TO THE

MINISTRY FOR THE ENVIRONMENT

ON THE

Proposed National Policy Statement for Indigenous Biodiversity

BY

Beef + Lamb New Zealand Ltd

and

Deer Industry New Zealand

14 March 2020

SUBMISSION TO THE MINISTRY FOR THE ENVIRONMENT ON THE PROPOSED NATIONAL POLICY STATEMENT ON INDIGENOUS BIODIVERSITY

Form 5: Submissions on a Publicly Notified Proposed Policy Statement or Regional Plan under Clause 5 of Schedule 1 of the Resource Management Act 1991

To:	Ministry for the Environment PO Box 10362 Wellington 6143
Email:	indigenousbiodiversity@mfe.govt.nz
Phone:	04 439 7400
Name of submitter:	Beef + Lamb New Zealand Limited and Deer Industry New Zealand
Contact person:	Corina Jordan Environment Strategy Manager Beef + Lamb New Zealand
Address for service:	Corina.jordan@beeflambnz.com and
Contact person:	Lindsay Fung Environmental Stewardship Manager Deer Industry New Zealand
Address for service:	Lindsay.Fung@deernz.org

Beef + Lamb New Zealand Ltd and the Deer Industry New Zealand wish to be heard in support of this submission. Both organisations may provide further technical information and data to underpin their position in further discussions with Ministers and officials.

INTRODUCTION

1. Beef + Lamb New Zealand (B+LNZ) and the Deer Industry New Zealand (DINZ) welcome the opportunity to submit their views to the Ministry for the Environment (MfE) and Department of Conservation on the proposed National Policy Statement for Indigenous Biodiversity.

2. B+LNZ and DINZ understand that the proposed National Policy Statement for Indigenous Biodiversity ('NPSIB') is intended to maintain indigenous biological diversity (indigenous biodiversity); and as such sets the policy framework for the sustainable management of indigenous biodiversity across New Zealand in ensuring regional consistency.

3. B+LNZ and DINZ support the goal of the NPSIB to maintain and enhance New Zealand's indigenous biodiversity. The indigenous fauna and flora of this country are precious and unique, they form a critical part of our personal and national identities. For the majority of farmers, indigenous biodiversity is a tangible aspect of the legacy farmers inherit and which they hope to pass on to their children. Our indigenous biodiversity is also a tangible aspect of our branding for New Zealand's products when we promote them to the world, one which consumers from other countries can readily connect with.

4. For our individual and cultural identity, for the legacies our farmers seek to leave in their lifetimes, for New Zealand's ability to compete on the global markets, and for the intrinsic value that indigenous biodiversity holds, it is important to ensure that indigenous biodiversity is sustainably managed for current and future generations.

5. This is why B+LNZ has committed to a vision for biodiversity in our Environment Strategy, which sets the goal for sheep and beef farms to provide habitats that support biodiversity and to protect our native species.

Figure 1: B+LNZ's Environment Strategy Pillars

6. To safeguard the future of New Zealand's indigenous biodiversity on farms and to achieve the goal set by our Environment Strategy, it is essential to give our farmers the ability to integrate indigenous biodiversity within their pastoral systems. Indigenous species should be a natural and functional part of agricultural farm systems, where the anthropogenic and indigenous components of the farm environment coexist and mutually thrive. These integrated farming landscapes will offer indigenous biodiversity habitat, corridors and networks, a better representation of New Zealand ecosystems, as well as a genetic and spatial buffer against the disruptions indigenous biodiversity will experience as a result of climate change. In this reciprocal relationship, farmers would benefit from the ecosystem services[1], greater wellbeing, as well as economic benefits from this relationship.

7. Farmers' ability to achieve all of this, however, hinges on their ability to feel safe to make that integration, to make the space for indigenous species in their systems and to foster that relationship without risk of being penalised for doing the right thing. It is crucial for the future of indigenous biodiversity in New Zealand that policy gives our farmers that safety.

8. The principles that B+LNZ and DINZ adhere to, and which we believe should guide any policy that seeks to achieve good outcomes for our native species, are that:

    - Policy should recognise, reward, and incentivise biodiversity work on farm.

    - Biodiversity is a valued resource which is integrated into our productive farming systems.

