Lodgment of Evidence for Hearings Process

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Address: 848 SH1, RD1, Tirau.

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In the matter of: Waikato Regional Council, Plan Change One, Healthy Rivers Wai Ora.

Hearing Topic: Block One, Overview and Objectives.

Contents:

Executive Summary:

1. This submission of evidence is from me as a farmer. Firstly, I will explain the development of our farm planning process which will inform the reader and provide the necessary background for my comments on the objectives of the plan. I will be relating the specific provisions that my submission identified and what it means for our farming systems. In some instances, I have had to delve into PC1 beyond the objectives and into subjects such as nitrogen management and stock exclusion. This is simply to be able to explain to the reader the implications the objectives have. Finally, I will outline the relief sought in **Appendix 1.**

Qualifications and Experience

2. My full name is James Richard Bailey.

3. I am the Managing Director of two farming businesses J.S.Bailey ltd (JSB), and Momona Dairy Trust (MDT) which together operates a total of four farms in the Waikato Region, including two dry stock units and two dairy units respectively. I am a past Waikato Ballance Farm Environment Award winner.

4. Family/Whanau is important to our business and I wouldn't be able to do it without the support of my wife Ella and our two children. In addition, our farming enterprises and partnerships support nine other families that live and work on our properties, plus three other family beneficiaries that have interest in MDT.

5. I have 10 years of experience working in farm system planning with multiple agencies working in collaboration with our farming business including Ag Research, Waikato River Authority, Waikato Catchment Environmental Enhancement Trust, and Regional and District Councils. This work is based around farm system modeling and design, ecosystem services, and general environmental improvement projects.

6. I am a cofounder and past chairman of Sustainable Coastlines Charitable Trust which developed the nationwide "Love Your Water" programme. I have been an officer and trustee for Puniu River Care. I have a Bachelor of Commerce degree and a graduate diploma in Applied Science.

7. I was a member of the Healthy Rivers Wai Ora Collaborative Stakeholder Group (CSG) and represented the Sheep and Beef Sector, the largest sector by land area in the Waikato Catchment. After the completion of the CSG Process I became a founding member of Farmers for Positive Change.

8. This submission of evidence is from me as a farmer. I will be relating the specific provisions that my submission identified and what it means for our farming systems. I have included a summary of the development of our farm planning process which will provide the necessary background for my comments on the objectives of the plan.

9. I am fully supportive of Te Ture Whaimana, The Vision and Strategy for the Waikato and Waipa Rivers.

Background: Farming Systems

10. Momona Drystock (JSB) – Focus of this Evidence:

- 470ha sheep and beef block near Tirau
- 2800 Coopworth Ewes, Hereford Breeding herd total 450 Cattle.
- GAP Accredited and Audited Farm
- Balance Farm Environment Awards Winner of two categories 2013
- Split between the Waikato Catchment and the Waihou Catchment
- Environmental Programme Agreement started in 2010 alongside Waikato Regional Council (WRC) Land Management Officer
- Beef and Lamb Land Environment Plan
- 4 QE2 Native Covenants
- Riparian Fencing (where practical), Planting, Wetland Enhancement, Poplar planting, work ongoing.
- Subdivision as per Land Use Capability (mapping provided by WRC) and other mitigation work ongoing
- Local Indigenous Biodiversity Strategy Pilot Project
- Ag Research farm system optimization modelling (AGINFORM)
- Restoration project retiring 10% of the farms steeper gullies and sidlings involving Afforestation Grant Scheme (AGS), Waikato River Authority (WRA), Waikato Catchment Enhancement Trust (WCEET) and Local and Regional Councils.

