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RECOMMENDATIONS ON THE FUTURE FOOTPRINT PROPOSAL

Report by the Change Management Team

13 September 2013

Title: Recommendations on the Future Footprint Proposal: Report by the Change Management Team

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Date: 13th September 2013

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1 EXECUTIVE SUMMARY

Future Foot Print (FFP) submission from staff totalled 245 with the majority focusing on science. All submissions were read by the CMT, themed then assessed against the FFP criteria (internal, external and stakeholder co-location and effectiveness and efficiency). The CMT also considered critical needs related to location for the different groups/teams/roles/areas for future work. Implementation, which was formally out of scope, was considered to address the concerns around FFP risks and ideas for implementation.

Staff indicated through submissions that there was a lack of information and/or understanding, and therefore trust, in the FFP Business Case and Proposal. The CMT have formulated key action points for the Executive Team (ET) to help mitigate this. A clear vision and concrete plans regarding the vitality of the regional campuses being one of them.

The CMT used the guiding principle of co-location of science teams/capability unless there was a compelling regional reason not to do so. This included future strong collaborator or stakeholder interactions, often related to regional facilities or regional problems which could not be serviced from another campus.

Metabolomics and Animal Productivity generated significant numbers of submissions. The CMT judged that the guiding principle for evaluating the location of the Metabolomics platform and corresponding expertise was the co-location of staff and facilities with the biological scientists. Although there could be compelling reasons for bringing all ‘omics platforms together in the future, the CMT judged that the premium of integrating data could also be achieved by a “virtual ‘omics network”. The co-location reasoning was not compelling enough to bring all omics platforms and capability together because of the different omics technology platforms and expertise.

The CMT agrees on the guiding principle of bringing all Animal Productivity science, including deer research together (“co-location”) at one campus unless there was a strong regional reason not to do so. Invermay was seen as the best campus to realise this due to the strong current and future stakeholder collaborations and the current and future links with Otago University, especially in genomics. Invermay is also considered a preferred location from a practical and future cost-benefit perspective due to it being closer to many science and farmers collaborators. The option to co-locate Animal Productivity in Lincoln was not judged to be beneficial to AgResearch due to the current lack of investment in animal sciences at Lincoln University and the lack of other attractive future opportunities for synergies at Lincoln. Although, the CMT understand there is a desire for establishing a “Systems Biology” capability at Lincoln in the future, the vision for this is still somewhat unclear and potentially high-risk without knowing Lincoln University’s future plans for developing Animal Sciences. Lincoln was therefore judged by the CMT as better placed to become a large hub for land-based research focusing on Farm Systems and Land &

Environment research. Lincoln University and other Lincoln based CRIs have a strong track record in this domain.

When considering submissions on Finance & Business Performance and Shared Services, co-location roles at Lincoln were the guiding principle. However, the CMT felt that in some cases there was a stronger argument to have specific roles co-located next to the internal clients. Face-to-face interactions and a service on-campus were judged to be more important than having peers together at a centralised location. Co-location with internal clients was decisive for the CMT recommendations regarding Accounting Services, Information Services Solutions, Support and Records and Bioinformatics and Statistics roles.

The CMT would like to suggest that the ET consider a few important topics regarding implementation. Flexibility around relocation could help to mitigate the risk of losing (key) staff. Extension of the relocation period, making relocating financially more attractive, clarity around and/or review of the relocation policy, and working with banks to help support our relocating staff secure mortgages are a few of the options to consider.

Many of the staff submissions focused on the perceived negative implications of the FFP Proposal and the implementation risks involved in a change like FFP, some of which were out of scope. The CMT understands these considerations and concerns. However, the CMT also sees all the positive opportunities of the FFP Proposal. The CMT worked hard to present all the information in a balanced way by looking at the future opportunities for AgResearch as a whole organisation. The CMT are aware that they have made some strong recommendations for changes to the FFP proposal. The CMT hopes that the staff consultation process, the recommendations and considerations will help the ET to make the best possible decisions for AgResearch and New Zealand.

2 RECOMMENDATIONS SUMMARY

Whole Organisation

1. *(Implementation)* That the ET provide additional information on the risks and benefits factored into the Business Case, specifically on:
    a) retention rates of science staff
    b) recruitment and relocation costs
    c) financial benefits of improved building occupancy rates
    d) travel cost savings
    e) the GPP growth.
2. Ensure leadership and vitality at regional campuses by locating sufficient a) L3-L4 roles; b) Senior Scientists (R8-9); and c) Multidisciplinary teams and Innovation Brokers.

Science

3. Metabolomics and Plant Chemistry capability to be co-located at Grasslands.
4. Plant Fungal Interactions Chemistry, Immuno-biochemistry and Toxicology capability to be located at Ruakura.
5. Key roles and facilities required to continue providing Facial Eczema research and the Ramguard service to be located at Ruakura.
6. Animal Genomics and Genomnz teams to be co-located at Invermay.
   Condition: Consideration is given as to whether Animal Genomics capability at Ruakura is required to address North Island regional issues, specifically selection for Facial Eczema resistance in sheep and cattle.
7. The majority of the Reproductive Technologies team to be co-located with other Animal Productivity capability at Invermay.
   Condition: That confirmation of an alternative satisfactory approach to obtaining sufficient ovaries for reproductive research is able to be developed prior to co-location.
8. Reproductive Technologies capability to be located at Ruakura for work based on critical regional facilities.
9. The Reproductive & Developmental Biology team to be co-located with other Animal Productivity capability at Invermay.
   Condition: That confirmation of an alternative satisfactory approach to obtaining sufficient ovaries for reproductive research is able to be developed prior to co-location.
10. Deer research capability to be co-located with other Animal Productivity capability at Invermay.
11. Animal Welfare science capability to be co-located with Animal Nutrition & Health national capability at Grasslands.

12. Food Assurance and Meat Quality capability to be co-located at Grasslands.
13. Dairy Foods team to be co-located at Grasslands, with a capability presence at Ruakura to service regional needs.

    Condition: Determine what sized regional presence (staffing and infra-structure) is required at Ruakura to optimise synergies from external co-location with collaborators and stakeholders prior to a final decision being made to co-locate Dairy Foods to Grasslands.
14. OVERSEER development and science underpinning development capability to be co-located at Lincoln.

    Condition: Expert User Group and Technical Advisory Group membership should be represented across all campuses
15. APSIM modelling capability to be split between Lincoln and Grasslands campuses.
16. *(Implementation)* APSIM modelling capability should be ensured for all campuses in the future.
17. Some senior/principal Land & Environment science capability to be located at Ruakura and Invermay (see recommendation 2).
18. *(Implementation)* Appropriate supporting laboratories to be located at Ruakura and Invermay.
19. Soil Ecology capability to be co-located at Lincoln with the Soil Biology team and external collaborators.

Executive Team

20. Executive Team to be co-located at Lincoln.

Finance & Business Performance

21. Financial Operations team to be co-located at Lincoln.
22. Accounting Services team to be located across all campuses alongside science, based on the number of science clients.

Shared Services

23. Records Manager role to be located at Lincoln (as per FFP Proposal); Information Administrator role to be located at Grasslands.
24. Information Systems User Support roles to be located across campuses proportionate to the number of internal clients.
25. One Information Systems Helpdesk role to be located at Grasslands and Lincoln.
26. A senior Information Systems User Support role ("Site Manager") to be located at Grasslands.

27. Information Systems Solutions capability to be located across campuses proportionate to the number of internal clients.
28. Bioinformatics and Statistics roles to be distributed across campuses and aligned to science teams.
29. Small Animal Colony facility to be relocated at Grasslands and aligned to science teams.
    Condition: Evaluation based on final location of science teams at Ruakura.
30. KBarn and Library Resource Services roles to be located at Ruakura.
31. The Lab Services roles and facility at Ruakura to be disestablished.
    Condition: Outcome of recommendation determined by final makeup of Ruakura campus.

Implementation considerations

32. AgResearch Relocation Policy is reviewed and updated
33. Work with banks to help support our relocating staff secure mortgages.
    Note: Implementation also includes recommendations 1, 16 and 18.

3 INTRODUCTION

3.1 Role of the Change Management Team (CMT)

This is the report from the AgResearch's FFP Change Management Team (CMT). The CMT had a formal role of considering all the submissions by AgResearch staff on the proposed changes regarding the FFP Proposal. Staff consultation is part of the formal change management process (http://g10.agresearch.co.nz/bestpractice/Pages/hr-change.aspx). In Appendix 1 the Terms of Reference for the CMT are provided; Appendix 2 gives an overview of the membership of the CMT. The role of the CMT was to consider all staff submissions, analyse and discuss them within the CMT, seek further information and clarification from submitters and management (L1-L3) if required and to formulate recommendations for the Sponsor (Shared Services Director) and the Executive Team (Chief Executive and four Directors). The ET will make final decisions regarding FFP based on the Proposal, staff submissions, the CMT recommendations, and other relevant information as deemed necessary.

3.2 Future Foot Print Business Case and Future Foot Print Proposal

The CMT used the FFP Business Case (staff version), the FFP Proposal (31st July 2013) and the information on proposed locations for teams and roles, as presented to all staff (http://g10.agresearch.co.nz/company/future-footprint/Pages/default.aspx), as a starting point. Where necessary the CMT asked for more information on the Business Case and Proposal and this is explained further in "The Way CMT Worked" section.

3.3 Submissions

Submissions from staff totalled 245 which represented 353 staff members. There were many submissions dealing with the same topic/theme and a few submissions were copied and sent in by different submitters. Some submissions were only a paragraph and some submissions were 13 pages long, not including attached literature. Attachments to submissions included: maps of deer farms in the South Island; scientific publications on innovation; statistical analysis of age distribution of AgResearch's staff; earthquake and other natural risk assessments; and quotes for the cost of equipment. Most of the submissions focussed on the pros and cons of the FFP Proposal with a greater tendency to point out the cons. However, a few submissions only mentioned the positive aspects of the FFP Proposal.

All submissions were read by the CMT. The CMT categorised and themed the submissions (see "The Way CMT Worked"). Many submissions dealt with more than one topic and were processed accordingly. Figure 1 gives an overview of the areas the submissions focused on.