9. We do not believe that the NPSIB will deliver the environmental outcomes that the Government seeks to achieve, and that the proposed policies will result in perverse outcomes both environmentally and economically.

10. The NPSIB hopes to achieve the maintenance and enhancement of indigenous biodiversity through the strengthening of Significant Natural Area (SNA) regulation and by widening the scope of that tool. This tool is premised on the assumption that protecting threatened indigenous vegetation and, as proposed by the current drafting of the NPSIB, widening that protection to capture vegetation that is not threatened, will result in improved protection for indigenous fauna and flora generally, which should automatically flourish out of this protected status.

11. The NPSIB as it is currently drafted recycles an ideology that research and experience has shown is not effective in safeguarding the future of our indigenous species. That ideology is that identifying and then 'locking up' indigenous habitats will result in their protection. This ignores the essential elements necessary for the sustainable management of indigenous biodiversity, namely the willing participation of landowners and communities. Through this willing engagement of communities, ground up

[1] Ecosystem services are defined as "*the benefits people obtain from ecosystems*". The 'ecosystems approach has its origins in ecological economics, recognising that the economy is a subsystem of the ecological system, and that sustainable economic activity needs to be performed within the biophysical limits of the natural environment. Natural resources scarcity is nowadays the limiting factor to economic development.

conservation initiatives and activities provide mechanisms for active protection which go beyond the resourcing available through crown entities.

12. New Zealand has an opportunity, through this NPSIB, to effect real change through new approaches to maintaining and enhancing indigenous biodiversity. In the face of species decline that will be ever more vulnerable due to climate change, and with experience of the SNA system failing to halt this; it would be remiss, for us to ignore this opportunity and make do with a re-dressing of an inadequate tool.

13. In B+LNZ and DINZ's view, a number of proposals that the Government is currently consulting New Zealanders on (e.g. climate change, freshwater and biodiversity policy) will lead to significant wealth transfer and distributional impacts, without delivering sustainable outcomes nor policy frameworks to facilitate climate change mitigation and adaptation.

14. We seek to ensure that policy decisions in different environmental domains are not made in isolation from each other, and as such we advocate for integrated environmental management. That is policy that achieves multiple positive outcomes on New Zealand's environmental, social, cultural and economic wellbeings, without creating perverse outcomes and unintended consequences for pastoral farmers and New Zealand's rural communities.

BACKGROUND

15. B+LNZ is an industry-good body funded under the Commodity Levies Act through a levy paid by producers on all cattle and sheep slaughtered in New Zealand. Its vision is 'Profitable farmers, thriving farming communities, valued by all New Zealanders'.

16. Sheep and beef livestock production is essential to maintaining the vibrancy of rural communities and their cultural, societal, and environmental wellbeing, as well as contributing regionally and nationally to the country's economic wellbeing.

17. In 2017-18, the red meat industry accounted for over 92,000 jobs, nearly $12 billion in industry value added and $4.6 billion in household income, including flow-on effects. It accounts for 4.7 percent of total national employment and over 4 percent of national industry value added and household income when flow-on effects are taken into account. The contribution of the sector to the national economy in absolute terms is substantial.[2]

18. Exports from New Zealand's red meat industry totalled $9.1 billion for the year ended 30 June 2019 – about 16% of New Zealand's merchandise goods exports – and we estimate domestic sales were around $1.6 billion at retail value. The sector exports over 90 per cent of its production and is New Zealand's largest manufacturing industry. The health and wellbeing of the sheep and beef livestock production sector within New

[2] SG Heilbron Economic & Policy Consulting, Economic Impact of the Beef and Lamb Industries in New Zealand, Melbourne, January 2020

Zealand is therefore important to the economy of the country, and the ongoing vitality and wellbeing of rural communities.

19. DINZ is a levy funded industry-good body established by the Deer Industry New Zealand Regulations (2004) under the Primary Products Marketing Act 1953. Its vision statement is 'To promote and assist the development of the New Zealand deer industry. A strong, stable, profitable industry for all participants.'

20. DINZ's levy payers are producers and processors of venison and velvet. There are roughly 1,500 deer farmers and 8 venison processing plants with approximately one million animals on farms.

