1 - WAIKATO AND WAIPA RIVER CATCHMENTS

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 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, including Objectives, Policies, or other rules, or restructuring of the Plan, or parts thereof, to give effect to the relief sought.

WAIKATO REGIONAL COUNCIL PROPOSED WAIKATO REGIONAL PLAN CHANGE 1 - WAIKATO AND WAIPA RIVER CATCHMENTS

The specific provisions my submission relates to are:	My submission is that:		The decision I would like the Waikato Regional Council to make is:
	SUPPORT / OPPOSE	REASON	RELIEF SOUGHT

WAIKATO REGIONAL COUNCIL PROPOSED WAIKATO REGIONAL PLAN CHANGE 1 - WAIKATO AND WAIPA RIVER CATCHMENTS

Schedule C 'Stock exclusion from every river, stream, drain' and Schedule B 'Nitrogen reference point' for low and high emitters.	I oppose.	The reasons for this are: The unknowns at present and the inequality these blanket generalized regulations create. We need confidence that what we do will have a positive impact on water quality. Will fencing off all extensively grazed hill country streams and drains really improve water quality? Where is the data to show this? Will capping low-end emitters really address nitrogen pollution if the problem continues to be the high-end emitters? Again, where is the data to show this and is either approach fair or equitable? Any major investment decision requires hard scientific facts. Fencing-off intensively-farmed dairy cattle on easy country may be practical and warranted. But is this true for extensively-farmed beef cattle? Are the hill country streams polluted – we don't even know this yet. We need more information on water quality at a local level and on the impact of such things as stocking rate, slope and grazing rotation, leading to credible cost/benefit analyses for a choice of management options. Personally, we farm about 2850 stock units of sheep (5.18 su/ha) and 1450 of beef cattle (2.63 su/ha) on 100 ha of alluvial flats and 450 ha of relatively steep hill country. This means we run about 150 breeding cows and keep the offspring for 2 years to finish or introduce into the breeding herd. We don't use nitrogen fertilizer.	I seek that the provision is amended as set out below: Avoid top-down blanket regulations, especially at a scale where they are not equitable or practical or are untested scientifically. A more integrated analysis is needed to develop the regulations. Conduct the science required to fill in the gaps in our knowledge (see below). Develop the regulations based on this science and specific to the areas that need them.

		The flats are a flood plain laid down over centuries as silt carried down from the native bush (DOC Reserve) surrounding the farm. This natural sedimentation will continue irrespective of regulations. The farm is our sole source of income and the beef herd provides 35 per cent. If the Plan Change were enforced today as written, we would not be able to comply and would be forced to stop farming cattle. It would be physically impossible and financially crippling to fence (and re-fence) every stream and drain on this farm laced with waterways flood-prone, naturally unstable and which move or meander whether or not there is livestock or fencing. Moreover, we have no scientific data available to us to say whether there is a water problem or where fencing would help. And it seems unlikely that Banks would make finance available for something that will not increase our production. The Plan Change in general seems to lack the Logical Framework necessary to achieve balance between Environmental, Social and Economic goals. For example, if hill country farmers as a group are forced to stop beef farming because of simplistic fencing regulations, any environmental benefit may actually be outweighed by social and economic costs. Local livelihoods and ratable land values will be compromised, and in the wider area those also affected will include beef processing plants, stock agents, contractors, vets and even consumers who presumably will have to be happy to pay more for imported beef.	

