BEFORE COMMISSIONERS APPOINTED BY THE WAIKATO REGIONAL COUNCIL

IN THE MATTER	of the First Schedule to the Act
AND	
IN THE MATTER	of Waikato Regional Plan Change 1- Waikato and Waipā River Catchments and Variation 1 to Plan Change 1
AND	
IN THE MATTER	of submissions under clause 6 First Schedule

HEARING STATEMENT OF BILL GRAHAM GARLAND 4 March 2019

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FARMING AND PERSONAL BACKGROUND

- My wife Sue, and I farm sheep and beef on a 430 hectare farm on the slopes of Maungatautari. The farm is at the headwaters of the Mangapiko stream and has an 8 km boundary adjoining the Maungatautari Ecological Island Reserve.
- 2. The farms land use capability class (LUC) is class 6E, meaning that it is rolling to steep hill country with erosion as one of its primary risk factors. We have the farm under 350 hectares of pasture, 20 hectares in production forestry, 47 hectares of indigenous forest and wetlands, and 8 hectares of restoration plantings. We run 2300 sheep and 400 cattle, effectively matching our stock type and stocking rate to the natural capital of the land.
- Our farm is Global Animal Partnership (Gap4) accredited. 95% of our lamb production (2800 lambs) go to supplying Wholefoods supermarket chain in the western states of America. Our forestry is Forest Stewardship Council (FSC) accredited. Both Gap4 and FSC are international assurance accreditations.
- 4. In 1980 our family first covenanted 11 hectares of native bush on the farm. Now there are 5 QII National Trust covenants covering 31 hectares registered on the property. In 1982 we entered into a land management agreement with the Waikato Valley Authority (WVA) to fence and retire 2 hectares of land, and open space plant 43 hectares with poplars and willows. In 2006 the farm featured in a 10year interactive display on sustainable land use at the Te Papa Museum. In 2017 we featured in a Country calendar program. In 2018 our farm was used by Beef and Lamb in their Pure Nature Branding strategy.
- The farm has been used by Landcare Research, AgRearch, Waikato Regional Council (WRC), Waikato University, Farm Forestry Association, QII national Trust, and DOC, for research and field days.
- 6. The farm has featured in several overseas documentaries and been used for promotional purposes by a number of commercial entities.
- 7. My personal background includes the following:
 - i. Waikato and National chair of farm environment Award Trust and

BFEA 9 years;

- ii. Judged for FEA 15 years ;
- iii. Elected director QII 9 years;
- iv. Waikato conservation Board 6 years;
- v. Waikato president Federated Farmers and National Chairman of Meat and Wool Section of Federated Farmers;
- vi. Responsible for two sustainable farming fund projects that analysed what motivated and the actions taken by past Farm Environment Award (FEA) winners;
- vii. Member of the team that developed the integrated catchment management plan for the Mangaotama catchment at the Whatawhata Hill Country Research Station;
- viii. 2004 I received the Officer New Zealand Order of Merit (ONZM) for services to the farming community and conservation.

INVOLVEMENT WITH PLAN CHANGE 1

- 8. I attended most if not all PC1 workshops. We hosted the CSG on farm to enable them to get a better understanding of the complexity of hill country properties and to show them what has worked for us and what hasn't in terms of the initiatives we have taken to improve the environmental outcomes of the property.
- 9. During the lead up to the release of the PC1 document it was fair to say I, along with those who had followed the CSG process, were reasonably comfortable with the direction they were taking. It wasn't until the final policy positions of the CGS process were revealed that it became clear there were serious implications for other farming sectors, beyond just dairy farming, including extensive farming systems.
- 10. At that point a number of things contributed to push back from the sheep and beef sector, deer farmers, horticulture, and forestry, resulting in

hundreds turning up to meetings around the region.

