BEFORE THE	Waikato Regional Council
IN THE MATTER OF	Healthy Rivers Wai Ora Plan Change 1 and Variation 1A
Statement of	Mark George Mandeno
Submitter ID: 72718	
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My name is Mark Mandeno and I manage our family drystock farm (called Ngarimu Station) in Ngaroma, North King Country. I am married and have two young children. My parents first bought Ngarimu Station 46 years ago and over the years we have bought additional titles to bring it up to the 902 hectares it is today. I was born and raised on the farm. I went to boarding school and then travelled overseas, returning in 2003 to take over management of the farm. Our family is heavily involved with the local community. I am the Chairman of our local hall. Our community has regular get togethers which is vital for mental health and wellbeing in rural areas. My wife is the Head Coach of the local pony club and we provide many volunteer hours to various community projects and fundraisers. The school stopped funding our school bus 15 years ago so we do a huge annual trail ride fundraiser to provide our own Community School van to get the local children to school.

We winter 1700 Ewes, 450 hoggets, 60 breeding cows, 1000 dairy grazers, 100 steers and heifers. We have approximately 240 paddocks. We employ my father, myself and one full time shepherd, we also employ a part time person during 6 months of the year. My wife looks after all the office work. The other people indirectly employed by our farm include veterinarians, shearers, silage contractors, helicopter pilots, fertiliser reps, ram breeders, seed merchants, to name just a few.

My parents struggled through the high interest rates of the 80s, but they managed to survive through it to keep the farm viable.

Good Farming Practice requires you to look after your land and that is exactly what we do. Our grazing policy ensures that we don't run heavy stock on steep land during wintertime. We don't graze our paddocks hard, preferring instead to leave decent covers of grass as this creates good recovery of pasture. We don't graze heavy stock on wet ground. We have fenced off some of the streams and drains over the years.

Some streams on the farm contribute to the Upper Puniu sub-catchment, the other streams contribute to the Waipa catchment. We have retired areas that are very swampy or had tomo's. Many areas of native bush still exist on our farm and many are fenced off, please refer to the farm map.

We have funding from the Upper Puniu Catchment Officer to plant Poplar Poles on relevant areas of the farm.

We have vastly improved our reticulated water troughs over the years: installing over 85 troughs and pumps, tanks, etc at a cost of over \$100,000 within the last 10 years. We have found this system is the most effective method to keep stock from waterways.

An Upper Puniu Sub-catchment group has been set up of which we have been actively involved with. This sub-catchment group has set up water monitoring sites and has the vision and goals of identifying and resolving water quality issues unique to the sub-catchment.

3.11.5.4 Stock Exclusion

I do not support mandatory stock exclusion from waterbodies through fencing in the hill country and for extensive farming systems, as this approach is not tailored to the landscape or farming systems, and is not effects based. The primary route for pathogens to enter waterbodies for the sector broadly is via overland flow pathways and not direct deposition.

The identification and management of Critical Source Areas and flow pathways and stock management provides the most effective (both environmentally and economically) approach to reducing the risk of pathogens from livestock entering waterbodies. This approach has measures which include sheep only areas, targeted retirement of steep gullies, strategic provision of shade and shelter away from waterbodies, stock water reticulation, along with the utilisation and establishment of wetlands and sediment ponds.

Under the proposed provisions, we would have 81 kms of fencing to undertake (40kms of waterways) at an estimated cost of \$75,000 to \$80,000 (see attached Map, the blue lines are the waterways). This would lead into having to change a lot of 7 wire fences to make paddocks useable and even the relocation of stock water troughs resulting in costs spiralling out to hundreds of thousands of dollars.

The health and safety implications of fencing a lot of these areas cannot be ignored. Health and safety risks associated with trying to fence more hilly areas is a big concern to us.

3.11.5.4 Nitrogen Reference Point:

The proposed Grandparenting rule is theft of the natural capital of your land. It rewards the Nitrogen discarders and places big restrictions on those lesser nitrogen discarders. It must be remembered that farming is a commodity market. In order to remain viable, drystock farmers must be allowed to follow market trends if necessary. If the bottom falls out of one market and our only option is to change market direction then it is vital that we are allowed to do so. Putting restrictions around the amount of nitrogen we can apply to our farms curtails this possibility. How are farmers supposed to see a positive future for farming under such unfair restrictions? Why should the nitrogen discarders still be able to pump large amounts of nitrogen onto their land... why should drystock farms be used to mitigate the action of Dairy Farms? How is that realistically going to help the health of our waterways?