11. Tirau Dairy (MDT):

- 225 ha system 2 dairy unit operated in partnership with sharemilker
- 500 Cows
- Riparian fencing as per Dairy Clean Streams Accord
- Wetland retirement and planting
- Land use change on a critical source area sidling back to sheep grazing
- New passive solid separation effluent system through weeping walls draining to large lined pond and farm irrigation system
- Further environmental enhancement and system design ongoing

12. Mamaku Dairy (MDT):

    - 360 ha system 2 Dairy unit operated in partnership with sharemilker
    - 600 Cows
    - Riparian fencing as per Dairy Clean Streams Accord
    - Retirement of native tree stands on milking platform
    - QE2 Covenants on native tree stands
    - New passive solid separation effluent system through weeping walls draining to large lined pond and farm irrigation system
    - Further environmental enhancement and system design ongoing

13. Grazing Block Tirau (MDT):
    - 130 ha dairy support, maize, and beef trading unit
    - All streams and drains fenced
    - QE2 Native Covenant
    - Further environmental enhancement and system design ongoing

Background: Farm Planning – Momona Drystock

14. When I took over the management of our family dry stock farm under a share farming agreement in 2009. My first steps were a Beef and Lamb Land and Environment Plan (LEP) and an Environmental Programme Agreement (EPA) with WRC through our Land Management Officer (LMO).

15. These two farm planning processes together identified environmental risk areas of the farming business and we decided to temporaily destock our winter trading cattle until we had better infrastructure to manage them appropriately in winter (fencing, water reticulation). This resulted in reduction of sediment run off and phosphorus loss, and significantly reduced our Nitrogen leaching. Basically, I thought that it was best to get on the front foot environmentally and never thought it would ever disadvantage me to do so.

16. The most useful tool in the farm planning process has, by far, been the Land Use Capability (LUC) mapping that was completed for me by our WRC Land Management Officer. This has basically determined our farm design and

subdivision, creating land management units that we can match easily to stock class and manage well during different seasons. Figure 1 shows the progression from our original farm map and fencing, overlaying the LUC information, finally and the resulting subdivision as at 2019.

Figure 1.

17. As we have based our subdivision on LUC and contour we have by default identified areas of the farm that are less productive (i.e. steep sidling's) or areas that are more environmentally sensitive. These areas can now be easily managed with care, or in some cased retired from livestock completely.

18. The farm planning process also identified risks and critical source areas for contaminant loss and we prioritized these risks and developed (and continue to develop) mitigations and timings appropriately. This farm planning approach gained us recognition by winning 2 categories at the Balance Farm Environment Awards.

Background: Farm System Modelling

19. I became involved with the Local Indigenous Biodiversity Strategy (LIBS) through WRC and South Waikato District Council (SWDC). Part of this strategy was to work with Ag Research and their farm system model

AGINFORM to analyze farms and optimize their systems on their better land while identifying areas of land that were marginal and may present opportunities to increase biodiversity. The aim is to bring the profitability of the farm up on the better land using the optimization model so if biodiversity opportunities can be realized on the marginal land it would not adversely affect the profitability of the farm.

20. Our farm is a pilot project for LIBS and I worked with Ag Research to put our farm system through their modeling process. I identified areas of the farm that were environmentally sensitive and could be considered for land use change in the modelling process. This amounted to around 10% of the farm. I chose these areas by assessing the productive value of that land against the potential costs of future environmental mitigations and the complexities involved in managing those areas within the livestock system.

21. The results of the modelling showed that by optimizing our farming system on the better land we would be able to increase our cattle to sheep ratio and retain and improve profitability of the business while retiring the less productive areas. Please see **Appendix 2:** Farming in a Changing Environment: Increasing Biodiversity on farm for the supply of multiple ecosystem services, Estelle Dominati et al 2019.

22. Based on the results of this modelling I embarked on a large-scale restoration project for the areas of less productive land that I had identified. This project involves three stages:

    a. Planting Manuka as and establishment species and potential honey production,
    b. Planting wetlands at the bottom of the gullies with wetland species,
    c. Planting Totara amongst Manuka for potential future selectively harvested timber plantation.

    The project is well underway with 24 ha already planted in Manuka last year, with wetland species due to go into the valley floors this year.

23. The environmental benefits relating to PC1 of this modeled system change include:

a. Significant reductions in phosphorous loss (15%) and reduction in erosion and run off from farm (20%)
b. Significant increase in biodiversity through above restoration project

24. The farm system change would result in a slightly higher Nitrogen leaching rate despite the retirement of 42 ha of land increasing from 17 kg/N/Ha/yr to 18 kg/N/Ha/yr as per overseer. However, there will be mitigation of N loss from the restoration areas and other mitigations that will not be picked up by overseer model.