3.11.4.7 Commission appropriate scientific research to inform any future framework	I support	The potential Social, Economic, Physical and Environmental impacts of the Plan Change are huge, for Waikato and for all Provinces of New Zealand where an equivalent plan is being developed. It is imperative that we get it right and that decisions are made based on numbers and not emotions. We need better science and monitoring to really nail what we need to work on, where we need to do it, and how we need to do it. For the Plan Change to be equitable it must adopt a polluter-pays-principal. This is very different to the current blanket interventions proposed. It is okay, for example, to distinguish between intensive dairy farming on lowlands and extensive beef farming in the hills. In fact, we must for the Plan to be fair. The question of scale is critical. Measurements are needed at a scale fine enough to say where exactly the pollution is coming from. Processes and sources must be differentiated and cost-effective control measures identified for these sites. Sub-catchment scale is too coarse if it amalgamates the effects of different land uses. Farm-scale probably offers the best solution because this helps farmers to be involved from the outset, creates trust from the bottom-up, and generates local ownership of any management interventions where pollution is identified. Farm-scale data is also required by models such as Overseer.	I seek that the provision is sent back to Government as an urgent request for a complementary scientific research and extension program to support the National Policy Statement for Fresh Water Management. Specifically to address the water quality issues and unknowns highlighted by the various submission processes around the country. This science to provide the facts, evidence and data needed to make the decisions now facing Farmers and Council staff alike. A series of publications and extension materials that might result from such a program might include: • Water quality in New Zealand: quantifying the impact of different land uses. This is the baseline situation. Maps of local level data measured at farm–scale, for dairying, hill country sheep and beef, horticulture, forestry, urban and native bush. Highlighting pollution hot-spots on a stream by stream basis where interventions are justified. This should help everyone know if, when and how they are polluting at present.

		Regional Councils perhaps have a right to feel let down by national Government. The Policy Statement set a direction some 10 years ago but it seems did not go on to consider the research that would be needed to answer the questions we now face on the ground. Generally, there is not going to be sufficient understanding and capability in regional and district councils at the moment. Changes are being proposed with the best of intentions but not yet with sufficient facts. Council cannot make good decisions or develop relevant extension materials without at least some basic water quality data at farm-scale and some scientific understanding of where and when different interventions will or will not be beneficial. Farmers will not be able to make rational decisions to invest and extension staff appointed by Council to work with these farmers will not be able to truly advise. Clearly the present situation is not ideal when we on the ground don't even know if we are polluting, if baseline water quality data is available for our own streams, or if the expensive interventions proposed have been scientifically validated as cost-effective. The Plan Change itself recognizes that it is a work in progress. While it may be sensible to halt further intensive land use change with immediate effect, it may also be necessary to pause and take stock on other aspects until missing information and relevant extension materials become available. A pilot project which instruments and studies in detail a number of	• The impact of cattle stocking rate, grazing rotation and land slope on water pollution by nitrogen, phosphate, sediment and pathogens. How many cattle can we safely run and where? What interventions will be cost-effective? • Social and economic appraisal of water quality management. The potential impacts on livelihoods and land values of decreased hill country beef farming, capping land use at current levels, and afforestation (if that is to come and which itself will alter water quality, acidity, invertebrate life etc) • Options for riparian planting without fences. Rooting patterns and plant heights for bank stability and pollution control, high growth rates and hardiness against stock. • Meeting in the middle – the reoccurring problem of top-down planning versus bottom-up implementation. Lessons learnt here and elsewhere. Successes and failures of the collaborative stakeholder group and submission process.

		small farm-scale catchments representative of our principal land uses would go a long way to providing the answers and extension materials needed and allow full implementation to be attempted. Perhaps noteworthy is a publication by McDowell RW and Nash D (2012) A *review of the cost-effectiveness and suitability of mitigation strategies to prevent phosphorous loss from dairy farms in New Zealand and Australia. Journal of Environmental Quality 41: 680-693.* This is the sort of thing I think is needed, if it could be repeated for each of our principal land uses and pollutants. p.s. Some of the problems and gaps in information outlined above are a reflection of the missing investment in Agricultural Science seen in New Zealand and worldwide over recent decades. I read today of the 'Our land and water' National Science Challenge, which is investing 96.9 million over 10 years hosted by AgResearch and six other Crown Research Institutions. Perhaps this is the complementary scientific program needed?	Getting farmers involved from the outset enough to feel ownership. Filling in the information gaps. • Rationalizing the variety of regional plans, rules and regulations. A national conference may help avoid a fragmented approach, bring together the experiences from the various submission processes, and identify the common scientific needs around the country.

Yours sincerely[j2]

Christopher Joseph Lovell

_____

Signature Date