The fact can also not be ignored about how those nitrogen reference point figures are obtained. Overseer <u>models</u> rather than measures nutrient loss.

To quote an interview with Caroline Read who is the Overseer Chief Executive in an article in Farmers Weekly January 14, 2019 (see attached): 'There were too many variables to accurately measure any nutrient losses from a farm and she wants councils to move away from having "hard

numbers" on which farmers are judged to have either passed or failed, to one where Overseer was used to determine trends and compare system and management changes.'

We suggest instead that nutrient losses are managed through a 2 pronged approach:

- 1. sub-catchment approach: i.e what are the problems specific to each subcatchment and what measures need to be undertaken to improve the subcatchment.
- 2. Land Use Capability on an individual farm scale: What is the soil type, geology, rainfall, etc of your land. What is the best way to minimise nutrient losses from your farm. Nitrogen loss can be greatly minimised by Good Farming Practice, such as applying fertiliser at suitable times, correct stocking rates, effective grazing policies, etc.

The consequences of the proposed Nitrogen Reference Point not being changed are that it limits the potential profitability of our farm. It creates a handbrake on our farm which could have disastrous consequences if the markets change. This could potentially mean losing the viability of the farm, job losses, and the subsequent flow on effects to other farming partners, communities, etc.

Farming is a commodity market, we cannot pass on the costs borne to us to our products; all costs have to be absorbed into our business somehow. It is imperative that this is remembered by the regulators.

To give you an example of the necessity of having flexibility surrounding nitrogen inputs: Due to the extended dry weather this summer into late Autumn, we were heading into winter with greatly reduced grass cover than normal. We de-stocked some capital stock and steers and heifers to have less mouths to feed over winter. We also applied Urea to the paddocks to give the paddocks a much needed boost of growth. If we were not able to do so under the proposed provisions, this would have meant that the stock would have less feed over winter (with resultant animal welfare concerns), or we would have had to destock even further which would have resulted in job losses on our farm due to the deimished income. This is the first time we have had to apply Urea in autumn but demonstrates to you that farmers need to have flexibility in their farming operations due to situations that are outside of their control such as the weather.

3.11.5.4 Farm Environmental Plans:

Considerations around a compulsory Farm Environmental Plan include the costs involved. To give you an idea on the costs involved for a Farm of our size: Obtaining an official Nitrogen Reference Point from a qualified consultant = approximately \$2400. Certification of the Farm Environment Plan from a certified Farm Environmental Planner = at least \$2500. That's nearly \$5000 and that doesn't include any of the costs of our time involved.

We suggest instead that rather than a blanket approach of set regulations, that Farm Environment Planning include the identification and management of critical source areas and pathways unique to each farm. Critical Source Areas are areas on the farm or at the catchment scale which accumulates runoff and delivers it to surface waterbodies. Research shows that around 80% of the P and sediment loss occurs from 20% of farm catchment, supporting more cost effective, targeted mitigation strategies rather than applying blanket rules (McDowell & Srinivasan, 2009).

This approach combined with matching the farming systems to the capability of the land provides the most efficient and effective approach to managing the emissions of concern from the red meat sector. Namely phosphorus, sediment, and pathogens. In summary, we are caretakers of our land and we look after it. We are continually improving our farm and that also means improving our environment. We are committed to the health of our waterways, however this can be achieved through farming best practice and identifying critical source areas. Not through the suggested unfair sledgehammer approach of the proposed Plan Change 1 provisions. Many of the provisions of Plan Change 1 need to be rethought with regards to fairness and true consequences to the farming enterprises concerned. Farmers should not have to bear the blame for all of the sediment problems too. We experience firsthand the sediment run off that occurs when the district council grades Mangawhio road (the road we live on) and the subsequent run off that occurs following the next rainfall events... the road would contribute more sediment run off than all of the farms combined on Mangawhio Road.