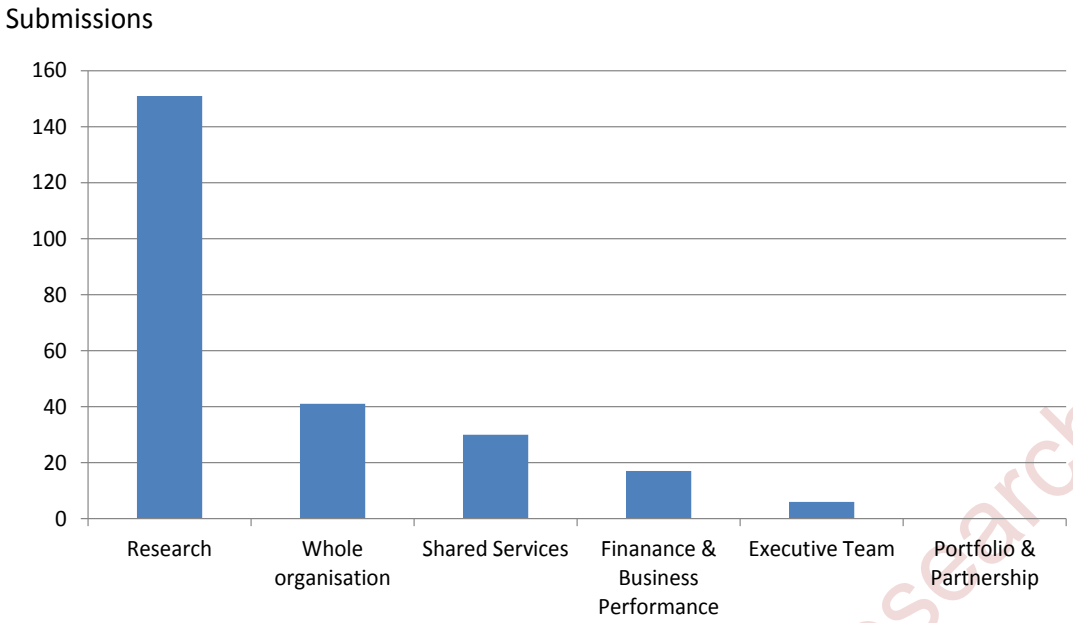

Figure1. Distribution of staff submissions across the different topic areas

3.4 The Way CMT Worked

To accomplish the task within allocated timeframes, the CMT had to occasionally work in sub-teams consisting of three CMT members. The sub-teams were tasked with comprehensively reading and summarising the submissions within a given topic area. The CMT worked in four sub-teams when required to assist with efficiency of tasks. Before analysing and summarising submissions the CMT conducted two calibration exercises. All CMT members read a small selection of submissions and the sub-team presented their summarised findings. The sub-team was then questioned and critiqued by other CMT members. By following the same approach during the first few meetings, the CMT learned how to best work through all submissions in a consistent way. Most CMT members read all submissions and had the freedom to ask questions or contribute to the other sub-team's work throughout the process. By reading and summarising all submissions, clear themes and generic topics appeared. All submissions were clustered based on these themes e.g. deer research, modelling capability.

The CMT used the following criteria in the FFP Proposal to evaluate the submissions:

a) co-location of staff internally where this offers a premium,
b) co-location externally (with those we do science with) where this offers a premium,
c) co-location with other stakeholders,
d) effectiveness and efficiency.

The CMT also considered critical needs for the different groups/teams/areas for future work related to location e.g. access to farms or abattoirs. Although implementation was formally

out of scope of the CMT's role, some implementation issues were addressed to provide a high level overview of the concerns around FFP risks and ideas for implementation. The CMT also discussed submissions that were considered out of scope, if the information contained was judged as relevant and valuable. Out of scope submissions were often submissions relating to personal circumstances and implementation issues.

The sub-teams presented summaries on each topic/theme to the CMT including:

a) FFP proposed change,
b) rationale for the proposal (pros and cons),
c) summary of submissions on the proposal,
d) CMT's recommendation, considerations and rationale.

The CMT had multiple Video Conference (VC) meetings and also met for four days face-to-face (F2F) at Ruakura. During the F2F meeting the CMT alternated between working in sub-teams and as the whole CMT. The sub-teams had the freedom to ask for clarity from submitters if necessary. Follow-up questions for management (L1-L3s) were formulated by the CMT to gain clarity around the FFP Proposal and rationale. After the interviews with management the responses were documented, shared and discussed within the CMT. Draft recommendations were formulated by the sub-teams and reviewed and critiqued by the CMT until agreement was reached. Thereafter the CMT report was written.

The CMT recommends that this CMT report is made available to all AgResearch staff. Therefore the CMT has tried to write in a clear and non-jargoned manner. However, we acknowledge that some topics are more difficult to understand than others and explanations may be required. There may be sensitive material that may not be appropriate for the ET to share with all staff.

4 CMT RECOMMENDATIONS & RATIONALE REGARDING FFP PROPOSAL

The CMT used all information available to make recommendations which included the documents on Gateway (http://g10.agresearch.co.nz/company/future-footprint/Pages/default.aspx) and by talking to management (L1-L3s) to further tease out the thinking and rationale behind the proposal. This included ideas and opportunities for campuses and hubs at the different locations and possible advantages of co-locating with other CRIs, universities and stakeholders. The CMT did not consider any evaluations from the different roadmaps (Animal Sciences, Forage, Adoption & Practice Change). However, these roadmaps have and will continue to influence and guide the thinking of the FFP project.

Staff submissions were mainly based on the FFP material available on the website. Background information on the rationale behind groups and teams and whole of organisation was variable throughout the organisation. CMT also acknowledges that new insights and further co-location opportunities are still developing. Because of this the CMT has focused on the submissions and the information that the submitters had access to. However, where possible the CMT has discussed the background information obtained through interviews with management.

Some recommendations are formulated on a conditional basis. This occurred when the recommendation was either dependent on a decision made about another recommendation, or reliant on the availability of facilities or proximity of collaborators that were deemed critical for the future success and functioning of a team (or part of a team). Recommendations were only formulated on topics addressed in the submissions, therefore, where no submissions were received on a particular part of the FFP Proposal, the CMT made no recommendations.

In the event that the CMT were unable to reach a unanimous agreement on a recommendation it was decided that it was best to leave the option open to have either a majority or consensus viewpoint. The philosophy of the CMT was that it was better to clearly explain the reasoning and thinking behind recommendations, even if not all of the CMT agreed/understood, instead of formulating weak recommendations based on consensus. The intention of the CMT was to formulate clear and decisive recommendations for the ET to consider. All recommendations were by a very strong majority vote of the CMT with over a third being by consensus.

The recommendations were formulated as follows:

Proposal: Description of FFP proposed change or situation.

Summary of Submissions: CMT interpretation and high level summary of staff submissions.

CMT Considerations: Analysis, considerations and context by CMT.

CMT Recommendation (in blue) and Rationale: The CMT judgement and rationale, sometimes including strict conditions. If a majority vote recommendation, the minority may be presented if judged to be informative.

4.1 WHOLE OF ORGANISATION

This section identifies and addresses topics identified at all-AgResearch level. Some of these topics i.e. relocation issues around staffing, ensuring the vitality of regional hubs, are considered more implementation issues. However given the invite to staff to bring all issues forward at the consultation phase, the CMT have considered them and provided recommendations where appropriate.

4.1.1 Business Case and Proposal – Risks and Benefits

The FFP Business Case and Proposal includes reference to financial benefits arising from increases in science collaboration flowing through to gross domestic product (GDP). Also referred to are further financial benefits arising from reduced travel costs, increased asset utilisation, innovation with co-located hub partners and qualitative benefits arising from attracting talent to AgResearch's world class facilities.

The Business Case refers to the need for careful risk management throughout FFP project implementation, particularly given 'the scale of property work and volume of role relocations'.

Summary of Submissions

Many submissions related to a perceived lack of evidence of business benefits in the Business Case and Proposal. The Business Case states that co-location will reduce costs and improve collaborations and ultimately drive a significant increase in GDP. Many submissions refuted this from a range of positions. These included; that the Business Case refers to two publications, however there are many more available which challenge or reject this relationship; research on virtual teams makes similar contentions; geography is not necessarily a driver of science outputs; the Proposal does not explain or evaluate the importance of co-location in hubs for collaboration and innovation versus other important drivers e.g. culture, less competitive funding environment; there is a lack of visibility on the extent to which the Business Case assumptions have considered data on the success or otherwise of previous AgResearch relocations; there is no evidence that our facilities are restricting our opportunities to carry out excellent science and attract researchers.

Other submissions focussed on a 'lack of a next best alternative' in the Business Case and that the two 'business as usual' cases cited do not consider other uses of the investment which could increase collaboration and innovation.

There were a number of requests for an 'independent suitably qualified external review of the Business Case risks, benefits and assumptions' and that not having such a review detracts from the Proposal's credibility and transparency.

There were concerns that the $13.4m transition costs referred to in the Business Case may not be enough, given indirect transition costs such as recruitment and up skilling.

There were concerns that Lincoln University does not rank as high as other current collaborating universities and therefore co-locating with Lincoln was not attractive for AgResearch. Feedback was that Otago University ranks as one of the highest and internationally it ranks within the top 250 universities.

There were many submissions which related to Business Case and Proposal risk, namely that there is no risk modelling in the Business Base, nor reference to how risks may have been factored into the revenue and cost streams associated with the Net Present Value (NPV) calculations and how sensitive this value is to changes in the impact or likelihood of project risks. Submissions focussed on loss of critical capability, recruitment risk (particularly the difficulty of replacing critical science capability), loss of existing collaborations, business continuity more broadly, risk of infrastructure cost over-run.

CMT Considerations

The CMT acknowledges that the Business Case presented to staff had some information removed for stated business reasons and that the Business Case itself was at a point in time and based on a number of assumptions, given the stage of the project at that time.

The CMT also acknowledges that staff have not been party to the background discussions with stakeholders which have fed into the Business Case and Proposal development, and that some of this information may be commercial in confidence. These future-oriented discussions are likely to have given the ET a level of perspective and confidence that many staff do not have at this stage, but which is critical to FFP project success.

CMT Recommendation and Rationale

Recommendation 1 (Implementation) ***That the ET provide additional information on the risks and benefits factored into the Business Case, specifically on:***

a) retention rates of science staff
b) recruitment and relocation costs
c) financial benefits of improved building occupancy rates
d) travel cost savings
e) the GDP growth.

Whilst important, many submissions related to implementation issues and the benefit of providing staff with full information to increase confidence in the proposal. The CMT proposes that the Executive Team provide additional information on the risks and benefits factored into the Business Case and should include assumed:

a) retention rates of science staff in relocating positions
b) recruitment and relation costs of replacement staff
c) financial benefits of improved building occupancy rates
d) travel cost savings
e) significant benefit streams in addition to the GDP growth arising from collation of AgResearch science staff and innovation hub partners.

4.1.2 Regional Campus Vitality and Leadership

Proposal: *Establishment of two main innovation hubs (Lincoln & Grasslands) supported by regional campuses (Ruakura and Invermay).*

Summary of Submissions

Concern at the lack of clarity regarding the level of on-site science leadership proposed for the two regional campuses (Ruakura and Invermay).

Invermay and Ruakura are held in high esteem within their respective regions and that without careful forward planning the FFP Proposal may jeopardise that and associated funding.

Various submissions suggested a range of alternatives to the 'two main hub plus two regional campuses' proposal. These included retaining a refurbished Ruakura as the main hub/campus, refurbishing the facilities on all four campuses with equal staffing levels. A group of submissions advocated Invermay facilities and staffing levels be upgraded and increased from present levels to make it a more vital regional change driver given links with Otago University. Another submission suggested one primary site (consistent with 'One AgResearch') supported by three regional campuses of approximately one hundred people to ensure vitality.

Regional campuses will become something of an outpost and lack national capability and the brand necessary to attract top science talent.

CMT Considerations

The CMT recognised regional campus vitality as an implementation issue that can only be fully addressed once the FFP Proposal is finalised and staffing levels at each of the four campuses are known.

The CMT discussed the wider issues of campus leadership and connection to their regional stakeholders and farming communities.

