

IN THE MATTER of the Resource
Management Act 1991.

AND

IN THE MATTER AgResearch Limited and
Livestock Improvement
Corporation Limited -
submissions and further
submissions on Proposed
One Plan – Water
Hearing

STATEMENT OF EVIDENCE OF GRAEME MATHIESON

1.0 INTRODUCTION

- 1.1 My name is Graeme John Mathieson. I am an Environmental Planning Consultant in the Auckland Office of Environmental Management Services Ltd (EMS). I have a Bachelor of Arts (Geography Major) degree and a Master of Regional and Resource Planning degree from the University of Otago, and 16 years of resource management experience.
- 1.2 I have assisted AgResearch Ltd (“AgResearch”) and Livestock Improvement Corporation Limited (“LIC”) on an ongoing basis providing resource management advice, reviewing new District and Regional Plans, and securing resource consents and private plan changes.
- 1.3 I reviewed the Proposed “One Plan” on behalf of AgResearch and LIC, and prepared primary and further submissions on their behalf. I have now been engaged by my clients to present planning evidence in relation to the Water Hearing.

2.0 AGRESEARCH/LIC INTERESTS

2.1 I will first outline briefly the interests and activities of my clients in the Manawatu Wanganui Region before turning to the subject matter of the Hearing.

AgResearch

2.2 As outlined on their website (www.agresearch.co.nz), AgResearch is New Zealand's largest Crown Research Institute (CRI) with expertise in biological science, therefore having a key role to play in boosting the productivity of our bio-dependent economy. AgResearch's mission is to create sustainable wealth in the pastoral and biotechnology sectors with science and technology. AgResearch's vision is to be the world's best pastoral sector research and development organization.

2.3 AgResearch comprises a number of renowned Research Centres made up of individual scientists, engineers, technicians and their teams. AgResearch has 4 Research Campuses located in Hamilton, Palmerston North, Lincoln and Mosgiel, and 12 Research Farms throughout the North and South Islands. AgResearch currently employs approximately 1080 fulltime staff and 150 casual staff.

2.4 AgResearch develops leading-edge scientific solutions for a range of international customers, including government agencies, industry bodies and private companies.

2.5 AgResearch's work targets the key opportunities and issues faced by the pastoral, biotechnology and textiles sectors, and leads to innovative products and knowledge that benefit all New Zealanders.

2.6 AgResearch has significant assets and operational interests in respect of land within the Manawatu Wanganui Region as follows:

- The Grasslands Research Centre located in Palmerston North which currently employs approximately 300 staff. With the recent closure of

AgResearch's Wallaceville Agricultural Research Centre in Upper Hutt, this has resulted in an intensification of usage and development at the Grasslands Research Centre as many staff, facilities and research programmes have been transferred from Wallaceville;

- 250 hectare Flockhouse Agricultural Research Farm located near Bulls;
- 192 hectare Aorangi Agricultural Research Farm located 15 kilometres west of Palmerston North on the Oroua River floodplain; and
- 485 hectare Ballantrae Hill Country Research Farm located near Woodville.

Livestock Improvement Corporation (“LIC”)

- 2.7 LIC sets the standards for the world in dairy herd improvement through a unique national database which offers unparalleled traceability, world class genetic improvement systems and milk analysis systems. LIC is one of the reasons New Zealand dairy farmers enjoy the lowest cost milk production in the world, a result of the highest technology transfer rate (research to farm practice) in the world, national farm management and breeding strategies and the highest rate of genetic gain (for the New Zealand environment) of any dairy industry in the world.
- 2.8 The LIC Headquarters are at their national dairy herd improvement, farm management and Research Campus located at Ruakura, Hamilton. Adjoining the Research Campus is a bull farm quarantine centre holding bulls for the national breeding programme. The Research Campus normally employs approximately 350 people.
- 2.9 The properties owned by LIC in the Manawatu Wanganui Region include two bull research farms located at Fielding and Awahuri. The Awahuri property includes a small office block and a semen processing laboratory. The total area of land owned by LIC in the Manawatu Wanganui Region is approximately 490 hectares.

3.0 Provision for Agricultural Research Centres and Farms

- 3.1 The activities of AgResearch and LIC are critical in ensuring the prosperity, security, and ecological sustainability of New Zealand's pastoral sector. This sector is the backbone of our economy and its continued success is essential to this country's living standards.
- 3.2 The AgResearch and LIC Agricultural Research Centres and Farms within the Manawatu Wanganui Region represent a significant capital investment in research infrastructure and are of regional and national significance. Sound planning is required to ensure that such resources and their associated activities are sufficiently recognised and protected for future generations in statutory planning documents such as the Proposed One Plan.

