Submission to Proposed Waikato Regional Plan Change 1 - Healthy Rivers

Thank you for the opportunity to present to you today.

I appear on behalf of the Advisory Committee on the Regional Environment (ACRE). This presentation supplements our submission, which identifies specific changes sought in particular sections of the plan. Rather than simply reiterating our original submission we will summarise it and talk about what we see as our most important messages and provide supporting examples for them. I am Anna Casey-Cox, Chair of ACRE, and with me is Kemble Pudney, immediate past chair and the coordinator for preparation of our submission.

ACRE is a Waikato Regional Council advisory committee whose purpose is to act as an environmental advocate by promoting the protection, preservation, conservation and enhancement of the natural values and character of the Waikato Region.

It carries out this role by networking and promoting conservation and good environmental practices in the region, acting as a forum for ideas and concerns on environmental matters, making recommendations on any environmental matters that need extra investigation and research, advising the Regional Council on environmental policy and alerting it of environmental matters in need of attention and liaising with groups sharing similar aims.

Members of ACRE come from a variety of backgrounds including farming, horticulture, environmental conservation and restoration, farm forestry, and reserves management among many others. Collectively we are involved in some sixty community environment groups. Such groups help create a context in which environmental matters are seen as a collective responsibility, and can help set the context in which water quality measures undertaken at a sub-catchment level are seen as both acceptable and desirable.

ACRE believes the proposed Plan Change is WRC's most important current initiative. Overall, it has our strong support; we note that its adoption is a statutory requirement, particularly in relation to the Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010, and the need for it is well supported by the science and the thorough collaborative and consultative process that has led to this point.

We accept that the Plan Change is not perfect, particularly in this first iteration, but in our view the urgency to make a start outweighs the areas of difficulty. The risk is that concerns about the impact of the plan change and criticism of some of its detail will lead to lengthy delay in it becoming operative or else to dilution of its provisions to the extent that it will fall well short of reaching its goals. We suggest a two-fold approach to address this risk: first, fine-tuning to the plan itself; second, a continued effort to explain and interpret the plan to those directly affected by it, emphasising the pressing need for and long term benefits of the practices mandated by the Plan Change. We also emphasise that Plan Change 1 is only the first step and will not in itself achieve the long term targets for the Waikato. An important next step is to mandate and facilitate sub-catchment level analysis and water quality management, and we will talk about this further.

We emphasise that any minor amendments to facilitate the introduction of the Plan Change should not allow for any overall increase in nutrient and pollutant inflow to the region's waterways above what the plan in its present form allows. Where areas of the plan are identified as being unsatisfactory in their current form the Council should commit to a

process and timeframe that addresses them.

In addition to areas where sector group concerns may delay the plan change becoming operative, ACRE identifies some areas where the Plan Change, at least in its current form, will not attain the goals of the Vision and Strategy. In particular the Vision and Strategy sets a target of swimability and it is not clear that the plan change will achieve this; it pays little attention to human health. Similarly, the plan focuses on outputs rather than eco-system health, itself an essential pre-condition for the river and lakes to be sources of kai.

In our submission we identify likely impediments to the plan being made operative and successfully implemented including real or perceived inequity, uncertainty over the modelling and measurement of farm output, lack of acceptance of the allocation of the costs of environmental protection or enhancement, and a lack of understanding of the true costs and benefits of good practice.

Examples of potential inequity include the uneven impact of the stock exclusion requirement on different types of farming, the treatment of current low emitters against that of current high emitters, the impact of the plan change on urban v. rural communities

Current Low and High Emitters
 Here we argued for some flexibility for current low emitters provided that within a viable area of measurement (most probably sub-catchments) there was an overall reduction in emissions. Since writing our submission members have had discussions with commercial vegetable growers, who represent a particular example of this issue, and Anna will share the results of those discussions.

Commercial vegetable growing is a high per hectare emitting land use which could potentially be seen as being unfairly treated by the rules as proposed. Current vegetable growing practices are high emitters of nutrients and sediments, and the state of Pukekohe streams bears witness to this. (Incidentally their *Escherichia coli* emissions are much lower than animal based agriculture and this fact may be worth bringing into consideration in subsequent iterations of the plan).

However the overall areas required for vegetable production are much less extensive than for animal based production. If and when cultural change leads to a decreased demand for meat it will be possible to feed us from a reduced area which has relatively high emissions of nutrients. That cultural change is not hypothetical – a February 2016 Roy Morgan Poll showed a 27% increase from 2011 to 2015 in New Zealanders who agree that "The food I eat is all, or almost all, vegetarian", from 8.1 to 10.3%.

The bottom line is that the Plan should not inhibit a land use shift if the overall impact is a decrease in emissions even if the per hectare emissions of the new land use are greater.

A related issue is the growth in demand for organic produce. The pathway for an organic / biodynamic grower to enter or expand in the marketplace could be quite difficult and often blocked, especially if for instance the land had been previously been in sheep and beef land use. The landowner would need to apply for a resource consent and show that what they plan to do is no worse for the environment than the current land use.

This may be possible on a larger farm scale where there is a mix of land suitable for horticulture and of steeper areas that could be retired and planted in trees as offset. However it could prove too restrictive on smaller properties where all land is of reasonable contour, which is probably the likelier case.

Both these instances advance the argument for sub-catchment land use and mitigation planning. Vegetable growing is relatively concentrated and lends itself to the amalgamation and treatment of run-off, but undoubtedly this will best be done across the boundaries of individual land holdings.