21. The deer industry is the youngest pastoral-based industry in New Zealand (the first deer farm licence was issued in 1970) but provides complementary land use, diversified markets and additional revenue to other pastoral farming industries. Indeed about 80% of deer farmers also farm other livestock species.

22. The deer industry has particular affinity with the sheep and beef industry as:

    - deer farms tend to be multi-species (i.e. deer are farmed along with sheep and/or beef cattle);

    - products derived from deer farms are similar (venison alongside beef and lamb, annual velvet harvesting alongside wool);

    - deer farms occupy the same land classes and run similar production systems (breeding, venison finishing/velvet) and have similar levels of inputs.

23. Both DINZ and B+LNZ are actively engaged in environmental management, with a particular emphasis on building farmers' capability and capacity to support an ethos of environmental stewardship, as part of a vibrant, resilient, and profitable sector based around thriving communities. Protecting and enhancing New Zealand's natural capital and economic opportunities and the ecosystem services they provide is fundamental to the sustainability of the sector and to New Zealand's wellbeing for current and future generations.

24. Drystock farmers are up to the challenge of playing their part in the actions needed to achieve New Zealand's Indigenous Biodiversity objectives, with many farms already voluntarily and willingly undertaking restoration or conservation activities.

25. As Kaitiaki, in aggregate farmers manage 2.8 million[1] hectares of native habitat, including 1.4 million hectares of native forest. This is the second largest holding of native forest and native biodiversity – bettered only by the Crown estate. In some regions, such as East Coast, there is more native biodiversity on land that sheep and beef farmers manage than in the Crown estate. As of 2017, around 47% of Queen Elizabeth II trust (QEII) covenants are on commercial sheep and beef farms and, in 2016, 60% of new covenants were on sheep and beef farms. Added to this is an estimated 180,000 hectares of forestry blocks on sheep and beef farms. Since 1990, 4.3 million fewer grazing hectares are farmed for sheep and beef production. Approximately one million

hectares has become part of the dairy sector. Of the other 3.3 million hectares, this has gone to the conservation estate through land tenure review, regenerating vegetation, forestry, with some lost to urban development, viticulture and horticulture.

26. DINZ does not have records of the extent of deer farmer investment in specific activities to protect or manage indigenous biodiversity but has been provided indicative data from QEII National Trust that suggests that in 2016 four percent of QEII covenants were associated with deer farms (168 covenants, average size 26 ha). DINZ considers that deer farming would comprise about two percent of pastoral farming so it could be interpreted that the rate of QEII covenants is disproportionately greater for deer farmers.

27. Pastoral farmers take an integrated and holistic view of the sustainable management of natural resources. They actively seek solutions that enable and empower multiple benefits across New Zealand's range of natural assets including biodiversity, aquatic ecosystem health, soils, climate, and healthy vibrant communities.

28. Policy on indigenous biodiversity should be transformative in design, enabling and empowering individuals and communities to build resilience across all wellbeings, including ecosystem services, community and cultural wellbeing, climate change and adaptation, and economic wellbeing. While policy on indigenous biodiversity should provide for clear and timebound outcomes to enable business and community certainty including investment certainty, it should also provide carefully crafted frameworks that enable flexibility and innovation, for catchment or ecological region bespoke approaches to conservation, and provide for business and community economic wellbeing and adaptation.

29. As such, it is imperative that policy on indigenous biodiversity is not created in a silo (in particular, in isolation from freshwater and climate policy), without considering the combined impact of multiple policies, and the need to provide for resilience and adaptation. Instead, we encourage domestic policy to provide a foundation that will deliver on New Zealand's indigenous biodiversity outcomes and enable and empower New Zealand's pastoral farmers to continue to build diverse, resilient, productive landscapes for the benefit of all New Zealand and in maintaining vibrant thriving communities.

GENERAL SUBMISSION

30. The proposed New Zealand Biodiversity Strategy (NZBS) that was launched in 2019 advocated for a holistic and integrated approach to valuing our environment; and working across it in a way which recognises:

    - humans as part of the environment;
    - the provisioning of ecosystem services;
    - interconnected nature of ecosystems; and
    - the importance of building resilience.

31. B+LNZ strongly supported this approach in our submission on the NZBS (submission annexed to this submission as **Appendix 1**).