4.0 RULE 13-1 AND TABLE 13-2

- 4.1 AgResearch lodged further submissions in support of the following primary submissions which sought the deletion or amendment of Rule 13-1 so that the activity of farming no longer requires resource consent and is provided for as a permitted activity:
- Federated Farmers (426/163);
 - Andrew Hoggard (411/1);
 - Mr Phillip James Hartridge (127/1);
 - Murray Holdaway (240/1); and
 - New Zealand Pork Industry Board (409/29).
- 4.2 As noted in their further submission, AgResearch is particularly concerned about the potential restriction on agricultural research programmes on research farms under Rule 13-1, through the application of the maximum nitrogen leaching/run-off values using Table 13-2.
- 4.3 Similarly, LIC lodged a primary submission in relation to Table 13-2 noting there is uncertainty regarding the appropriateness of the maximum nitrogen leaching/run-off values, and the degree of impact they will have on research farms (and other farms) in the Region. LIC sought a revision of Table 13-2

unless research on trial farms conclusively proves that the nitrogen leaching/run-off values are appropriate and will not result in research farming (and other farming) becoming unsustainable.

- 4.4 The issue of Rule 13-1 potentially restricting future research programmes is particularly relevant and concerning to AgResearch. AgResearch currently operates 16 farms throughout New Zealand, providing the company with the ability to undertake scientific work such as reproduction, parasitology, genomics, plant breeding, soil fertility, animal behaviour, immunology and disease management. Exploring land uses, practices and technologies that go beyond current boundaries and parameters (such as the maximum nitrogen leaching/run-off values in Table 13-2) is an integral part of that research effort.
- 4.5 AgResearch has advised that the following two examples of recent research would be constrained if research farms were not exempt from the maximum nitrogen leaching/run-off values of Table 13-2:
- (i) Examining the behaviour of agro-ecosystems to nutrient additions beyond current economic and biological optimums; and
 - (ii) Livestock numbers/ha beyond even short-term biological limits to explore the resilience of our soil-plant systems.
- 4.6 Limits of this nature would seriously hinder the scope and hence value of the research AgResearch could offer to the pastoral industry.
- 4.7 The application of Rule 13-1 as currently written in the Proposed One Plan would result in AgResearch being required to seek discretionary activity resource consents under Rule 13-27 to undertake some future agricultural research activities. In this scenario, there could be significant costs in preparing any necessary resource consent applications. Being a discretionary activity, it is possible that Horizons.MW could publicly notify such applications potentially resulting in delays, further cost associated with Hearings, and a high level of uncertainty as to whether or not such resource consents would be granted. This would place agricultural research

programmes at risk which could be of regional and national significance in terms of their findings.

- 4.8 AgResearch and LIC consider the ability to undertake a wide range of agricultural research programmes is of regional and national significance to the farming industry, which should be adequately recognised and provided for within the Proposed One Plan.
- 4.9 Accordingly, AgResearch and LIC seek that Council recognises the importance of providing adequately for agricultural research activities by amending Rule 13-1 so that it specifically states that “agricultural research farms” are exempt from it’s application, resulting in a permitted activity status for this activity.

5.0 PRODUCTION LAND

5.1 Rules 13-3, 13-4, 13-5 and 13-6 refer to “production land” when determining permitted discharges (subject to performance standards) as follows:

- Rule 13-3 provides for the discharge of contaminants onto land from the preparation, storage, use or transportation of stock feed on production land.
- Rule 13-4 provides for the discharge of grade Aa biosolids and soil conditioners onto production land.
- Rule 13-5 provides for the discharge of contaminants onto or into production land associated with an offal hole or farm dump.
- Rule 13-6 provides for the discharge of farm animal effluent onto production land.

5.2 No definition has been provided for “production land” in the Proposed One Plan, but the definition of “production land” in the Resource Management Act 1991 is as follows:

“(a) Means any land and auxiliary buildings used for the production (but not processing) of primary products (including agricultural, pastoral, horticultural, and forestry products).”

- 5.3 As noted in their primary submissions, AgResearch and LIC are concerned that there is an element of uncertainty as to whether rural land used primarily for agricultural research (i.e. not for “the production of primary products”) would fit neatly within the definition of “production land”.
- 5.4 In their submission, AgResearch and LIC sought assurance that the same set of rules would apply to rural land used for “production” and to land used for an “agricultural research farm”. Accordingly, AgResearch and LIC sought amendments to Rules 13-3 to 13-6 so that it was specified that the permitted discharges could occur to “production land” and “land used for an agricultural research farm”.
- 5.5 The Officers Report recommends rejecting these submissions on the basis that *“The term “production land” is clear and if research farms are included then other activities would question why they too are not included. It would lead to inconsistency.”*
- 5.6 It is considered that there is an element of uncertainty regarding whether or not the use of the term “production land” in Rules 13-3 to 13-6 would restrict discharges to land used primarily for agricultural research. It is noted that some of the other rules in Chapter 13 simply refer to discharges to “land” as opposed to “production land” (e.g. Rule 13-1, 13-2) which would address the issue. Alternatively, another option is to include a footnote in Rules 13-3 to 13-6 which for the avoidance of doubt states *““production land” includes land used for an agricultural research farm”*. The various performance standards attached to the Rule would ensure that any adverse environmental effects would be no more than minor.

6.0 SUMMARY

- 6.1 AgResearch and LIC seek greater certainty that the Proposed One Plan does not unnecessarily restrict regionally and nationally significant agricultural research activities. Accordingly, AgResearch and LIC seek that Council amends the One Plan as suggested in this evidence, and/or makes any alternative changes appropriate to achieve the same outcomes being sought.

Graeme Mathieson
ENVIRONMENTAL PLANNER
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