- Urban Centres in Comparison to the Rural Sector
 Here we argue for more stringent treatment for the urban centres. We acknowledge
 that Hamilton City, for example, may be at a point where further improvements in the
 quality of wastewater charges are hard to achieve (though I'm not sure that is the case
 for discharges from urban streams); but urban centres could be required to offset their
 wastewater discharges by resourcing establishment of improved sub-catchment
 treatment of rural discharges.
- Modelling and Measurement of Farm Input
 Here we identified a tension between the need for certainty and consistency over time and the need for the rules to reflect progress in the science and technology. We recognised difficulties with Overseer but on balance believe it is best to continue with it.

However, consideration should be given to basing future modelling and monitoring on a more holistic framework of environmental land use impacts, as Anna alluded to in her discussion of commercial vegetable growing. This could take account both of a wide range of water-quality related parameters and of the larger context of the activity in question, including whether the activity enables an overall decline in emissions by obviating the need for higher-polluting activities, its carbon footprint and its food production/area.

In the meantime in relation to commercial vegetable production ACRE supports the use of Farm Environment Plans with inputs / outputs measured by either N Check or Overseer. Rather than using this information to enforce minimum standards on individual properties, it could be used to monitor the industry as a whole over a period of time of say 5-10 years. This will provide more time to gain more science knowledge around monitoring. It will identify if the industry as a whole is making positive changes to meet or even better the 10% reduction in N, P and sediments. It will provide an opportunity for the growers to work together to bring about more positive outcomes - or risk facing much higher compliance costs with the next 10 year cycle of plan change.

Cost Allocation

ACRE supports the Plan Change's implicit assumption that polluters should meet the costs of avoiding or remedying environmental harm. We are aware of an understandable perception that the views of an environmental minority are saddling agriculture with unnecessary costs, and that if the community at large wants higher environmental standards they should pay for them.

We agree that all sectors of society must meet the environmental standards expected

of agriculture, particularly urban centres.

Further, the economic costs and benefits of agriculture must be analysed within a framework that represents the wider context, so that the environmental costs beyond the farm are fairly represented.

To that end, ACRE believes there is scope for introduction of an outcomes component to monitoring the impact of land use, and in particular adopting a healthy ecosystems approach that takes account of the amount of erosion-susceptible land, suspended solids in the water, plant nutrients in water, diversity and numbers of desirable fauna and the composition and abundance of water plant communities.

· Costs and Benefits.

Some analyses suggest that even within the framework of the farm's budget, good environmental practice is economically favourable. It has also been stated that there is little difference in the profitability of low input-low output and high input-high output dairy farms. To the extent that these points are true, they are important parts of selling the plan change.

A member of ACRE, now sadly lost to us, has provided the following account of the benefits of excluding stock from waterways on his property. Though anecdotal it is real farm experience.

"I have done over 20 kilometres of fencing since 2004 to keep stock out of our waterways, using 2 wire electric fences and also have done quite a bit of planting on the stream banks. We have two streams running through our farm as well as numerous smaller side streams. The water quality has improved markedly despite the fact the dry stock farmer upstream has done nothing and we are lucky that he doesn't have too many stock

From a farming perspective it has been a very good investment, from a stock control point of view it's paid for itself. We used to lose 3 or 4 animals each each year to drowning, that's no longer a problem. Winter grazing is much simpler, very easy to break feed as electric fencing is always close. Stock grazing stream banks used to push the sides in but now I spend much less on cleaning the streams. Also I notice when I'm spreading fertiliser the long grass and plantings on the stream back act as a physical barrier to the granules."

Farm Plans

ACRE believes strongly that the proposed farm plans are an excellent initiative.

Sub-Catchment Level Work

Earlier we said that PC1 is only a first step in achieving the necessary improvements in water quality. An important next step in water quality improvement is the development of constructed wetlands on farms. These will work best when they are implemented at subcatchment level, possibly through farm environment planning coordinated at subcatchment level. It may be possible to generate opportunities for cost-sharing at a local level and to more rational use of land within that sub-catchment.

Incorporating wetlands into the farming landscape to improve water quality does have an economic impact but there ways that these costs can be shared. We talked earlier about the responsibilities of the urban centres.

With such an approach, the management unit becomes the sub-catchment, and when the agricultural activities are properly planned to achieve water quality standards there are generous corridors and the opportunity to create critical mass to support biodiversity for example in the areas of wetland that will need to be created to remove contaminants from the run-off waters.

The spatial arrangements achieved by farm planning at sub-catchment level will support biodiversity in the very best way possible since the riparian margins, steep slopes and wetland areas are all naturally continuous and will create a range of connected habitats.

We recognise that the infrastructure to support sub-catchment level water quality enhancement will require significant engineering works and landscaping, both hard and soft, which will be only practicable as unitary managed projects. However second-tier work such as, for example, planting of retired peripheral and ephemeral water courses and fostering biodiversity in those areas would be very appropriately undertaken by voluntary organisations of the kind represented on ACRE. Administrative and resource support would be important success factors.

In conclusion, ACRE strongly encourages WRC to push on with PC1 but to do so in a way that addresses identified issues with the plan and sets a foundation for the further enhancements that will be required to meet the Plan's long term goals.

Thank you again for the opportunity to participate in this process. ACRE offers the Regional Council every support in introducing and implementing this most important plan change.

Anna Casey-Cox Chair Advisory Committee for the Regional Environment