CMT Recommendation and Rationale

Recommendation 2 (Change to proposal) ***Ensure leadership and vitality at regional campuses by locating sufficient a) L3-L4 roles; b) Senior Scientists (R8-9); and c) Multidisciplinary teams and Innovation Brokers.***

Regional campus vitality is critical to successful adoption and practice change, alignment of science with national and regional issues and the attraction of these campuses to top science talent.

4.2 SCIENCE

The CMT tried to present our considerations and recommendations in a logical order. We started with the discussion of Metabolomics. The considerations regarding Animal Productivity are related to Metabolomics through the omics considerations. Then the other science teams and groups, which had weaker interdependencies, are discussed.

4.2.1 FORAGE IMPROVEMENT

4.2.1.1 Metabolomics Capability

Proposal: *Metabolomics capability and chemistry infrastructure plus analytical operators to co-locate with other analytical capability in Lincoln*

Summary of Submissions

The most significant theme within the submissions received from both users of the service and metabolomics/chemistry operators was that the critical interaction for metabolomics is between the experimental scientist/biologist and the analytical operator. This interaction occurs during experimental design, data analysis and interpretation and the submitters were strongly of the view that co-location is critical for these interactions. It was acknowledged that some of the users of metabolomics would be Lincoln based, but a count of the teams that are potential users of metabolomics platforms indicated twelve teams would be based at Grasslands under the FFP Proposal (Animal Health, Rumen Microbiology, Parasitology, Infectious Diseases, Dairy Foods, Food Assurance & Meat Quality, Food Nutrition & Health, Plant Biotechnology, Plant Phenotyping, Forage Breeding Innovations, Plant Fungal Interactions, Germplasm Development) versus four to be based at Lincoln (Reproductive & Developmental Biology, Reproductive Technologies, Animal Genomics, Protein & Biomaterials).

The concept behind science opportunities from integrating metabolomics data with proteomics and genomics data was generally supported in submissions. However, many submissions strongly challenged the efficiency gains from co-location of the instrumentation and operators of those technologies, as:

a) These 'omics' use entirely different technology platforms, and require specialist operators – hence there is little benefit from physical co-location.
b) The platforms are at different stages of technology development, and some (e.g. genomics) can be (and are currently) sourced off-shore, while others (metabolomics) require specialist operator knowledge and interpretation.

The view was that the critical factor is in data integration and analysis, and with modern data storage and transfer pipelines that this can be achieved from any location. In light of this,

several submissions suggested that a "virtual 'omics'" platform be established to facilitate this data integration, but that this did not require co-location of instrumentation to be achieved.

Location of metabolomics capability at Lincoln will lead to significant logistical difficulties with sample transfer between sites. These difficulties include problems with stability of metabolites over time and during transport, limiting the ability to apply metabolomics to research areas. A second very significant difficulty is the regulatory process and risk management around the transfer of genetically modified material from Grasslands to Lincoln.

Other points raised included the lack of L3-L4 leadership in forage at Lincoln under the proposed role locations, and the synergies that can be obtained from AgResearch metabolomics capability interacting with Massey NMR facilities, and Plant & Food Mass Spec capability in Palmerston North.

Alternative suggestions included establishing a small satellite metabolomics capability at Lincoln while retaining existing capability at Grasslands (cost estimates indicated that instrumentation purchase costs might be lower than relocation costs), creating a virtual 'omics' network (as mentioned above), and creating a systems biology capability (suggested location was Grasslands).

CMT Considerations

Some clarification was sought as to synergies from co-location of technological platforms, but largely confirmed the view from submissions. Some small efficiencies are obtainable from service contracts for equipment and sharing of consumables, and a small element of common machinery exists, but the overall efficiency gains do not appear to be large. The concept of "systems biology" was elaborated on during interviews with management, as it was absent from the formal documentation around the FFP Proposal shared with staff. The CMT felt that staff as a whole had not been given sufficient information on the "systems biology" concept to provide informed submissions on this.

CMT Recommendation and Rationale

Recommendation 3 (Change to proposal) ***Metabolomics and Plant Chemistry capability to be co-located at Grasslands.***

CMT considered that the critical interaction between biologists and metabolomics operators is a compelling reason to co-locate the metabolomics and plant chemistry capability with the majority of science users at Grasslands. This is consistent with the FFP principle to co-locate AgResearch staff where it offers a premium. In this instance the premium appears to be greatest from the biologist-metabolomics operator interaction, and the synergies from co-location of metabolomics instrumentation with proteomics and genomics platforms. Moreover it was apparent that sample transfer from Grasslands to Lincoln would limit the type of

analysis undertaken (e.g. analysis of volatiles from live plants would not be feasible) and provide significant logistical issues (e.g. transfer of GM materials between facilities requiring individual permits).

Integration of 'omics' data is still a valuable goal, but alternative models could achieve this, as clearly the critical integration is at the data level and the computing infrastructure and platforms required to achieve this are significantly less dependent upon co-location with instrumentation.

4.2.1.2 Plant Fungal Interactions and Ramguard

Proposal: *Ruakura-based Plant Fungal Interactions roles to co-locate to Lincoln*

The majority of the Plant Fungal Interactions team are proposed to stay co-located at Grasslands with the Margot Forde Germplasm Centre and the Forage Improvement group. The staff currently at Ruakura are proposed to co-locate with other analytical capability and endophyte testing in Lincoln. Three staff are proposed to remain at Lincoln for animal endophyte testing.

Summary of Submissions

The Plant Fungal Interactions chemistry and Immuno-biochemistry capability sit within the Forage Improvement group and are part of high performing multi-disciplinary "right team". The focus of the teams is on developing and maintaining grass/endophyte associations. The northern North Island has the greatest pasture pest issues having both temperate and subtropical species. Biotic and abiotic pressures mean differences between plant breeding lines appear more rapidly here. Endophyte entomology is to remain in the Waikato region due to the need to test endophytes under high pest and environmental pressure, in conditions that only exist in this region. The chemistry, immune-biochemistry and toxicology capabilities are essential to the work of the endophyte researchers (Bio-control & Biosecurity entomologists). The need for co-location with these teams is due to endophyte compounds being very unstable meaning transportation of samples is not possible and sampling and insect testing needs to be taken regularly and analysed immediately. Fractionation and testing methods must be must be tailored to each individual experiment, requiring a high degree of collaboration, as does data analysis which must be considered from a chemical and entomological point of view.

The submissions overwhelmingly state that the key strength of the endophyte team is in the multidisciplinary nature and that co-location of part of these capabilities to Lincoln would severely impact on current and future endophyte/entomology research capability. Submitters acknowledge that while there may be some advantages to having the Ruakura chemistry

capability at Lincoln to support animal testing, it is in fact crucial for the success of endophyte development and soil biology research that they are co-located with this science at Ruakura.

The essential toxicology capability to insect/endophyte research is provided by a scientist from the Forage improvement group. Chemistry capability is provided by the Food and Bio-based Products group.

Additionally, external stakeholders including seed breeding companies are active in the region and thus require the Biocontrol & Biosecurity team to be based at Ruakura to support regional needs.

CMT Considerations

The CMT clustered the chemistry, immuno-biochemistry and toxicology capabilities. Consideration was given to both co-location with "like" capabilities and co-location with the science they support. Additionally the location of the Ramguard service and facial eczema research was considered as northern region specific and it draws from capabilities in the Plant Fungal Interactions and Soil Biology teams. The specialised high hazard sporidesmin production laboratory facility and equipment used for this work is also utilised for Plant Fungal Interactions and Biocontrol & Biosecurity team research.

CMT Recommendation and Rationale

Recommendation 4 (Change to proposal) ***Plant Fungal Interactions Chemistry, Immuno-biochemistry and Toxicology capability to be located at Ruakura.***

CMT judged that co-location of chemistry, immuno-chemistry and toxicology capability with the regionally anchored science programmes that they contribute to, is critical to successful outcomes and on-going viability of this research. It allows close integration with science roles who contribute complementary specialist skills and biochemical method development, working closely together and identifying knowledge gaps, possible solutions and developing practical sampling and analytical procedures.

The CMT believes co-locating analytical chemistry capability with the science it supports is essential for the viability of existing and future research programmes and that the resulting gains outweigh any potential benefits in co-locating with "like" capability. The different research focus, sample management, skill sets and analytical technologies of the different chemistry capabilities mean the expected efficiency and collaborative gains of co-locating chemistry capability, as per the proposal, are not compelling.

Consideration should be given to whether there would be any gains by splitting the toxicology capability, co-locating the Food & Bio-based toxicology science role based at

Grasslands with Microbiology/Food Assurance capability and whether these would outweigh the status quo.

Recommendation 5 (Change to proposal) ***Key roles and facilities required to continue providing Facial Eczema research and the Ramguard* service to be located at Ruakura.***

*See also condition to Recommendation 6 for Animal Genomics component of this service.

The Ramguard service has been provided to sheep breeders for 30 years, has strong stakeholder links and regional visibility and is currently being developed and tested for cattle. Facial Eczema (FE) is an animal disorder (mycotoxicosis) that is heavily region specific, particularly in the North Island's northern and east coast regions, and is caused by a toxin-producing fungus in pasture and is a major cause of lost animal production. The programme draws on input from three teams including Animal Genomics, Plant Fungal Interactions and Soil Biology. The mycological input that supports Ramguard must stay in an FE-prone region. It is essential to regularly collect field isolates of the causative organism, *Pithomyces chartarum*, to ensure strongly toxigenic strains are available for large scale culturing for toxin production. These isolates have to be collected from FE-prone pastures and these are not available in Canterbury. In addition, the inoculum required for large scale fungal culturing for toxin production is unstable and must be used within one to two hours of preparation. The toxin production therefore needs to be co-located with the mycological input. The Soil Biology Team's mycological capability is to remain at Ruakura. Based on the concept of 'right teams' it would be logical to co-locate the other two team roles (from Animal Genomics and Plant-Fungal Interactions teams) at Ruakura.

4.2.2 ANIMAL PRODUCTIVITY AND DEER RESEARCH

There is a premium to be obtained through co-location of the four teams within Animal Productivity (internal co-location principle). The CMT formed this view after having considered submissions related to each team individually and deciding to consider the teams as a collective. The deer capability within Farm Systems South was also considered as a critical co-location factor with the Animal Productivity teams, and so was considered as part of the overall animal science capability to be co-located - acknowledging that other animal science capability exists within Animal Nutrition & Health, proposed to remain at Grasslands.

The CMT acknowledged that the proposed co-location with proteomics capability at Lincoln could be beneficial. Some submissions surmised an AgResearch move toward establishing a Systems Biology focus in the future. However, this Systems Biology vision is unclear, was not in the FFP Proposal and was not part of the consultation process. For these reasons, it has not been taken into consideration by CMT.

Submissions did not see any benefit for animal productivity teams to co-locate with Lincoln University. The university's animal science programme is not as strong as other universities and there are no clear plans that Lincoln will develop this capability further in the future. Far greater potential synergies appear obtainable from co-location with Otago University and AbacusBio. Otago University is New Zealand's leading university in the areas of genetics and genomics and arguably reproduction, with the greatest undergraduate student numbers. This, along with AbacusBio presence as a key collaborator in animal genetics, offers a far more compelling case for co-location.