- 11. Several key things galvanised those of us affected by PC1;
 - i. The final outcome of the CSG process was not consistent with the messages we were receiving during the process;
 - ii. It became clear that the dairy industry had won some concessions in the final outcome and were reasonably comfortable with PC1. To defend their position, they embarked on an aggressive public campaign openly criticising the environmental performance of sheep and beef farmers;
 - iii. Those of us who had a track record of promoting the environmental cause and had experience in the field collectively came to the conclusion that as well as having serious financial implications for the sheep and beef sector PC1 was going to deliver sub optimal environmental outcomes.
- 12. The advice we received leading up to notification of PC1:
 - Farm environment plans (FEP) would be a key component of PC1. They would be tailored to individual farms with a focus of matching land use with land class;
 - ii. There would be a moratorium on conversions from forestry to dairy. However, land use changes and intensification which was part of a property redesign that achieved an increase in productivity from the better land at the same time as reducing contaminant discharges appeared to have support;
 - iii. PC1 would include a requirement to exclude stock from water bodies but fencing would only be mandatory where fencing was practical as opposed to applying slope and set back calculations as the determinant;
 - iv. An allocation mechanism for contaminant discharges including nitrogen would be deferred to future plan changes. Using grandparenting as a mechanism for allocation was strongly opposed throughout pre PC1 consultation. However, it was

indicated that high leaching farms would be required to lower their N losses;

v. It was also made clear throughout the consultation process that PC1 would be the beginning of an eight stage journey allowing farmers and their communities time to adjust. It was recognized that to achieve the vision and strategy water quality standards farmers needed certainty and a clear pathway forward.

CONCERNS REGARDING THE FINAL OUTCOME OF THE CSG PROCESS

- 13. PC1 fails to live up to the expectations of farmers, which were built through the CSG process, with the exception of the dairy sector. PC1 now clearly reflects the dominance of dairying in the region at the expense of other land users. What we ended up with was a case of the devil being in the detail, and a plan which fails to provide a clear pathway forward. Reference in PC1 to significant reforestation of pasture land to achieve the 80-year water quality targets along with suggestions that midrange hill country will be targeted for production forestry is a total contradiction to assurances given that there would be certainty and a path way forward. It also causes resentment amongst hill country farmers who feel their future is being sacrificed to accommodate ongoing pollution by others.
- 14. Despite the assurances of otherwise, PC1 introduced a form of allocation for nitrogen discharges based on grandparenting. Apart from the moral issue of giving people the right to pollute based on their level of pollution in the past, requiring farmers to operate under a Nitrogen (N) cap seriously disadvantages low emitter land uses, such as farming systems running all grass systems such as ourselves. As well as directing resources away from dealing with more critical contaminants in hill country, nitrogen capping undermines the financial resilience of all grass farmers. The principle tool sheep and beef farmers use to manage variances in pasture growth and product returns is by adjusting stocking rates and stock classes. N capping limits a farmer's ability to make those adjustments. It is also a constraint on those farmers who may wish to better utilise the more productive parts of their farm.

- 15. PC1 rules on fencing stock from waterways has pros and cons. It is a plus that PC1 recognizes sheep have less impact on water quality compared to cattle, and the cost of fencing out sheep verses the environmental benefits in hill country can make it an un-economic proposition. The slope and set back numbers that underpin the stock exclusion rules makes for complex compliance and will result in suboptimal water quality outcomes. Policing these rules will prove to be highly contentious and will lead to litigation.
- 16. The desirability of all famers having a Farm Environment Plan (FEP) has been well canvased outside of PC1. FEPS are central to Beef + Lamb NZ environmental strategy. They are a requirement of sheep and beef industry farm assurance programs including GAP4. In our case we have been using FEPs to improve the management of our farms natural resources for a number of years.
- 17. To be effective a FEPs needs to be owned by the farmer. They should be a tool to identify critical source areas for contaminants at a property level and prioritise actions to rectify the problem based on the level of risk. Schedule 1 in PC1 compromises that process. Nitrogen is elevated to the priority contaminant irrespective of whether it is or it isn't. The same applies for stock exclusion rules. To put it another way under schedule 1 FEPs become a method to give effect to rules and standards, rather than being a tool that assesses environmental risks and the appropriate measures to manage the risk.
- 18. While sheep and beef farmers were rallying in protest of PC1 the dairy industry went on the offensive in order to defend the concessions they had won during the CSG process. They ran an aggressive public campaign accusing sheep and beef farmers of not doing their bit to improve water quality while dairy farmers had invested heavily to be ahead of the game.
- 19. The attack on sheep and beef farmers highlighted two things. The dairy industry failed to acknowledge the difference between the two sectors. Dairying had gone down the intensification path while sheep and beef farmers went down the path of producing more from less animals which in turn lessoned the environmental footprint from their farming activity. In our own case we have increased sheep and meat production by 30% at the same time as reducing sheep numbers by over 30%.

