BEFORE THE Canterbury Regional Council

IN THE MATTER OF the Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010

AND

IN THE MATTER OF Submission and Further Submission on Proposed Plan Change 1 to the Hurunui and Waiau River Regional Plan

STATEMENT OF EVIDENCE OF DAN HODGEN ON BEHALF OF THE NORTH CANTERBURY PROVINCE OF FEDERATED FARMERS OF NEW ZEALAND

Dated 4 October 2019
Introduction

My name is Dan Hodgen. I farm 930 Hectares in the Upper Waipara and Hurunui Catchments in partnership with my parents and Sister.

I am currently the Senior Vice President of the North Canterbury Province of Federated Farmers of NZ and have been elected to the National Meat and Wool executive for the last 3 years.

I was a founding member of the Hurunui District Landcare Group and am still a member of the committee and unofficial leadership group.

I was a member of the Nutrient Working Group formed by the Hurunui Waiau Zone Committee, established to find a solution to issues arising from the “10 % rule” some years ago.

I am the vice chair of the Hurunui Drought Response Committee. This group came together during three years of drought in the district to support farmers with technical advice and try to alleviate some of the mental stress and fatigue we saw occurring.

Background

Our farming operation consists of 4 properties ranging from 43 hectares to 401 hectares which are all run together and lie within approximately a 10km radius. While geographically close, the four properties are very different, with a wide range of soil types, different aspects and even marginally different annual rainfall histories. Two properties have a reasonable length of the Waipara River North Branch running through them. A third has the Pyramid Valley Moa Swamp in the middle. This 7 hectare area was put into a QE2 covenant in the early 1980’s, ironically to protect it from the local council who had suggested draining it and removing the moa remains.

We farm sheep and beef only, aiming for early lamb finishing with the remainder sold as stores before Christmas to work within climatic limitations. Cattle are both bred and bought in to the property depending on pasture growth, particularly in the autumn.

Plan Change

“10 % rule”

When the original plan was written, my father, Mike Hodgen, was a community member of the Zone Committee. He expressed his concern at the time about the inequality and unfairness of grandparenting and the 10 % rule as we have come to know it (actually a definition of Change of Land Use). The response he got from Environment Canterbury was “No worries, if it turns out to be wrong we can come back and fix it”. In my opinion this was a classic case of perverse outcomes from regulators rushing to meet a timeline.

The 10 % limitation had many perverse outcomes. Firstly it rewarded those who had intensified and increased their nutrient output. If a farm had an estimated N-loss of 100 kg N/ha/year, for example, this would only be possible under irrigation because of low annual rainfall. The tolerance for such a farm before triggering the definition of Change of Land Use (+10%) would be more than the total loss for most dryland farms.
I have modelled my farm’s N-loss using overseer 3 times. Different versions have estimated 5 kg/N/ha/yr, 13 kg/N/ha/yr and lastly 8 kg/N/ha/yr. All leave a very small amount for seasonal fluctuation to remain compliant within the +10% allowed by the definition of Land Use Change.

During the drought many of the advice strategies and on-farm practices could have caused a farm to be breach of this 10%.

During one year of drought we bought in 176,000 kg of barley and 160 medium square bales of baleage to feed our Ewes. This equates to approximately 189,200 kg of dry matter. We also applied 24 tonnes of Urea to try and best utilise limited moisture in both spring and autumn. Neither of these are normal on our farm.

Both of these practices however, increase our modelled N loss using overseer and would probably have put us in breach of the 10% rule. Our rainfall in that year was 235mm compared to a long term average of 675mm. Given that Overseer uses long term averages that low rainfall figure can’t be used. Peter Brown from Aqualinc Research explained in a presentation to the Zone Committee that a continuously ‘wet’ soil profile was needed to enable N loss. In reality, because our soil moisture level was so low, the actual N loss from the root zone during this period would have been zero.

In that same year our lamb production was significantly reduced. Poorer than normal Ewe condition and an inability to ‘Flush’ them pre mating saw our pregnancy scanning drop from a normal 160% to 127%. Product output from a farm reduces the calculated N loss so a reduction in numbers of lambs sold would again have potentially increased our estimated N loss.

**Given their low starting point a 10% limitation has the potential to make dryland farms either unable to undertake practices to survive through long and medium term drought or force them to run a gauntlet of non-compliance, despite the fact that the actual physical impact won’t increase.**

### Audited Farm Environment Plans

I believe Farm Environment Plans (FEP’s) are a useful planning document. They are a good way to plan and prioritise future actions and identify potentially damaging actions and practices. By auditing them however they shift from a farm planning tool to a regulatory one. This will limit what information is put in them. They will no longer be used to plan, voluntary positive actions.

I completed a Beef & Lamb NZ FEP while they were under the threat of audit. While I had no issues that needed to be entered in the plan I had hoped to use the opportunity to plan some positive actions I want to, but were not required, to undertake. Had I put these in the plan, I would have failed my audit if they weren’t done for any reason, despite the fact that they were not actually required.

Membership of the Hurunui District Landcare Group is conditional on undertaking an FEP but we maintain that these will never be passed to ECAN.

**Farm Environment Plans are a useful tool but auditing will limit that use and add significant cost while reducing environmental benefit.**
Overseer

Overseer was originally designed to estimate nutrient usage based on stocking rate and make recommendations on what fertiliser was required to replace those nutrients. For this it was useful. Sadly, in a rush to have a measuring tool for environmental impact, it has been used for something it struggles with. It is estimated to have inaccuracies of plus or minus 30%. It also struggles with the complexity of dryland and sheep and beef operations.

Two years ago I was provided with an estimate to complete a nutrient budget of between $3000 and $4000. With 8 different stock classes, 3 different rainfall zones and around 17 soil types it was very complex, with a huge amount of data to collate and enter.

It seems ridiculous to go through this exercise and cost to get a ‘number’ which we know will be low but is probably wrong anyway.

Conclusions

I think we can all agree that where farming practices have a reasonable negative impact we need to reduce that impact and that working to prevent any degradation to areas that are still healthy is a worthy goal.

In the Hurunui-Waiau zone there is significant evidence to show that most dryland practices have a negligible impact, particularly regarding Nitrogen loss.

Almost all agree that the 10% rule is unfair, particularly on low impact farming operations. It also has serious implications on the ability of those low impact farms to respond to seasonal challenges and variability, and makes many drought strategies potentially illegal.

Auditing of farm environment plans and nutrient budgeting add significant cost. Where we know the impacts of certain types of farms are low this can’t be justified and actually has the perverse outcome of either reducing voluntary environmental enhancement or forcing more intensification to cover the extra costs.

The approach in Plan Change 1 to require Management Plans which are not audited is appropriate. It should encourage positive actions and avoid the potential perverse outcomes associated with audited FEP’s

Making Dryland farming a permitted activity with some easily identifiable limitations on potentially higher risk activities is a sensible and workable solution.