25. The AGINFORM model based its findings on our profitable beef cow herd, and hence the results pointed towards increasing our cow numbers on suitable parts of the farm. However, this will no doubt change over time. The point is that the highly productive parts of the farm have great potential, and we can strike a sustainable balance between land use and retirement for biodiversity and water quality.

26. It is important to note that had I not destocked our winter trading cattle voluntarily at the beginning or our farm planning journey in 2009 we would have had a much higher N leaching rate. It should also be noted that I do not use urea as a growth stimulant on my pastures, or use supplementary feeding for outside our farming system such as palm kernel, all stock are grass fed.

27. The overall package of environmental improvement and reduction in contaminant loss of this farm system change and the retirement and restoration project is a win for my sub catchment. This overall improvement is enabled by the increased profitability of the optimized farm system to enable the necessary capital expenditure on restoration and mitigations.

Objectives of PC1 and how they translate to my farming business

The Staged Approach: Section 3.11.2 Objectives 3 and 4 and any consequential amendments.

28. The principle of a staged approach is to break down a journey into achievable goals and timeframes. However, we as farmers need to know the

end goal. PC1 is focused on 10 years with no real consideration of where to after that. This is evident from the strict grand parenting rules with no certainty of a future allocation system and the broad stroke stock exclusion rules. PC1 is telling me as a farmer to lock into our current system and invest even more capital into this system even though this might only get us 10% of the way to where we are going. I find this perplexing, I want to look ahead, to evolve and develop solutions that could lay the groundwork to achieve the Vision and Strategy, such as those identified by the farm system modelling and restoration projects outlined above. **PC1 is telling me to stop and don't move, wait 10 years and see what happens in the next stage.**

29. The Staged approach in PC1 and the grand parenting of nitrogen gives the wrong signal for farmers regarding their N leaching. For example, on our farm we reduced our N leaching voluntarily well before the CSG process even started. This has significantly disadvantaged me through a low NRP with implications for my farm system flexibility and land value. Why would farmers try to reduce N leaching after getting this signal in the first stage? Especially seeing there is no certainty in what sort of allocation system will develop in the next stage.

30. The staged approach in PC1 is telling me to fence off waterways across significant areas of my farm, some of them running through flood prone valleys. The next stage may instruct me to retire those valleys, there by rendering the capital investment in that fencing and water reticulation obsolete.

31. In my farm planning process, we are fencing off water ways that are practical to fence. Our fencing budget is then focused on Land Use Capability and contour fencing. Those areas that are impractical to fence can be managed with appropriate classes of stock. Further mitigations can be developed including wetlands or sediment traps at the bottom of these valleys, or perhaps even full restoration of that valley as per the results of our farm system change project mentioned above.

32. Our farm planning process is identifying our natural resources and their capabilities and providing flexibility while the best mitigations can be developed and paid for. This is consistent with an **adaptive management**

approach that recognizes the need to adapt, fosters innovation, and allows us to insert new technologies as they develop. This gives me confidence to continue investing in our business. Conversely, PC1's staged approach makes the future beyond the first 10 years very uncertain.

Staged Approach Continued – My attempt to secure investment certainty with WRC:

33. The results of the farm system modelling through Ag Research gave us confidence to start work on the restoration of our gullies. We were also excited to help improve biodiversity and water quality for our catchment.

34. This is a big investment and we wanted some security that this change to our farming system would be allowed under PC1's staged approach, especially around the restrictions of the NRP. I approached WRC to apply for a resource consent presenting all the components of our farm planning and proposed restoration projects. WRC staff were very supportive of the project and were keen to help. However, they explained that they were considerably restrained to consider proposals such as mine under PC1 because of the following points taken from their written response:

1. The unavailability of options for land-owners in regard to seeking an increase in their NRP ahead of the need for resource consent. We explained that in addition to there being no regulatory pathway to make such an application, there is also little or no policy support in PPC1 for increasing nitrogen leaching losses;
2. Given the inability of Overseer to take account of certain N-reducing mitigations, there is no clear methodology for taking account of certain mitigations in the rules framework so that land-owners can obtain the benefit of them. We noted that this is a matter the Council has sought to clarify through the Schedule 1 submission process.
3. At present, the use of land for farming in a "tranche 3" sub-catchment is a permitted activity under rule 3.11.5.4 until 2026 subject to registering the property and producing a NRP by March 2019. We have previously had legal advice that a consent authority cannot grant a resource consent for an activity which is permitted (whether by a rule, an NES or the RMA itself)

35. I was not able to get a resource consent to gain investment certainty for farm system change including restoration of sensitive environmental areas, reductions in all contaminants, including N (just not as per overseer).