20. The campaign by dairy criticising sheep and beef farmers exposed the folly of attempting to sort out the allocation of rights through consensus in an environment where big versus small. Natural justice and community wellbeing go out the window and self-interest takes control.

RESPONSE TO PC1

- 21. While it is fine to jump up and down about something that is going to make our lives more difficult, the reality is that farming in New Zealand is having to change. If we are going continue to have the privilege of using natural resources in the pursuit of making money, we are going to have to get better at managing the impact we are having on those natural resources. The issue with PC1 is not that it is requiring land owners to change practices, but that it is setting up a framework which will not deliver on its environmental ambitions, and which places the financial burden on those land uses with the smallest environmental footprints, while protecting the highest emitting land uses. In my opinion sound policy should aim to achieve the desired improvements to water quality, without compromising the management of other natural resources, while still allowing farmers to earn a living.
- 22. This is where F4PC has an advantage. Almost all of us have environmental credentials. We are not in the business of resisting change. Instead we are only interested in insuring PC1 achieves the intended outcomes and naturally want to insure our industry has a future.
- 23. To that end I have assessed the effectiveness of PC1 by considering what our farm would look like today if we had had to work under the umbrella of PC1. I also assessed PC1 against what had come out of the Mangaotama research project and lessons we have learnt from the farmers who had won the Balance Farm Environment Awards (BFEA) awards.
- 24. The short answer to 'what would our farm look like today had we been working under a PC1 umbrella?' is, that it would look very different and would not have achieved its environmental outcomes. In summary:
 - We would not have undertaken our most ambitious projects that involved environmental enhancement and improved productivity;

- The emphasis would have been on fencing waterways rather than taking a holistic approach to protecting the natural environment;
- iii. Resources would have gone into managing the nitrogen cap for little or no environmental benefit;
- iv. Grandparenting of nitrogen discharges and the moratorium on changing land use from forestry to other land use options would have had a negative impact on the capital value of the property curtailing our ability to fund new development, including environmental works;
- Reference to the need of re-afforestation of pasture land would have had a bearing on our investment decisions and time horizons;
- 25. In order to understand why we would have made very different decisions under PC1 it is important to understand the reasoning behind the choices we have made over the last 20 to 30 years.
- 26. Our biggest redesign project involved 50 hectares. We protected 8 hectares of indigenous forest, planted 16 hectares of steep unstable land in forestry and restoration plantings, with the remaining 26 hectares in pasture being redeveloped to improve its productive capabilities. The increased productivity covered the opportunity costs of the redesign, and the environmental works.
- 27. The redesign was motivated by the Mangaotama catchment project. Production and environmental outcomes were anticipated to be similar.
- 28. Key performance measures from Mangaotama (Dodd, 2008):
 - i. Increased lamb productivity 87% beef productivity 170%;
 - ii. 40% increase in terrestrial native plant diversity in fenced and pest controlled forest remnants;
 - iii. Sediment reduction 76%;
 - iv. Annual Phosphorus (P) reduction 62%;

- v. Significant increase in instream macroinvertebrate community health (MCI), as a measure of freshwater ecological health;
- vi. N losses initially increased but was expected to decline over time.