32. B+LNZ and DINZ oppose the draft National Policy Statement for Indigenous Biodiversity's approach to halting the decline of indigenous biodiversity, which is to maintain and increase land area in native vegetation through regulation of private land use, particularly pastoral land use, through Significant Natural Areas (SNAs). This approach, through its various provisions, fails to recognise and support the proposed NZBS holistic and integrated framework as described above

33. The NPSIB's SNA-centric approach fails to recognise the main drivers of habitat and species loss in New Zealand and would therefore fail to achieve the policy's goals, as the greatest threat to indigenous biodiversity comes from pests and weeds. Furthermore, it overlooks the value of integrated pastoral systems as habitat for both indigenous fauna and flora, and the essential role of landowners and communities in understanding, valuing, and willingly engaging in the conservation of indigenous habitats.

34. Policy frameworks which fail to recognise the outstanding conservation efforts already achieved by farmers, which derogate from the ability of farmers to build their understanding of the connections between their farming systems and indigenous biodiversity, and which fail to empower farmers to sustainably manage these habitats and species while running profitable businesses, are unlikely to achieve the long term sustainable management of these natural resources. The personal journey of a predominate sheep and beef farming family in relation to valuing, protecting, and enhancing indigenous biodiversity as part of their farm development is provided below.

35. B+LNZ and DINZ submit that the approach proposed in the NPSIB will encourage perverse outcomes that are likely to have detrimental effects on indigenous biodiversity, as well as economic and social wellbeing in New Zealand.

36. Farmers invest a great deal of their own time, resources, and efforts into maintaining and caring for indigenous biodiversity on their property which the NPSIB fails to recognise. These farmers do the work as part of their personal identity as kaitiakitanga of their land. They value that land and they value the biodiversity, many of them would readily explain that they enjoy having it on farm and consider it important to leave that legacy when they pass on, as a resource and treasure for their children and also as their mark in the world.

37. Not only does the draft NPSIB with its focus on SNAs fail to recognise the extraordinary contribution that farmers make to indigenous biodiversity, it devalues their relationship with the biodiversity, serves to exclude them from it, and takes what most farmers consider an asset and turns it into a liability.

38. The NPSIB as drafted appears to bias towards the partial or whole exclusion of humans and their livestock from land marked as SNAs, and potentially areas around SNAs. The on-the-ground effects of that type of policy framework are that the policy inadequately provides for people to provide for their social, economic, and cultural wellbeing and maintaining existing use rights within SNAs, and potentially around SNAs.

39. The on-the-ground effects of that type of policy framework are:

- The loss of productive land through exclusion of stock and fencing off of biodiversity that previously coexisted with the system as part of an integrated farming landscape.

- Corresponding loss of production and income, resilience in the farm system, and flexibility in land use practices.

- Increased costs incurred due to fencing and pest control requirements, as well as restoration obligations implied by the NPSIB.

- Loss of land value – even where a farmer wasn't planning to develop the land or change land use type, having a SNA declared over the property affects its land value (an on the ground example of this is provided below).

- The grandparenting of land use, along with its inherent consequence of penalising farmers who have tried to tread gently through this world. Farmers who have invested in indigenous biodiversity on their farm and provided a space for native species to coexist within their system will effectively be penalised for doing so through the losses described above. These farmers who have done the most for indigenous biodiversity will bear the greatest costs and restrictions. Farmers who have eliminated indigenous biodiversity from their property, or not tolerated its regeneration on their properties, will be unaffected.

- This sends a message to other farmers that biodiversity on farm is a risk to their livelihood, and indigenous vegetation that has not been classified as a SNA may be targeted for clearance for fear that it might become a SNA, either through regeneration or through the broad classification system that the NPSIB proposes.

Indigenous Biodiversity integrated within a pastoral based farm

A prominent environmental award winner in the Waipa catchment (Waikato) describes his farm's journey of protecting and improving indigenous biodiversity.

Fencing and covenanting of native bush and wetlands commenced in 1972 and has continued sporadically but progressively to the present with now only two more sites to protect. To date there are 14 SNAs on the farm with 5 of these being QEII covenants and 3 being Land Management Agreements. The biodiversity activities are sporadic because some years the budget has to be allocated to other environmental issues such as water quality management. On average expenditure on biodiversity accounts for about one third of the total maintenance budget.