The CMT felt that overall a case for co-locating teams within the Animal Productivity group at Invermay, together with the deer research focus within Farm Systems South, offered a significantly greater premium for co-location with collaborators and a tertiary institution than Lincoln, while maintaining the significant majority of the premium available from internal co-location. Moreover, both the Animal Genomics and deer components of the Farm Systems South team have significant requirements for proximity to collaborating farms, for which location at Invermay would be significantly advantageous as this proximity will be difficult, in the case of deer, and impossible, in the case of sheep breeding flocks, to replicate at Lincoln due to land-use distribution. The CMT also felt that there would be justification to retain a small regional presence of animal productivity research staff at Ruakura to facilitate work which is best done from a Waikato base.

Complementary interactions between 'omics' platforms are still worthwhile to pursue (see Recommendation 3), but that the key to this is the data platforms and integrated analysis, which can be achieved without co-location of the capabilities. The current plans to co-locate new forage genomics capability with the Animal Genomics team to achieve synergies within genomics capability is equally viable whether located at Lincoln or Invermay and would also benefit from Otago University genomics capability.

The CMT felt that Invermay was a more natural co-location for an animal productivity focus and that a "forced" co-location at Lincoln is likely to put capability at risk, without yielding significantly greater benefit. The CMT was of the view that locations should be determined by science benefits rather than location head counts, but considered whether their recommendation would have significant implications for the hub concept at Lincoln. The CMT recommendation would still leave over 200 staff at Lincoln, with Invermay having similar staff numbers to Ruakura. Lincoln could then become a significant hub concentrating on land based, farm system and environmental issues, complementary to Lincoln University strengths and common issues with other Lincoln hub partners - Plant & Food, LandCare and DairyNZ. An additional feature of the recommendation would be higher staff numbers at Invermay, such critical mass mitigating other significant concerns raised in other submissions (see Recommendation 2).

4.2.2.1 Animal Genomics and Genomnz

Proposal: *Animal Genomics and Genomnz teams to co-locate to Lincoln*

Proposed co-location with all AgResearch animal and plant genomics, as well as the wider 'omics capability. Proposal will allow for the development of rapid phenotyping tests to assist with selection and co-location with new and existing stakeholders.

Summary of Submissions

Animal Genomics research programmes rely on access to animals in key breeding flocks and herds, with these breeders more accurately described as collaborators rather than stakeholders. For sheep, these potential collaborating farms are clustered in two regions being central North Island and Otago/Southland - 30% of national sheep flock. In contrast there are very few potential collaborating sheep breeding farms within feasible operating distance from Lincoln. This is evidenced by attendance at Ovita breeder meetings held annually, where 30 to 40 key breeders attend in Paihiatua and Gore, and three attend in Lincoln.

Submissions stated that internal co-location under the FFP Proposal did not reflect staff views of the natural collaborations which will add most value to animal genetics research. The most logical co-location was considered to be with forage genomics, but this doesn't occur under the Proposal

Alternative views were that co-location with plant genomics was useful but not essential for collaboration, or that plant genomics capability should be co-located with Animal Genomics at Invermay. Other teams where staff saw benefit in co-location included Animal Health (greenhouse gas capability), Food Assurance & Meat Quality (meat science capability) and Food Nutrition & Health (nutritional composition of products) – these teams are all proposed to be located at Grasslands.

External collaboration was a strong theme in submissions, with a strong view that Otago University is the most natural tertiary institution to collaborate with in genomics and genetics, with strong undergraduate and post-graduate programmes in science and genetics providing a stream of students with the right background for both PhD students and future AgResearch employees. In contrast Lincoln University has limited capability in genetics, genomics, IT, molecular biology and bioinformatics. In addition to Otago University, AbacusBio is a significant collaborator across a number of areas. Also, the Animal Genomics team has significant international collaborations in the genomics area, based on data sharing.

External stakeholders also clustered in proximity to Invermay, include Zoetis, Alliance Group Ltd (Invercargill), Silver Fern Farms and a significant concentration of sheep farmers in the southern region.

Submissions identified key risks around potential staff losses; with a survey indicating 18 to 20% have a likelihood of relocating. The risk that some staff leaving will take funding with them could reduce the viability for the remaining staff.

Excellent facilities for genomic work already exist at Invermay, and submissions from both within the team/campus, and from elsewhere within AgResearch, suggested that duplication of these facilities would not be prudent.

Some specific submissions related to the proportion of Animal Genomics staff located at Hamilton. These related to regionally specific issues which have animal genetics solutions, including facial eczema and the Ramguard service, and proximity to dairy genetics stakeholders located in the Waikato (DairyNZ, CRV Ambreed and LIC).

Other submissions relevant to this proposal supported the concept of the 'omics' cluster at Lincoln. These submissions came primarily from a proteomics and a wool value chain perspective.

CMT Considerations

The CMT sought further information from management on Lincoln University's future plans for animal science in order to assess the likelihood of collaborative potential. This suggested there is no concrete plan as yet and the thinking is based on the development of Lincoln University's capability in this area with AgResearch as a catalyst for this to occur.

Clarification was obtained that the co-location with plant genomics refers to an intention to employ two to four plant genomics staff (new positions) to co-locate with animal genomics, and not a relocation of existing plant genomics capability. The FFP proposal documented staff movements refer to current positions only.

CMT Recommendation and Rationale

Recommendation 6 (Change to proposal) ***Animal Genomics and Genomnz teams to be co-located at Invermay.***

Condition: Consideration is given as to whether Animal Genomics capability at Ruakura is required to address North Island regional issues, specifically selection for Facial Eczema resistance in sheep and cattle.

CMT judged that while there may be some benefits to co-location of Animal Genomics and Genomnz with proteomics at Lincoln, overall the proposal does not deliver the right internal and external collaboration premiums compared to those available at the teams' current

location - given plant genomics capability can co-locate at either Invermay or Lincoln. Key features lacking are co-location with the capabilities offering the greatest collaborative premium and co-location with a university equipped to provide students with the appropriate undergraduate background in genomics. Current proximity of these teams to both Otago University who provide access to leading genomic capability, technology and thinking and AbacusBio, who actively collaborate in sheep, dairy, deer and beef genetics and form an important part of NZ genetics capability, offers significantly greater premiums now and into the future. While Lincoln University may develop greater capability over time, there is no information available to suggest that animal science will be a future focus. The university is unlikely to attract more students in this area than are currently available at Otago.

Another key consideration is that present genetics programmes and those available for the future rely on accessibility of appropriate flocks and herds within reasonable travelling distance to provide animal phenotype resources - a feature which is significantly lacking at Lincoln. This will create difficulties both in logistics and in maintaining relationships with key farmer collaborators and will lead to a reduction in effectiveness and efficiency.

The presence of Animal Genomics staff at Ruakura contributes to creating animal breeding solutions to Facial Eczema (FE) in sheep and cattle, a regional issue affecting the upper North Island. This issue is of significant importance, to the extent that FE-resistant genetics can be the determining factor as to whether a sheep farming operation is viable in this region and is given high priority by industry in this region. The Ramguard service operated from Ruakura is a component to delivering tools to enable selection for FE resistance in sheep, and is managed by Animal Genomics staff with contributions from other teams. Consideration needs to be given to how both research and service delivery can address selection for FE-resistance, and whether an Animal Genomics capability presence is required at Ruakura to service regional needs.

4.2.2.2 Reproductive Technologies

Proposal: *Reproductive Technologies team to co-locate at Lincoln*

Proposed to co-locate with the Reproductive & Developmental Biology and 'omics' platforms. Proposal will allow access to students via Lincoln University.

Summary of Submissions

There is a recognised advantage for co-location of the entire team with other teams with whom the team share common interests. There is agreement that an extensive facilities upgrade is required and that co-location with the metabolomics platform would enable better progress on some aspects of the research undertaken by Reproductive Technologies (RT).

There are significant disadvantages for this team to move away from the main industry partners - CRV Ambreed/ABS/LIC, as these companies are not only stakeholders, but also contribute to the outcome of the science with provision of facilities, access to elite animal oocytes and provision of recipient animals to make rapid genetic gains for the industry. This research relies on cows, oocyte collection and embryo production facilities being co-located. These animal breeding companies have no plans to move from their current Waikato base in the foreseeable future, even whilst supporting the growing dairy cattle numbers elsewhere in the country.

A large component of the fundamental cattle research of RT depends on generation of research embryos from large numbers of oocytes obtained from the ovaries of commercially slaughtered cows. This requires time dependent access to local abattoirs to collect the ovaries. Typically, RT collects 500 ovaries per week. The Lincoln area is unlikely to be able to provide this requirement.

The proposed move to Lincoln will have major negative impacts on the production, sampling and study of transgenic animals currently sited on the Ruakura campus. Under the FFP Proposal the Animal Containment Facility (ACF) is not proposed to move. The viability of transgenic animal embryos is dependent on laboratory proximity to donor and recipient animals as mentioned for the AAB science. In addition the transfer of volumes of genetically modified (GM) samples and waste to and from the ACF would have a significant impact not only on the ability to deliver on the science, but also in regard to research cost and risk management.

The proximity of the transgenic research capability to Auckland University gives greater premium in regard to access to students and researchers working in the field. The Auckland University's proximity has significance also in regard to the proposed National Capability in Animal Transgenics. Lincoln has no advantage for this capability in student accessibility or science collaboration. The Auckland and Waikato Universities have the closest synergies to RT and supply most of the student stream. The team recognises that they could contribute to development of curriculum and teaching in specialised areas at Lincoln but doubt that students would actually move from those Universities with proven record in the field.

Under the FFP Proposal the small animal transgenic capability and facilities, which are integral to the research of this team, is to be sited at Grasslands away from RT.

The suggested 'omics' co-location is not seen as a requirement for research success. Samples are currently sent to metabolomics (Grasslands), GenomNZ (Invermay) and internationally to China, Korea, US. The key factor is that common data platforms are available to facilitate integration. This was a common theme with submissions based on other areas.

CMT Considerations

The CMT checked the stated requirement that proximity to abattoir facilities was essential to current and future research. The CMT recognise that viability for an oocyte is time dependent from kill to maturation media, defined as the four hour window. This is a combination of chain speed, male/female kill profile, seasonal kill patterns, driving time and laboratory handling. There are multiple (six) abattoir options in the Waikato area to fulfil the 500 per week research requirement. Commercial operators currently undertake ovum pickup using a mobile facility, but this is for small numbers and is not an option for the number of ovaries required to meet basic research demands.

The CMT sought clarity from management around the negotiations with Auckland University over the proposed national capability in Animal Transgenics. There is an interest in a team being based at the University. Current and near future focus is with the small transgenic animal facility. They have also expressed interest in doing large animal work. The ACF at Ruakura has resource consent beyond FFP. The intention is to obtain agreement on the concept by the end of 2013.