29. In our case:

- i. We effectively increased stock numbers by 20% on 40% less grazable land, as a result of retirement and forestry options;
- Water quality is similar to that coming out of Maungatautari Reserve ie under indigenous forest;
- Biodiversity status has gone from locally significant to regionally significant;
- iv. Fertilizer applied to the total area has dropped by 35%;
- v. Chemical usage is down.
- 30. There are several reasons why we wouldn't have undertaken this project, under the umbrella of PC1:
 - The N cap would have been a constraint on our ability to increase productivity and thereby being able to offset the opportunity costs of environmental works;
 - PC1 stock exclusion rules would have redirected resources to fencing off water bodies further down the catchment;
 - The moratorium on forestry conversions and N cap would have had a negative impact on our balance sheet making it more difficult to borrow;
 - iv. There is some uncertainty about whether the forestry could be harvested in the future.
- 31. The conclusion we arrived at, in relation to managing a N cap, was that it is not a good spend on properties such as ours. This is based off 18 years of doing nutrient budgets using overseer and knowledge gained from water

testing data collected by Agresearch.

- 32. Our nutrient budgets prepared by Agknowledge, which span an 18 year period, show our property has been modelled over time to be leaching between 11 23kgN/ha/yr, with current losses modelled to be around 12kgN/ha/yr. Because the current overseer model does not account for all the mitigations adopted on farm, our actual 2018 N losses are likely to be lower than those modelled and less that our 2002 N losses. Modelled N losses have been variable over the 18 year time frame, as set out above. Some of this is due to changes in the overseer model. Some are due to the variances in our sheep and beef system which has been optimized to match the seasonal grass curve.
- 33. The water quality data collect by Agresearch led by Andrea Donnison is further evidence that managing an N cap is unlikely to be a good spend on properties such as ours. Data collected monthly between July 2004 and June 2005:
 - i. N at bush margin Mangapiko 0.57 ppm;
 - ii. N at farm boundary 0.43ppm;
 - iii. N at bottom of forestry secondary stream 0.51ppm
- 34. As an aside the upside of the water quality testing was that it recorded persistently high e coli levels inside the forestry block. From this we were able to pinpoint the source and rectify the problem. Without the water testing data we would never have known there was a problem.
- 35. We have always taken a holistic approach to managing contaminate losses to waterways. Rather than fencing waterways in the lower reaches of our main streams, our priority has been fencing forest remnants and retiring the top end of the tributaries or creating buffers part way down the tributary. Our approach has been to remove the major contaminant loads at or near to source. As well as having the added bonus of improved biodiversity outcomes it lessons peak stream flows and helps protect downstream infrastructure as well as reducing stream bank erosion in the lower reaches.
- 36. Our rationale for taking this approach is that we get greater environmental benefit for our dollars compared to fencing the lower reaches. It was also

consistent with the advice we had received from WRC land managers.

CONCLUSIONS

- 37. PC1 should work for everyone, regardless of the type of farm you run, whether or not you are in a priority catchment, and whether or not you are part of a subcatchment group. Well-designed rules should not penalise people who are not causing the problems.
- 38. We should all be responsible for the pollution generated by our own farming business. We should not be expected to be disadvantaged by someone not taking responsibility for their pollution.
- 39. Knowing what the contaminant discharges are from our own farm and in our sub-catchment is the key to success.
- 40. Redesigning a property involves a major injection of capital. In the long run it achieves the best environmental outcomes however to make that level of investments farmers need time, a clear path way forward, certainty, and the ability to optimise the use of their better land.
- 41. FEPs are pivotal to helping farmers plan and better manage their natural environment. To be effective plans need to have a holistic approach and not just focus on one component of managing the natural environment.
- 42. PC1 has the potential to be the catalyst for changing the way we farmers manage our natural resources and at the same time improve the financial resilience of our farming business. However, in its current form PC1 is not up to the task.

Dated this 4 day of March 2019

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