An example of one line item is that fencing out the SNA will cost between $12,000 to $20,000 in one year, but prior to that there will be weed control and following there will be ongoing maintenance costs which only increase as the extent and number of SNAs increase. Mr Garland notes that all bar one of these SNAs were established without any financial assistance although two had retrospective assistance, therefore all the costs were funded from farm income. He also notes that as you retire more and become more aware of what works and what doesn't the amount of area to be retired and the amount of restoration plantings increases, but this is tempered by his experience that in doing so this can elevate

the significance of the SNA from local to regional or national levels. This could in turn under the proposed NPSIB create more stringent restrictions and requirements for the landowner who is in effect being penalised for "doing the right thing."

While every farm will have different challenges and circumstances, Mr Garland also considers that establishing SNAs can provide commercial benefit such as improving the ability to move or muster stock (that aren't in the retired areas), although this has to be balanced by careful consideration of fence design as the retired areas still perform a role for providing shade/shelter for animal welfare), and market requirements.

One final observation is that there is a lack of capability for assessing SNA consent conditions - which result in consent conditions or compliance monitoring that lack good judgement or awareness of achieving a good environmental/biodiversity outcome. This weakness will undermine much of the goodwill and motivation for landowners to protect indigenous biodiversity.

Loss of Land Value

An example of the potential loss of land value was provided by a farmer who attended a B+LNZ NPSIB information session. This lays out a real-life example of the implications of locking up areas of indigenous biodiversity on the capital value of a farm.

A past proposal for a potential SNA was put over the farmer's land. This made it less attractive to other land use interests even though the farmer hadn't planned to change land use. Rules associated with SNAs result in loss of versatility for the land and its use, and the loss in versatility devalued the land at $10,000 per hectare. If the SNA proposal had gone through, a likely result would have been that, as a result of that value loss, the interest rate of the farmer's mortgage would have increased by 0.5% because of a debt to equity ratio, and put the farmer into a higher risk category. The outcome of this would be that interest payments on the mortgage would have increased by $25,000 per year. At best, the farmer would be less resilient because there would be less equity to borrow against in the event of drought, flood, market disruptions, or other environmental migration costs. At worst, it could have compelled the bank that held the mortgage to demand a higher principal repayment. That would have pushed the farmer into potential liquidation even though the farmer had no intention to change land use or sell in the near future.

40. Under this approach, in farming landscapes which have retained significant areas of indigenous biodiversity on farm, the presence of this biodiversity becomes essentially a risk to the ongoing viability of the farm and its resilience, and a risk or liability to their systems and their ability to provide for their social and economic needs. The effect of the proposed policy is to disempower farmers and disengage them from indigenous biodiversity, as we outlined in our submissions on the NZBS at paragraphs 28-39. This is ultimately a loss for indigenous biodiversity.

41. B+LNZ and DINZ note that the draft policy mentions financial incentives for restoration, however the provision for these incentives are insufficient and there are no incentives provided for protection and ongoing management of existing biodiversity.

Declining land area in indigenous vegetation

42. A core premise of the draft NPSIB is that indigenous biodiversity is in serious decline. On that premise the criteria for "significance" are designed to focus on the common place, early seral, and even highly modified systems. In effect, the argument has become, under these perspectives, all indigenous vegetation, and the habitats of indigenous fauna are declining, and must therefore be protected, and so must be found significant to ensure this protection through regulatory measures.

43. Decline (in terms of spatial area of habitats), however, has slowed in the last three decades (DoC NZ Biodiversity strategy 2000-2020 (2019)). In recent decades, the decline in our indigenous biodiversity, is more seriously due to predators and the lack of pest and weed control (DoC NZ Biodiversity strategy 2000-2020 (2019)). This is a crucial factual point as it goes to the heart of the rationale of the NPSIB where continuing 'serious' decline creates an imperative for all effects to be avoided - but misses the real issue of pest and weed management deficiency as the cause for decline. In this context, protection alone by a single level regulatory protection approach will not assist or facilitate landowners or community groups to carry out ongoing management, such as animal and weed pest control and recreation of linkages and ecological buffers.