CMT Recommendation and Rationale

Recommendation 7 (Change to proposal) ***The majority of the Reproductive Technologies team to be co-located with other Animal Productivity capability at Invermay.***
Condition: That confirmation of an alternative satisfactory approach to obtaining sufficient ovaries for reproductive research is able to be developed prior to co-location

Recommendation 8 (Change to proposal) ***Reproductive Technologies capability to be located at Ruakura for work based on critical regional facilities.***

CMT agreed that there is a premium for co-locating Reproductive Technologies (RT) with other animal productivity capability. However, there are logistical issues, principally around collection of sufficient numbers of ovaries, access to the ACF and Waikato-based stakeholder/collaborators which would need to be addressed to continue current avenues of research. The CMT obtained information regarding ovary collection and concluded that it may be possible to develop alternatives, but that this is a critical factor which would need to be rigorously determined prior to a final decision on which capability of the team could co-locate to successfully operate from another location. The CMT also concluded that facilities for large animal transgenic work were unlikely to be able to be duplicated at other locations in part due to public opinion and regulatory issues and so consideration needs to be given to how this work might continue to use existing facilities while at the same time obtaining

advantages from co-location with other animal productivity capability. This may require a small regional capability presence remaining at Ruakura. Further clarity around the future of transgenic work under a national capability arrangement with Auckland University might impact on optimal location of staff working in transgenics and CMT believed that final decisions on location should be delayed until this is determined - rather than co-locate staff and then ask them to co-locate again.

4.2.2.3 Reproductive & Developmental Biology

Proposal: *Reproductive & Developmental Biology team to co-locate at Lincoln*

The team is proposed to co-locate with Reproductive Technologies and the 'omics' platform which will also allow access to students through Lincoln University.

Summary of Submissions

There is a recognised advantage for co-location of the entire team and with other teams with whom they share common interests. There is agreement that an extensive facilities upgrade is required at Ruakura, although purpose built facilities exist at Invermay. New facilities would be required for a move to Lincoln. It is a common concern that the impact of a third restructure to this team will seriously affect morale and could decimate numbers remaining.

A large component of the fundamental cattle research at Ruakura depends on generation of research embryos from large numbers of oocytes obtained from the ovaries of commercially slaughtered cows. This requires time dependent access to local abattoirs to collect the ovaries. Typically 600 to 800 ovaries per week are collected. The Lincoln/Canterbury area is unlikely to be able to match this requirement.

The use of the Tokanui research farm provides custom designed facilities for intensive techniques, cattle-side. The use of the Lincoln University dairy farm is not practical as it is too small to run more than one trial concurrently and is seasonal, with cows wintered off.

There are significant disadvantages for the Ruakura-based capability from this team to move away from the main stakeholder/collaborators/industry partners - CRV Ambreed/Animal Breeding Services/LIC.

Research requires access to the Invermay sheep farm and is aligned with industry stakeholder location and existing facilities already meeting team needs. Internal collaborations are primarily with Animal Genomics and Reproductive Technologies teams.

CMT Considerations

CMT checked the stated requirement that proximity to abattoir facilities was essential to current and future research. The CMT recognise that viability for an oocyte is time dependent

from kill to maturation media, defined as the four hour window. This is a combination of chain speed, male/female kill profile, seasonal kill patterns, driving time and laboratory handling. There are multiple (six) abattoir options in the Waikato area to fulfil the 500 per week research requirement. Commercial operators currently undertake Ovum Pickup using a mobile facility, but this is for small numbers and is not an option for the number of ovaries required.

CMT Recommendation and Rationale

Recommendation 9 (Change to proposal) ***The Reproductive & Developmental Biology team to be co-located with other Animal Productivity capability at Invermay.***
Condition: That confirmation of an alternative satisfactory approach to obtaining sufficient ovaries for reproductive research is able to be developed prior to co-location

CMT agrees that co-location of the Reproductive & Developmental Biology team with other animal productivity capability offers a premium. Critical factors for location are ability to source sufficient ovaries (cattle research) and access to a research farm of sufficient scale to maintain research flocks and herds. On the assumption that these critical factors are able to be satisfied, the Reproductive & Developmental Biology team location should be primarily determined by optimal location for the animal productivity and deer science cluster of capability, as per the overview. Modern facilities which satisfy the majority of this team's requirements already exist at Invermay.

4.2.2.4 Deer research

Proposal: *Co-location of Farm Systems South and research capability at Lincoln*

Deer research capability proposed to co-locate with Animal Genetics, Animal Genomics and reproduction national capability at the Lincoln hub.

The proposal provides opportunities for increased collaboration with AgResearch animal-focused research staff, and aligns with the Animal Science Roadmap recommendation. It also provides Farm Systems expertise in national and regional research and extension activities at Lincoln. Co-location with Lincoln University will help catalyse focus on animal science at Lincoln University. The challenge of maintaining links with key deer farmers is recognised.

Summary of Submissions

One submission pointed out that some cross-campus collaborations do occur, so that co-location was not essential. All submitters argued strongly against the proposal. Splitting the Invermay Farm Systems South staff would mean sub-critical mass at both Invermay and

Lincoln; the South Island deer industry is weighted towards Otago and Southland making continuation of collaborative on-farm trials more time-consuming; the Lincoln University deer unit has closed; loss of the "Invermay Brand". A lot of emphasis was put on the current excellent facilities and deer research farms at Invermay.

CMT Considerations

None of the submitters gave any consideration to the potential benefits of co-locating deer research with a larger grouping of AgResearch's animal productivity research scientists. Additional information provided by management was that in terms of collaborating farmers, it was easier to work with corporates like Landcorp (scale, flexibility, and ability to provide support) and these are mainly in the Te Anau basin – a much greater distance from Lincoln with associated time and travel costs. Results of more basic deer research done at Lincoln would be widely applicable, and for this work deer research facilities equivalent to those currently at Invermay could be built at Lincoln. However, work on bigger breeding herds or on assessing environmental impacts requires access to hill farms and the choice of sites would be driven by topography and soils/rainfall. The reality is that Invermay is more centrally located to conduct this type of work, although some of this might also be serviced by the regional Innovative Farm Systems and/or Land & Environment teams.

CMT Recommendation and Rationale

Recommendation 10 (Change to proposal) ***Deer research capability to be co-located with other Animal Productivity capability at Invermay.***

The CMT believe that the strongest driver for the location of the deer research capability is co-location with the other AgResearch animal productivity capability as per the FFP Proposal. The CMT has recommended that these teams are located at Invermay, which also accommodates the practical and logistical drivers that suggest that Invermay is a more effective and efficient location for the deer research capability.

4.2.3 ANIMAL WELFARE

Proposal: *Animal Welfare and Farm Systems Capability – co-location with Animal Nutrition & Health Group national capability*

It is proposed that staff from the Farm Systems North team, specifically the Animal Welfare capability, co-locate to Grasslands to enhance opportunities for increased collaboration with Animal Nutrition & Health research capability and to provide regional Farm Systems expertise - one staff member proposed to co-locate. The proposed co-location will also

enhance the collaborative relationship with Massey University in animal welfare research, a recommendation from the Animal Sciences Roadmap.

Summary of Submissions

Staff submissions focused solely on the Animal Welfare (AW) science capability and highlighted that the main risks of the proposed co-location are the a) possible loss of relationship with current, in particular DairyNZ and LIC and future funders and collaborators, in particular Dairy Goat Co-op (DGC), and b) loss of access to the Waikato/DairyNZ farms where the AW staff currently conduct research trials. In addition, the submissions suggested that future animal welfare research requirements will move away from the animal husbandry aspect e.g. animal nutrition and health, but increasingly use behavioural and animal psychology techniques to deliver the required animal welfare outcomes, thus reducing the advantage of being co-located with the Animal Nutrition & Health group. The collaboration with Massey University is already established and functioning well and submitters feel there is no need for co-location to improve this.

Risk of staff loss and associated impacts on existing roles or relationships e.g. membership of the Collaborating Centre on Animal Welfare of the World Organisation for Animal Health (OIE) is acknowledged. Staff loss risks are addressed under the Whole Organisation section.

One submission highlighted the consequences of the proposed co-location for the functioning of the Ruakura Animal Ethics Committee (RAEC). The Chair and Secretary roles of the RAEC are currently filled by AW staff whose roles are proposed to co-locate to Grasslands. Although this is an implementation issue i.e. ensuring the Chair and Secretary roles are handed over to others if necessary and thus out of scope of this report, the CMT wants to flag this issue to ensure that this potential risk is recognised and mitigated.

CMT Considerations

Additional information and discussions with management indicated that it is indeed important to maintain an effective relationship with DairyNZ, and that in the short term this means maintaining a close working relationship from Ruakura. However, in the longer term this can be maintained from Grasslands. The link with DGC is recognised but our strongest links with them are through the Dairy Foods team, not animal welfare per se. In addition, DGC has indicated it wants to engage with AgResearch teams no matter where they are located. Although working on Waikato/DairyNZ farms is preferred for practical reasons, there are no location-specific objectives in the DairyNZ projects. Animal Welfare staff have, and are conducting research projects across the country.

CMT Recommendation and Rationale

Recommendation 11 (No change to proposal) ***Animal Welfare science capability to be co-located with Animal Nutrition & Health national capability at Grasslands.***

The CMT judge the importance of co-location of the AW capability with the Animal Nutrition & Health Group and with Massey University to build even stronger research relationships and right-teams as more important than the logistical and practical risks highlighted in the submissions.

4.2.4 FOOD & BIO-BASED PRODUCTS

4.2.4.1 Food Assurance & Meat Quality

Proposal: *The Food Assurance & Meat Quality team co-located with food R&D capability at Grasslands.*

Food Assurance & Meat Quality (FMAQ) are proposed to co-locate with food R&D capability at Grasslands. The benefits from co-location will include close partnerships with the Riddet, Hopkirk, Massey University and Plant & Food Research.

Summary of Submissions

Some submitters acknowledged the value of co-location with aligned researchers. However, the majority of the submitters were opposed and some provided alternatives such as remain at Ruakura, phased co-location, and mobile laboratory facilities. Key issues raised included physical separation from DairyNZ, Waikato Maori agribusinesses, and on-farm research in the Waikato. Another major concern was the difficulty in replacing the current access to the Ruakura abattoir for pre-rigor meat with an equivalent facility at Palmerston North. Hamilton's high per capita Moslem population and the Moslem population of Auckland give credibility to AgResearch's work on Halal slaughter at Ruakura. Developments in goat meat will also be Waikato-based. It was suggested that it would be more difficult to maintain relationships in the foods area with independent, innovative companies like Tatua, under the shadow of Fonterra at Palmerston North. It was pointed out that future innovation with stakeholders related to meat processing is likely to be Auckland centric.

CMT Considerations

There is time to grow the currently developing relationships with Waikato Māori to a sufficiently mature state that the partnerships could be serviced from Grasslands. Developing a substitute for access to the Ruakura abattoir in the Manawatu will be challenging, but there is time to investigate this and organise a system that delivers to the future requirements for this team.

CMT Recommendation and Rationale

Recommendation 12 (No change to proposal) ***Food Assurance and Meat Quality capability to be co-located at Grasslands.***

The CMT felt that, on balance, the long term future benefits of co-location with other food scientists in a Palmerston North food hub outweighed the short term costs of reduced proximity to current commercial collaborators.