36. Evidently though, there is the ability under PC1 for high leaching dairy farm operations to gain a consent to purchase neighboring low leaching dry stock properties and spread the N leaching across the two properties as was the case for Taumata farms ltd who have been granted such a consent.

37. So, from what I can see as a farmer, under a staged approach based on grand parenting, PC1 is basically telling me that if I have high N leaching I will be rewarded with more flexibility in the future and hence greater land value. If I have reduced my N leaching prior to PC1 then I have devalued my farm and I can be bought out by my neighbor to help spread out their N loss.

38. It was at this point I made the conscious decision to carry on with my farm system change, farm planning, and restoration projects without a resource consent because PC1, quite frankly, had become ridiculous.

39. We have two dairy units in the Waihou Catchment. I can only assume that the grand parenting nature of the staged approach will be rolled out into this part of the Waikato Region also. As a businessman with large dairy interests, should I:

    a. be ramping up our N loss to game flexibility and farm value for the future? or
    b. should I stick to my knitting and base our farming system on the capability of the land it is on and strive to improve the sustainability of our farming business?

    For me the answer will always be b, however it is up to this hearings process if this will be detrimental or advantageous to my business and farm value.

The Vision and Strategy: Section3.11.2 Objectives 1 and 2, Table3.11-1, and any consequential amendments.

40. I fully support the Vision and Strategy however it is the interpretation of the Vision and Strategy through table 3.11-1 that I have trouble with. I believe

that the CSG interpretation is unrealistic when considering what the Vision and Strategy means for our farm and for our catchment.

41. A key part of this is because of what I learned on the CSG. Early in the process, we as a group agreed to Scenario One from the TLG modelling when deciding what best reflected the Vision and Strategy. We knew that this was an aspirational target, however we did not realize that it was not actually achievable.

42. Very late in the process, the TLG presented us with another modelling run that represented what the water quality would have been like in 1863. The startling fact was that the E-coli targets we were trying to reach for Scenario One/The Vision and Strategy were lower (harder to achieve) than what was likely to have been present in 1863. I raised serious concerns with this but nothing was done to remedy the fact that we were trying to achieve the impossible.

43. During the process, I made a point of asking Maori Interests Representatives during CSG meeting time if they thought that Scenario One reflected the Vision and Strategy and the answer was no.

44. The implications this has on my farming enterprise is that PC1 is rushing stock exclusion fencing time frames to meet unrealistic targets. This will ultimately lead to misplaced fencing without the careful consideration and planning within the whole farm system that it needs.

45. I have first-hand experience of doing this the wrong way through the waterway fencing we did for our dairy farms which was informed at the time through the Clean Streams Dairy Accord. This accord had the best intentions but was hastened by social pressure and became a box ticking exercise. This lead to misplaced fences that now need to be pulled out and reconsidered through a well thought out farm planning process.

46. **To achieve the Vision and Strategy we need to plan and implement our mitigations well, and basically do it once and do it right.** Rushing to reach unrealistic targets to meet objectives will only prove to be a costly

exercise in futility and will lead to resentment and give ammunition for those who do not want to continue adapting to achieve the Vision and Strategy.

New Objective: Sub catchment approach

47. Our farm system redesign and the development of mitigations will benefit our sub catchment greatly. This farm is at the top of a catchment and is one of only a handful of sheep and beef properties out of a clear majority of dairy farms that have much higher nitrogen leaching profiles.

48. I can help in the reduction of phosphorous and sediment as my contribution to improvement in water quality in our sub catchment however I need a certain amount of flexibility in my N leaching (which is already low) to be able to achieve this.

49. If an effective sub catchment approach was taken this understanding can be developed between members of the sub catchment to ensure we are targeting mitigations where the risk of contaminant loss for each contaminant is greatest and get the best bang for our buck.