If farmers are asked to contribute to an improvement of our waterways this needs to be done in a common sense, effects based, practical and fair way. This way you will achieve positive uptake by the farming community leading to true water quality improvements.

Please also consider the fact that applying limits to farming operations in areas such as nitrogen application, fencing requirements etc leads to problems in other areas, such as animal welfare (due to possible shortages of feed), loss of productivity, profitability and the flow on effect of job and industry losses and the overall slowdown of the rural sector.

Compulsory fencing of waterways leads to Health and Safety concerns of fencing steep areas. Compulsory fencing of waterways is also going to lead to a much larger weed burden with the subsequent increase of chemicals needed to control such weeds. Have studies been done concerning the increased usage of such chemicals in the waterways? Also these fenced corridors create easily accessible pathways for pests such as possums to move freely within these areas... leading to the spread of disease such as TB and destruction of our native trees and bird life.

Thank you for your time today.



Ngarimu Station Mandeno Family Farm







News

Caution urged on Overseer use

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A FLURRY of reports advising caution in the use of Overseer has prompted developers of the technology to convene meetings with local and central government to develop better guidelines on its use.

Three reports released last year, and another commissioned by Overseer Ltd, confirm the technology was a decision support tool for farmers but was increasingly being used by regional councils as a tactical tool used especially for setting and measuring nitrogen leaching limits.

Overseer chief executive Caroline Read said she will work with regulators to get consensus on how to best use Overseer and to move away from it being used to provide an absolute number on the amount of nitrogen leaching.

Reports last year by the **Biological Emissions Reference** Group, Productivity Commission and the Parliamentary Commissioner for the Environment all raised doubts about the accuracy of Overseer in establishing absolute numbers on the level of nitrogen emissions.

Read said Overseer was more accurate at measuring trends and proportionate changes over time. The Overseer-commissioned



review, by Gerard Willis of Enfocus, described Overseer as a decision support tool for farmers.

"That is, it allows the user to understand the long-term impacts of system wide changes to a farm rather than day-to-day changes in N-loss."

Actual N-loss from a farm can never be known because it cannot be reliably measured for a whole farm and Willis said as with any modelling, Overseer simplified complex processes and standardised localised variability.

Read said in an interview there were too many variables to accurately measure any nutrient losses from a farm and she wants councils to move away from

having "hard numbers" on which farmers are judged to have either passed or failed to one where Overseer was used to determine trends and compare system and management changes.

Overseer chief

is designed to

executive Caroline

Read says Overseer

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rather than providing

As technology improves Read said measuring nutrient loss will become more accurate and provide farmers with a comparison of the impacts of different systems and management changes.

"That is what we are trying to achieve at Overseer, to give farmers the opportunity to understand that if they make changes, what it will mean to their system," she said.

Willis said in his report that

Overseer modelled rather than measured nutrient loss, and then only losses below plant root zones.

Councils have used it as a regulatory tool for more than a decade, principally as a compliance measurement tool and to set nutrient loss limits.

Over time its use has extended as regional councils look for technology to measure diffuse discharges and to meet freshwater quality targets.

Willis urged care with its use in planning effects-based water management.

"Overseer should not be considered as a substitute for a broad, multi-pronged approach to water management more generally."

Willis said after N, phosphorous (P) was the other important nutrient for water quality and while regional councils did not set property-specific P-loss limits using Overseer, there have been calls for this happen.

He said Overseer assumed all farmers followed good management practices, but this ignored changes to improve those practices and similarly ignored those following poor management.

He warned that using Overseer to show compliance or compliance failure against specific N leaching limits could lead to inequities in the way farmers are

treated relative to others, drive creative uses of Overseer and be difficult to justify and enforce if tested legally.

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For that reason, he advocated Overseer be used to estimate farm performance against a target range and where failure to meet those standards triggers closer scrutiny of a farm operation.

66 Overseer should not be considered as a substitute for a broad, multi-pronged approach to water management more generally.

Gerard Willis Enfocus

This may not necessarily mean refusal or forfeiture of consent, because Willis said Overseer data should not be the only consideration for regulators.

"This approach contrasts with one that uses Overseer as part of a pass/fail test that sees a limit imposed and the activity unable to be authorised, even under a consenting regime, until such time as Overseer can demonstrate that the limit will not be exceeded."