4.2.4.2 Dairy Foods

Proposal: *The Dairy Foods team co-located with food R&D capability in Grasslands*

Co-location with food R&D capability and shared capabilities across meat and dairy (lipids, function, sensory, nutrition, etc). Improved partnerships with the Riddet, Massey University and Plant & Food through possibility of shared capabilities/facilities (e.g. food processing, animal facilities). Improved Fonterra linkages. The challenge will be in maintaining other linkages with regional stakeholders including DGC, WMI and Tatua.

Summary of Submissions

A strong theme in submissions was to maintain links with current and future industry stakeholders and partners. This is a challenge already identified in the FFP Proposal. Submissions emphasise that Dairy Foods must engage and work effectively with many different dairy sector stakeholders. The value of the innovative but smaller dairy companies ($2b to NZ economy) is significant, despite their relative small size in the New Zealand dairy industry. The Dairy Foods research programme in niche dairy product development is reliant on the small dairy companies and in close collaborator/ stakeholder relationships e.g. Tatua, WMI/Miraka. The alignment with, and proposed proximity to Fonterra, could result in a loss of confidence in AgResearch independence and may adversely impact on these companies' willingness to work with AgResearch.

Particularly addressed in the submissions is the current and future research programme undertaken with DGC, which is regionally based in Waikato. The research for the DGC involves close interaction of scientists with DGC farmers, and requires proximity to the DGC commercial process plant, access to fresh milk and AgResearch pilot plant facilities. Co-location of all dairy foods capability to Grasslands would impact on current (+$2m MPI/$1.15m DGC pa) and proposed future DGC science delivery.

Infra-structure requirements for Dairy Foods research are significant, and may not be practical or cost-effective to replicate in Grasslands. The team relies on access to Tokanui research farm for the development of specialty milks/ingredients. Tokanui farm allows for

mob separation and handling, and separate vat facilities with data collection capabilities. The team also requires access to co-located pilot scale processing facilities and accessible abattoir facilities.

Removal of dairy foods capability from Waikato will weaken the nationally significant cluster of dairy research capability in the Waikato. This cluster includes DairyNZ, LIC, CRV Ambreed, and the NZ Food Innovation network (FINZ) hub with these companies and food research capabilities out of Auckland. The Innovation Park commercial scale dairy processing facility was established as part of this cluster. Submissions also highlighted the loss of 'knowledge base' from the Dairy Foods team under FFP as a number of staff have indicated lack of intent to co-locate. The negative impacts include loss of scientific and technical knowledge, loss of strategic know-how and loss of industry network systems, impacting on the ability to develop innovative ideas, write competitive bids and deliver high quality R&D to the Dairy Off-Farm space.

Currently the team collaborates across AgResearch teams proactively, including: Food Nutrition & Health, (plus Riddet, Fonterra, Whai Hua PGP & Gravida), Proteins & Biomaterials (Lincoln), Animal Health (Hopkirk) and Rumen Microbiology (Grasslands). Physical co-location has not been a barrier to successful and productive collaborations. Submissions highlight a requirement for detailed cost/benefit analysis for this team in regard to risks of loss of knowledge base, collaborations with industry innovation partners, monetary costs of relocating equipment, staff removal costs and redundancies, and loss of productivity, prior to FFP implementation.

CMT Considerations

Dairy Foods is already working collaboratively with other AgResearch teams and with a number of research stakeholders/collaborators. Dairy Foods has initiated and is developing iterative science programmes within the region (DGC/ WMI/Miraka). Dairy Foods is currently located within the hub of dairy research companies and allied programmes. Future innovative research is dependent on access to expensive infrastructure (research dairy farm, pilot scale processing), and retention of key staff for stakeholder/collaborator relationships, knowledge transfer, and FFP implementation. However, the CMT see that some of these concerns might be addressed in the implementation timeframe of FFP. Participation by AgResearch in FINZ could be dependent on a Dairy Foods regional capability presence.

CMT Recommendation and Rationale

Recommendation 13 (Change to proposal) ***Dairy Foods team to be co-located at Grasslands, with a capability presence at Ruakura to service regional needs.***
Condition: Determine what sized regional presence (staffing and infra-structure) is required at Ruakura to optimise synergies from external co-location with collaborators and stakeholders prior to a final decision being made to co-locate Dairy Foods to Grasslands.

CMT agrees that the principle of co-location internally and with external collaborators where there is a premium suggests that the Dairy Foods team should be located in the Food Hub at Grasslands. Notwithstanding this, the CMT believes that there is a strong case to suggest that specific regional needs exist which may be best served by a subset of the Dairy Foods team being located at Ruakura to facilitate the science being conducted regionally. Dairy Foods are involved in significant research programmes with stakeholders that span the value chain, and it is important that the ability to continue this approach is preserved. This is beyond connection with stakeholders alone, but encompasses the operational interactions with these stakeholders during the course of the science programmes jointly conducted with them.

4.2.5 LAND & ENVIRONMENT

4.2.5.1 Modelling capability

Proposal: *National Land & Environment modelling capability to co-locate at Lincoln (OVERSEER, APSIM and Life Cycle Management)*

It is proposed to co-locate all national modelling capability at Lincoln. This includes co-locating staff from the Nutrient Management & Environmental Footprinting team with specific OVERSEER and Life Cycle Management (LCM) modelling focus (Ruakura) and staff from the Soil Land Use & Global Change team with specific APSIM modelling capability (Grasslands).

Summary of Submissions

The submissions received related to APSIM and OVERSEER modelling capability only. A common thread of all submissions was that co-location of APSIM and OVERSEER modellers with the research teams that use the models is much more important for both model development and model application/use, than co-locating all modellers together. Additional comments included the recognition that modellers work very well remotely with other modellers, but that some co-location of modellers would be beneficial for mentoring and professional development of modelling staff.

Submissions specifically regarding OVERSEER also highlighted the risk of losing links with the current software development collaborator (Rezare – based at Innovation Park, Ruakura), and maintaining sufficient regional presence to meet regional needs for clients using OVERSEER e.g. Regional Councils.

The concern that the proposed co-location will result in loss of key people and institutional knowledge is acknowledged and addressed under the Whole Organisation section.

CMT Considerations

The CMT obtained additional information regarding the current structure of OVERSEER, which includes development, the science underpinning development, a Technical Advisory Group (TAG) which reviews the science underpinning OVERSEER, product support and testing, and an Expert User Group (EUG). The FFP Proposal co-locates staff involved in development, the science underpinning development and product support and testing at Lincoln. The current membership of the TAG and the EUG is spread across campuses.

CMT Recommendation and Rationale

Recommendation 14 (No change to proposal) ***OVERSEER development and science underpinning development capability to be co-located at Lincoln.***
Condition: Expert User Group and Technical Advisory Group membership should be represented across all campuses.

Recommendation 15 (Change to proposal) ***APSIM modelling capability to be split between Lincoln and Grasslands campuses.***

Recommendation 16 (Implementation) ***APSIM modelling capability should be ensured for all campuses in the future.***

OVERSEER is a less complex model to use and is widely applied by research staff (and other end-users). The support structure around OVERSEER is well developed and already ensures close interaction with model developers and users. The CMT therefore sees co-location of the model development, the science underpinning development and product support and testing capability with APSIM and LCM modelling capability at Lincoln as a major benefit, provided the EUG and TAG membership encompasses all campuses.

The CMT distinguished between model development and model application/use. As APSIM is a relatively complex model, APSIM modellers are both 'developers' and 'users'. They work alongside science staff to run model applications as required e.g. to test scenarios and identify research questions. The CMT recommends that having APSIM modelling capability

at all campuses to facilitate the latter would be the most ideal scenario. However the current staff numbers (n=6) are not enough to spread across all campuses to ensure sufficient mentoring and learning and development, and it is therefore recommended that in the short term the capability is shared across the two main campuses (Lincoln and Grasslands). In the future, this capability should expand across all campuses.

4.2.5.2 Regional campus capability

Proposal: *Maintain regional Land & Environment capability*

Under the current proposal Land & Environment (L&E) national capability (modelling and laboratories) will be centralised at Lincoln, while all four campuses will have a regional L&E focus.

Summary of Submissions

Most submitters acknowledged the benefits of co-locating the national capability/laboratories, and growing the regional capability at Lincoln for future importance of environmental research for Canterbury agriculture. However, an un-intended consequence of the current proposal is that the most senior L&E staff from Ruakura and Invermay are proposed to co-locate at Lincoln. Although the benefits to AgResearch of having its thought leadership on environmental research co-located at Lincoln was recognised, the loss of these senior researchers at Invermay and Ruakura to interact with regional stakeholders, and act as mentors for developing staff, was a concern. Submitters were also concerned about the potential loss of laboratory facilities at the regional centres. An important function of the present regional analytical capability is method development with laboratory staff involved right through the research process. This sort of non-routine analytical service is seen as an on-going requirement for regional research activities.

CMT Considerations

It was confirmed during L2 and L3 management interviews that loss of regional thought leadership capability was an unintended consequence that required more consideration.

CMT Recommendation and Rationale

Recommendation 17 (Change to proposal) ***Some senior/principal Land & Environment science capability to be located at Ruakura and Invermay (see Recommendation 2).***

Recommendation 18 (Implementation) ***Appropriate supporting laboratories to be located at Ruakura and Invermay.***

Regional variation in soils, climate and farming practices mean that research underpinning development of sustainable agriculture needs to be broadly regionally based. AgResearch would benefit from keeping some senior capability at Ruakura and Invermay to provide regional thought leadership, further development of relationships with regional stakeholders and for mentoring and developing staff. However, the value to AgResearch of co-locating environmental research on the Lincoln site is not disputed.

The argument for retaining supporting laboratories at Ruakura and Lincoln is supported by the fact that these are not routine testing laboratories but an integral part of regional research programmes. The laboratory staff are involved in development and application of analytical procedures from research planning and sample collection through to laboratory techniques.

4.2.5.3 Soil Ecology/earthworm research

Proposal: *National capability centralised and co-located with Soil Biology*

It is proposed that the Soil Ecology capability in the Soil, Land Use & Global Change team (L&E), currently split between Grasslands and Lincoln, co-locates at Lincoln with the Lincoln-based Soil Biology team (IFS) and with external collaborators (in particular Plant & Food Research) to build a national capability in soil ecology/soil biology.

Summary of Submissions

Staff submissions highlighted that the main disadvantages of the proposed co-location were a) the potential loss of the staff member and associated key knowledge, b) loss of capability in the North Island, c) the purpose-built facility at Grasslands becoming redundant, d) risk with transportation of samples between islands.

CMT Considerations

The rationale for the FFP Proposal is co-location of the current national capability and linking with the Soil Biology team at Lincoln. The current North Island work is focused on earthworms and is thought to be driven from a science-push, rather than industry-pull. There are opportunities and needs to grow the capability beyond earthworms and to develop a strong soil ecology/biology capability that operates within a systems context.

CMT Recommendation and Rationale

Recommendation 19 (No change to proposal) ***Soil Ecology capability to be co-located at Lincoln with the Soil Biology team and external collaborators.***

The CMT judged that co-location of the Soil Ecology and Soil Biology teams and external collaborators at Lincoln was critical to developing/strengthening a systems-focused national

soil ecology/soil biology capability. The benefit outweighs the logistical and practical risks highlighted in the submissions.