50. In addition, I would no doubt learn a thing or two from people downstream and further mitigations I could be doing at my place to help progress the sub catchment towards the vision and strategy.

51. The key element to a successful sub catchment approach is having a community working together to achieve meaningful gains for water quality. The nature of PC1 disincentives neighboring farmers to get together to develop innovative edge of field solutions consistent within a sub catchment approach. This is because there is only a weak reference to the sub catchment approach in Policy 9, combined with the Nitrogen Reference Point (NRP) and grand parenting which is divisive.

52. There are many examples around New Zealand and the world where local communities have got in behind a sub catchment approach to get meaningful gains to water quality. Including Lake Ruawhikaaitu (BOP), Whaingaroa Harbour Care (Raglan), and the Pomohaka Catchment (Otago).

53. In the Pomohaka Catchment they have Beef and Lamb and the Dairy NZ working alongside each other, why can't we have that here? Unfortunately, here in the Waikato the sheep and Beef sector and the Dairy sector are at odds with regards to Plan Change one. This puts the sub catchment approach and the Vision and Strategy on the back foot from day one.

54. All the Waikato Regional Council needs to do is enable PC1 to incentivize and enable the sub catchment approach, provide valuable risk analysis and monitoring data. Some sub catchment groups have already started up voluntarily after the notification of PC1 including the Whangape and Upper Puniu sub catchments. Sadly, from what I understand, the uptake from the dairy sector has not been forthcoming. Dairy NZ and dairy farmers themselves have a lot of expertise and knowledge to share on environmental innovation and are a vital part to a successful sub catchment approach and have as much to gain from it as any of us.

Appendix 1

Relief Sought

Please note: I am not a plan writer and do not have experience in doing so beyond my involvement in the CSG. For this reason I have not given specific wording, but I have outlined below the changes I would like to see in the plan that relate to the issues raised in my evidence.

1 .The "Staged" Approach

Objectives: Section 3.11.2, Objectives 3 and 4.

a. Instead of a '**Staged'** approach the objectives should take an **Adaptive management approach** to the management of Nitrogen and all contaminants.
b. We need to transition from current state to a state in which our water quality and our communities are consistent with the Vision and Strategy and with the NPSFM.
c. An adaptive management approach acknowledges where we are today and encourages me to strive to achieve the goals set in place and includes me in that journey.
d. The plan must recognise Land Suitability and Natural capital as the basis of the Nitrogen management mechanism.
e. Land Use Suitability and natural Capital was acknowledged by the CSG and the core principle of future allocation. But was not chosen to be implemented at this point because there needs to be more work done on it.
f. Natural Capital, as a basis of Nitrogen allocation, has already been implemented in regions of NZ.
g. We need to use this as a starting point and then transition towards the Vision and Strategy through **Adaptive Management** as our understanding of land use suitability continues to develop, reviewing and adapting through subsequent plan changes.

2 . The Vision and Strategy

Section 3.11.2 Objectives 1 and 2, table 3.11-1, and any consequential amendments.

Amend table 3.11-1 to give effect to:

a. The Vision and Strategy including all 13 of its objectives with endorsement from all 5 river Iwi
b. The NPSFM
c. Provides for healthy and vibrant communities
d. Water quality outcomes that are actually achievable

3 . Sub catchment approach:

New Objective – Sub catchment approach is provided for and incentivised

a. Insert a new objectives, policies, methods and rules that ensure the sub catchment approach to improving water quality is enabled and incentivised through the development of Sub catchment governance groups that will help the council identify edge of field mitigations to help provide solutions to a specific sub catchments water quality issues.
b. Develop the ability for group/global consents to be granted at a Sub Catchment level for Sub Catchments to work together in meeting the bottom line water quality targets at Sub Catchment Level.
c. Acknowledge the importance of water quality monitoring at sub catchment level by including the attributes total N and Total Nitrogen at the sub catchment level not just on the main stem of the Waikato River as it currently prescribes in PC1.
d. Ensure that approaches which hold land uses to historic discharge rates based on historic use are deleted and replaced with allocation based on the Natural Capital of soils which underpins Land Use Suitability and ensures equitable outcomes. This needs to be implemented in PC1.