4.3 EXECUTIVE TEAM

Proposal: *Co-location of the Executive Team (ET) at Lincoln.*

Summary of Submissions

Not having senior leadership (CEO or Directors) presence at Grasslands, which is a major science campus, is seen as a disadvantage in that staff won't feel well connected to senior management. There was a view that having an ET member (particularly the Research Director) at Grasslands would help to build the local innovation network, especially around FoodHQ and beyond.

Submissions requested having the Research Director at Grasslands because a substantial part of our science staff are proposed to be at Grasslands. An alternative put forward was to have two Research Director positions: one based at Lincoln focussing on the land-based on-farm research and one at Grasslands focussing on food and post-farm gate research.

CMT Considerations

The CMT sort clarification from management of the rationale of co-location of the ET team. The key rationale was to allow for an enhanced working dynamic between ET occurring outside the times that ET members must currently work face to face, including in particular preparation for ET, Board and strategic sessions. The consideration was acknowledged that ET members would have to schedule and be available to staff on both formal and informal occasions at all other campuses, in particular the Research Director and Partnerships & Programmes (P&P) Director. The Lincoln location hinged upon the location of the corporate support staff and to a larger catchment of corporate support professionals.

CMT Recommendation and Rationale

Recommendation 20 (No change to proposal) ***Executive Team to be co-located at Lincoln.***

The majority of the CMT thought the benefits of having ET leadership co-located at Lincoln were greater than those arising from having an ET member based at Grasslands.

The minority of the CMT thought a physical presence of an ET member at Grasslands would be necessary to have strong senior leadership presence at this large and critical innovation hub. A Grasslands presence would also be beneficial for high level strategic networks in the area.

The CMT acknowledges that a weekly/regular presence of ET, especially the Research Director and/or P&P Director could mitigate the concerns of not having an ET member permanently located at Grasslands.

4.4 FINANCE & BUSINESS PERFORMANCE

4.4.1 Financial Operations

Proposal: *Financial Operations team co-locate with Corporate Finance in Lincoln.*

Summary of Submissions

The effectiveness of the Financial Operations team could be maintained from its current location at Ruakura. It is not deemed necessary to co-locate with the balance of the finance and corporate business functions. The Financial Operations team currently operates mostly without direct face-to-face interaction. There are compelling risk management and business continuity reasons for having financial operations based in Ruakura. Ruakura is a cheaper cost base to run the Financial Operations team compared to Christchurch. Accordingly, co-location is not necessary for the Financial Operations team.

CMT considerations

The CMT considered the submissions above versus the advantage of the physical co-location with the internal clients that the Financial Operations team currently has face-to-face contact with, primarily finance (L3 level) management. The submissions argued and showed evidence that Hamilton has a lower overall background risk of large natural disaster events occurring. The submissions cite examples of companies that have financial operations and/or back up facilities in Hamilton because of its low natural disaster risk. However, it was felt that these companies had a higher business continuity need in the event of a natural disaster than AgResearch, because they would have to provide essential services such as insurance responses and power services quickly. These companies therefore have a higher need to reduce risk from natural disasters.

The CMT considered that adequate business continuity plans for AgResearch's needs due to disruption from natural events could be put in place in Lincoln, even if the probability of those events occurring was higher than in Hamilton.

CMT Recommendation and rationale

Recommendation 21 (No change to proposal) ***Financial Operations team to be co-located at Lincoln.***

An advantage of co-location is that it keeps the Financial Operations team in place where most internal interactions occur with the finance group. Whilst the CMT accepted that salary and space costs could potentially be higher at Lincoln, it was felt that the savings of keeping the Financial Operations team at Ruakura was not a compelling reason to operate the team remotely from the finance (L3 level) management. There will be disruptions of moving the

team however these where considered to be an implementation issue, and one that could be overcome over the timeframes of FFP.

4.4.2 Accounting Services

Proposal: *Accounting Services team co-locate with Corporate Finance in Lincoln.*

The benefit in co-locating the Accounting Services Team (Management Accountants and Accounting Technicians) at Lincoln provides a better internal team synergy. This will lead to a better consistency of processes and approaches across the team, enable easier back-up and support of each other and give members of the team the opportunity and ability to apply their skills to different problem sets, not limited to the client group whom they primarily support or specialise in.

Summary of Submissions

Not having Accountants (Management Accountants and Accounting Technicians) alongside the science staff they support is a huge disadvantage and risk. The Accountants do not have to be interacting with a team(s) on site. However, having a physical accounting presence on all sites will provide assistance when required, especially for Project Managers in control of multi-million dollar budgets. This presence will provide improved adoption of financial practices and a greater level of financial accountability amongst science staff. Accountants should be considered part of the 'right team'. There is concern that the strong and effective relationships that have been established due to face-to-face interactions cannot be achieved or maintained remotely. Those who have experienced remote support have found it to be unsatisfactory. Being located alongside the science will mitigate a "them-versus-us" inference and also follows the same principle as the proposal to align IS, HR and Bioinformatics & Statistics alongside the science they support.

CMT Considerations

The CMT acknowledges that a large part (80 to 90%) of the work Accountants perform and will perform is related to science projects. Only a part of this time is used for face-to-face interactions with Scientists, Science Administrators, Science Team Leaders, Science Group Leaders and Portfolio Leaders, etc. In an ideal world with streamlined financial systems and professional Project Managers, face-to-face interactions in the future could be reduced. It can be noted that some remote interactions between Project Managers and Accountants work well at present. However, the main focus and expertise of scientists will be research and not finance.

CMT Recommendation and Rationale

Recommendation 22 (Change to proposal) ***Accounting Services team to be located across all campuses alongside science, based on the number of science clients.***

The CMT judged that the face-to-face support given by Accountants to science will be vital. The knowledge they have of the staff they support, the science their teams are involved in and the intricacies of their funding is easier to achieve face-to-face than remotely. It is acknowledged that accounting language is different to science language and it is easier to communicate face-to face.

The desire for better consistency of processes and approaches across the Accounting Services team can be achieved through more regular interactions between the team including via travel. This would be more cost effective than travel from Lincoln to all campuses which would be required to ensure trust, robust financial information and accountability.

4.5 SHARED SERVICES

4.5.1 Records Management

Proposal: *Records Management team co-locate at Lincoln*

The Records Management team is currently located at Ruakura. This team deals with both the physical and electronic records of the company. One of its responsibilities is to ensure compliance with the Public Records Act. It is proposed to move the team to Lincoln.

Summary of Submissions

Records management work is currently being undertaken at all sites. There is currently a considerable amount of unlisted and inaccessible legacy material which needs an on-site presence to deal with as physical materials require a physical presence. Having to travel to other sites to complete this work would incur additional costs. Having a resource located on site ensures engagement with staff is highly focused through face-to-face interaction which would enable the team to more effectively promote its goal of ensuring compliance with the Public Records Act.

It was proposed that the Records Manager role be located at Lincoln and the Information Administrator role be located at Grasslands - additional positions to be considered for Ruakura and Invermay, which is outside the scope of FFP. In the interim, it was suggested that the Records Manager role be located at Ruakura in the medium term to archive and store all the material not needed in the new locations.

CMT Considerations

One submission was advocating additional positions so that all sites could be covered with a physical presence, but this is out of scope of the CMT.

CMT Recommendation and Rationale

Recommendation 23 (Change to proposal) ***Records Manager role to be located at Lincoln (as per FFP Proposal); Information Administrator role to be located at Grasslands.***

A consistent focus of the FFP Proposal is to have support staff located where they could best service the needs of their clients. The CMT see merit in the argument that physical records require a physical presence. Both Lincoln and Grasslands are going to be large campuses with challenges for the Records Management team and having an onsite presence at each of these campuses makes good sense.

4.5.2 Information Systems User Support

Proposal: *Information Systems (IS) User Support team to co-locate at Lincoln, with regional support requirement at Ruakura, Grasslands and Invermay.*

Summary of Submissions

Submissions for the IS User Support team focused around three themes. These were the distribution of support staff proportionate to the number of clients that they service, the de-centralisation of the Helpdesk and the lack of a senior staff member ("site manager") at Grasslands. Under the current proposal the ratio of support staff to clients does not appear to be spread evenly across all four campuses.

Submissions proposed that Helpdesk roles be based at Grasslands and Lincoln so that where there are Helpdesk staff based locally, a "drop in" function can be provided along with phone support. Having the Helpdesk located at the two larger campuses would spread capability evenly. Local anniversary holidays would be automatically covered as would network outages where the Helpdesk could continue operating normally. Business continuity planning was mentioned as being a benefit to having a de-centralised Helpdesk split across the campuses.

Under the current proposal Grasslands would have only three junior support positions. There would need to be a senior staff member ("site manager") on this site to coordinate resources locally and report issues nationally.

CMT Considerations

It was confirmed through discussions with management that the intent was to proportionally distribute IS Support roles across AgResearch based on the number of clients to be serviced.

CMT Recommendation and Rationale

Recommendation 24 (Change to proposal) ***Information Systems User Support roles to be located across campuses proportionate to the number of internal clients.***

Recommendation 25 (Change to proposal) ***One Information Systems Helpdesk role to be located at Grasslands and Lincoln.***

Recommendation 26 (Change to proposal) ***A senior Information Systems User Support role ("Site Manager") to be located at Grasslands.***

The IS User Support team rely on direct contact with their clients for a major component of the second level IS support that they provide. As such they are required to be based locally to facilitate this.

4.5.3 Information Systems Solutions

Proposal: *Information Systems (IS) Solutions to co-locate at Lincoln*

The IS Solutions team is currently spread across three AgResearch sites (Ruakura, Grasslands and Invermay). The FFP Proposal is to co-locate all positions to Lincoln.

Summary of Submissions

Submissions from the IS Solutions team focused around the theme that co-location and collaboration benefits are driven more by interactions with internal clients (non-functional experts) than peer interaction. Function experts within the team can collaborate effectively using existing technologies.

Submissions stated a more decentralised model (like the current state) would reduce geographical business continuity risks through the distribution of infrastructure. Another benefit was the ability to attract the best talent nationally by drawing upon a wider labour market.

The team already successfully operates across campuses in this manner with twice weekly team meetings via webcam.

CMT Considerations

Conversations with management confirmed the benefit of having staff on site during the analysis and requirement setting phase of application development.

CMT Recommendation and Rationale

Recommendation 27 (Change to proposal) ***Information Systems Solutions capability to be located across campuses proportionate to the number of internal clients.***

It was seen as being important that the IS Solutions team members have close contact with their internal clients, particularly during the gathering of initial information, setting of requirements and the design phase of a project. These early phases are critical to project success. Business continuity planning opportunities are enhanced under the decentralised model.

4.5.4 Bioinformatics and Statistics

Proposal: *Align Bioinformaticians, Statisticians and Mathematicians to science teams.*

Under FFP it is proposed that two statisticians are located at Ruakura to support eight teams, one statistician supporting two teams at Invermay, and the rest to co-locate with science teams they work with at Grasslands & Lincoln. Bioinformatics and Statistics leadership to co-locate at Lincoln.

Summary of Submissions

It is important to ensure that the Bioinformatics and Statistics team maintain high quality collaborations with science teams, maintain a high level of knowledge and experience and continue an effective succession plan with mentoring of newer staff.

Therefore it was requested that a flexible approach be employed in FFP implementation with regard to the location of Bioinformatics and Statistics roles. When deciding upon the co-location of an individual whose role is designated to move to another campus, the following need to be taken into consideration: including the ability of the person to deliver on their role from a site other than that to which the role is assigned; the cost/benefit to AgResearch of retaining the person at a campus other than that to which the role is assigned; the resulting size of teams at the various campuses; the personal circumstances of the individual.

CMT Considerations

Whilst flexibility in co-locating was deemed to be implementation and out of scope, it was deemed to be a significant issue and would be included in the Whole Organisation section dealing with risk mitigation.

CMT Recommendation and Rationale

Recommendation 28 (No change to proposal) ***Bioinformatics and Statistics roles to be distributed across campuses and aligned to science teams.***

The submissions around the Bioinformatics and Statistics team were broadly in agreement with FFP Proposal. The main concerns were around the flexibility of the implementation. This has been a common theme across many teams.

4.5.5 Small Animal Colony Facility Ruakura

Proposal: *Align the Small Animal Colony facility with science teams.*

The Ruakura facility is proposed to close and the three roles to co-locate at Grasslands.

Summary of Submissions

This was a very detailed submission which provided five alternative scenarios to consider.

Prior to any final decision there needs to be agreement between the proposed research staff at each campus as to what, if any, their requirements are for laboratory animals and how much they are prepared to contribute to the production and maintenance of them.

Laboratory animal facilities are unique by design and operation. Investigating, refining and ultimately pricing the various options are paramount before altering the current situation.

Decisions cannot be effectively made at this time. A decision around the Small Animal Colony needs to be delayed until detailed analysis can be completed following confirmation of the location of science functions.

CMT Considerations

This specific facility needs more consideration. It is not possible to make good recommendations without knowing the final locations of science teams.

CMT Recommendation and Rationale

Recommendation 29 (No change to proposal) ***Small Animal Colony facility to be relocated at Grasslands and aligned to science teams.***

Condition: Evaluation based on final location of science teams at Ruakura.

CMT agree with the submitter that a decision around the Small Animal Colony facilities be delayed until a detailed analysis can be completed following confirmation of the location of science functions. It is recommended that the Research Director address this issue with the Small Animal Colony Manager.

4.5.6 Library Resource Services - KBarn

Proposal: *Physical library and roles located at Ruakura*

The Library's centralised physical book collection (KBarn) is currently located at Ruakura and is proposed to remain at this location along with the associated roles.

Summary of Submissions

This submission argued that the rationale for not co-locating the Library/KBarn and associated roles is flawed. The logic of retaining the KBarn at Ruakura could similarly be applied to any laboratory, the Small Animal Colony, or other "fixed" working environment. Under the current proposal the Library Resource Services roles will be isolated from the

remainder of the team. It was contended that this approach is not consistent with the recent realignment with Bioinformatics and Statistics.

In line with the Proposal to co-locate the majority of support services to be close to their clients, the KBarn and the Library Resource Services roles should also co-locate to one of the major campuses.

CMT Considerations

The submitter was contacted for further clarification. It was confirmed that concerns were around consistency and not whether the proposed model was workable.

CMT Recommendation and Rationale

Recommendation 30 (No change to proposal) ***KBarn and Library Resource Services roles to be located at Ruakura.***

Whilst the consistency of this approach has been questioned, counter submissions point to KBarn and roles already servicing all of AgResearch regardless of location. The current building is well suited to the task with the structural strength to handle the weight of shelving and books. The single point model was not under dispute and already provides a single point of service. Though valuable, this is a transactional service and can be carried out effectively from Ruakura i.e. no collaboration benefit.

4.5.7 Lab Services Ruakura

Proposal: Disestablish Lab Services at Ruakura

Under FFP, the Lab Services roles and facility based at Ruakura would be disestablished.

Summary of Submissions

Under FFP, existing Lab Services will not be carried out at any of the campuses. The rationale being fewer staff at Ruakura will require less support. Those science roles proposed to co-locate elsewhere are those which currently use the services.

The central Lab Service facility at Ruakura should be retained for the convenience of the science groups. There is no value in moving a low cost service to a more high cost resource i.e. from Lab Services to scientists.

CMT Considerations

This is a specific way of organising Lab Services at Ruakura and this is organised in a different way that at other campuses.

CMT Recommendation and Rationale

Recommendation 31 (No change to proposal) ***The Lab Services roles and facility at Ruakura to be disestablished.***

Condition: Outcome of recommendation determined by final makeup of Ruakura campus.

Those science roles proposed to move are those which currently use the services and therefore the service isn't necessary anymore. However, this could change if more science roles with Lab Service requirements are located at Ruakura.

5 CMT RECOMMENDATIONS & RATIONALE REGARDING IMPLEMENTATION

5.1 Staff Relocation

All positions will relocate in a timeframe determined by the development of physical infrastructure. All staff in co-locating positions will be given at least six months' notice of role co-location and will be eligible for redundancy if they do not co-locate. The default position of the standard AgResearch relocation package plus a two year salary guarantee in the new location has been proposed.

Summary of Submissions

Relocation and co-location does not result in increased productivity and performance for all roles; the organisation will benefit more from co-location of some types of roles and less or not at all for others. Roles which confer less benefit (considered in submissions to be largely IS Development roles and Financial Operations roles) shouldn't therefore need to move, or could move via attrition. This would decrease cost, risk, productivity loss and further loss of morale.

There is no real benefit to some roles co-locating – collaboration is more with on-site clients rather than with functional peers – who currently collaborate effectively using video conference, 'Communicator', email and webcam. Internal client collaboration is more effective face-to-face.

AgResearch's primary asset is its people. Staff need to trust management – the merit of decisions and the way they are implemented. A credible, people-centred, but business-driven approach to implementation is essential to this trust and confidence and therefore buy-in and co-location uptake.

Expect substantial loss of staff and ensuing business risk and productivity decrease for years. The Business Case gives no expected staff losses and retention rates – what has been factored into the Net Present Value?

There is concern over the two year employment or salary guarantee in the new location. It is not enough to make people feel comfortable about moving, especially given moving costs and house prices. There is a request for an extension to five years and/or cash re-location incentives.

There is a lack of clarity around the standard AgResearch relocation policy.

There is concern regarding the house price differential – largely in relation to roles proposed to co-locate to Lincoln. This has been made worse with anticipated changes to bank's equity to loan value ratios and tiered mortgage rates based on equity to loan ratios etc. Some proposals suggested accommodation subsidies etc.

CMT Considerations

The CMT recognises that the Proposal is to establish our head office at Lincoln in Christchurch, and that some roles are expected to co-locate because of this, rather than because of direct science co-location and collaboration benefits.

The CMT also recognises that AgResearch has a need to upgrade, consolidate and optimise use of infrastructure.

There appears to be some misinterpretation of the AgResearch relocation policy i.e. that only $1,500 will be paid toward real estate fees

CMT Recommendation and Rationale

Recommendation 32 (Implementation) ***AgResearch Relocation Policy is reviewed and updated.***

Recommendation 33 (Implementation) ***Banking service package is reviewed.***

Whilst important, submissions in this area relate to implementation issues.

The CMT suggests that the AgResearch Relocation Policy is reviewed and updated, including clarification of real estate agent fees and building inspection costs. The stated figure would not cover a building inspection, particularly in Christchurch. There could be a role for cash incentives in this policy in order to mitigate risk around low staff relocation rates due to the associated costs.

Further, the CMT suggests a review of the staff banking package/service and secure a relocation-specific package and service.

The CMT is confident that issues regarding phased relocation that were raised in submissions are already being considered, as suggested by statements in the FFP project 'Frequently Asked Questions' in relation to retirements i.e. 'AgResearch will be flexible around retirements where possible, after consideration of business needs'.

6 ACKNOWLEDGEMENTS

The CMT is thankful for the support received during formation of the team, reviewing of the FFP submissions, formulation of recommendations, and final writing of the report. Timeframes were extremely tight but, due to supportive staff and the streamlined processes, the CMT was able to deliver the project results on time.

Thank you to Suzie Valentine, Tani Hansen and Sarah Robson who worked pro-actively on the submission forms. The database and the format in which the submissions were presented to the CMT worked extremely well.

To Carole Giles, thank you for providing excellent to the CMT.

Thanks also to Barbara Shackell, Lois McKay and Linda Murray who supported Carole and the CMT members on other campuses.

Andrea Rogers, also a CMT member, was also tasked with coordinating the team and all documentation, logistics and keeping the CMT focused, energised and on track.

Thanks to all AgResearch staff that took the time to put together a submission.

And a final acknowledgment to management (L1-L3s) that shared their thinking and rationale behind the FFP Business Case and Proposal.

7 APPENDICES

7.1 CMT Terms of Reference

Change Management Team Scope and Responsibilities

Scope

- Review and consider staff feedback received as it relates to the Future Footprint Proposal rationale and benefits of the proposed changes.
- Future Footprint proposed changes, rationale and benefits are outlined in the proposal document and in the presentations available on the Future Footprint webpages and distributed to staff.

Out of Scope - feedback received that is:

- About individual performance, personal staff circumstances, implementation detail, other change management processes, e.g. science roadmap outcomes.
- From other sources.

Responsibilities

- Contribute objectively and professionally to CMT discussions and resulting recommendations.
- Report regularly to the project sponsor and seek clarification as necessary.
- Gather additional data and supporting information if required.
- Provide recommendations to the Project Sponsor and Executive Team.
- Remind staff to use the online feedback process and not engage in feedback discussions, collect staff views or act as an advocate on behalf of others.

Confidentiality

- All information provided and discussions held within the CMT are confidential to CMT members, the Project Sponsor and Executive Team. Disclosure shall constitute grounds for disciplinary action. Text

7.2 CMT Membership

Name	Area	Title	Selected By	Location
Jason Archer	Programmes & Partnerships	Portfolio Leader	Programmes & Partnerships Director	Invermay
Marita Broadhurst	Food and Bio-based Products	Research Associate	Affected staff	Ruakura
Jim Crush	Forage	Senior Scientist & Team Leader	Affected staff	Ruakura
Cecile de Klein	Land and Environment	Principal Scientist & Impact Leader	Affected staff	Invermay
Bram de Vos (Chair)	Research - Land and Environment	Science Group Leader	Research Director	Ruakura
Erica Henderson	Human Resources	HR Advisor	HR National Manager	Lincoln
Roberta McFelin	Accounting Services	Accounting Assistant	Affected staff	Invermay
Andrea Rogers (Project co-ordinator)	Programmes & Partnerships	Project Support Analyst	Executive Team	Ruakura
Dave Scammell	Information Services	User Support Manager	Affected staff	Grasslands
Jacquie Sherborne	Shared Services	National HR Manager	Shared Services Director	Ruakura
Richard Townsend	Innovative Farm Systems	Research Associate	PSA national delegates	Lincoln
Neil Tunnell	Finance & Business Performance	Investments Manager	Finance & Business Performance Director	Ruakura