44. Ewers et al (2006) report that deforestation rates in New Zealand (of native forest) over the period of 1997-2002 were very low (0.01% p.a.), but variable about the country. Shrub change was also low at 0.14% p.a. The most current information on landcover trends is from Statistics NZ which looks at changes in land use and land cover between 1996-2012, presents a national picture of change to vegetation / habitat, which is:

    - The largest decrease in area of land cover was in exotic grasslands, down 1.7 percent;
    - Other decreases in land cover were:
        - tussock grasslands (down 1.3 percent or 30,929 ha);
        - exotic scrub/shrubland (down 9.3 percent or 25, 978 ha);
        - indigenous scrub/shrubland (down 1.3 percent or 24,187 ha); and
        - indigenous forests (down 0.2 percent or 16,108 ha).

45. Regions with the largest decreases in indigenous forest cover were the West Coast (down 0.4 percent), Taranaki (down 1.0 percent), and Marlborough (down 0.8 percent).

46. While there has been a small decline of indigenous forests, that decline is less than one percentage and we suggest it is within the margin of error of the dataset overall . What is clear in most research is that the rate of indigenous forest / habitat decline has and is reducing.

47. Belliss et al (2017) in showing WONI (Wetland of National interest) wetland loss between 2001/2 and 2015/16 revealed that 76% of wetlands did not change (in area), 5% had partial loss and 1.5% (214 in number, 1,247ha) appeared to be completely lost. The rest

were not assessable. At a regional level, losses of wetland area were (averaged) around 0.8%.

48. Further, it is our observation that, in the seven years since the publication of Statistics NZ's 2012 land use and land cover statistics, protection and rehabilitation of terrestrial biodiversity has continued in many areas, and that any losses in terms of physical loss of vegetation and habitat, continue to be small or negligible.

49. For these reasons we suggest that the key premise upon which the NPSIB is based is overstated and fails to address the major drivers of indigenous biodiversity health and conservation.

Significance alone unlikely to result in effective conservation

50. Another premise of the draft NPSIB is that identifying indigenous vegetation and habitats of indigenous fauna and declaring it 'significant' will protect it. We would argue that this is demonstrably not the case. True protection of sites of ecological value requires investment and management. Often (currently) that investment and management is achieved on private land by allowing some effects such as through the continued allowance of strategic grazing – especially where those effects are to parts of attributes of the area that do not take away the site's value, viability, significance.

51. The NPSIB will have the greatest impact on private land, and so we consider that it should actively and strongly promote non-regulatory measures, including incentives, as much or more than regulatory measures. As currently proposed the NPSIB is largely silent on alternatives to policies, rules and methods in plans, and appears to favour regulatory intervention over non regulatory methods. While a NPS is reliant on directing Regional Councils to establish methods (regulatory and non regulatory) to achieve objectives, rather than considering government funding, we submit that at the very least the NPSIB should recognise the appropriate balance between regulatory and non regulatory methods, and in this context the limitations of regulation on private land for protecting indigenous biodiversity.

52. We submit that the NPSIB should be amended to enable and incentivise non regulatory and catchment approaches to conservation over regulatory bottom lines. This should be supported by appropriate incentives including but not limited to financial instruments such as financial support for the sustainable management of existing indigenous biodiversity (not just in relation to restoration as provision 3.16 does).

53. We consider non-regulatory methods that support landowners to build the knowledge connections between and encourage good behaviours to be essential elements of any future management that is able to reduce the impact on biodiversity from pests and weeds given that landowners will necessarily be the primary agents of this work or must be at least willing for it to occur (annexed as **Appendix 2**).

54. Such incentives could include:

- Rates relief for land protected for biodiversity values;

- Waiving consent and processing costs for activities with positive outcomes for biodiversity such as fencing;

- Funding mechanisms to assist with management of biodiversity within SNAs and elsewhere;

- Further financial, technical and in-kind support for community biodiversity initiatives – all ecological experts acknowledge the good work of the groups that are currently active;

- Providing educational information on important species and ecosystems of the district;

- Subsidised ecological assessments for landowners e.g. High Value Area ecological surveys undertaken by Southland Regional Council;

- Increased biodiversity expertise within Council staff in advisory and educational roles;

- Regular engagement of those staff with landholders and the community;

- Increasing funding and support for QEII and other partnership and covenanting opportunities;

- Strengthening incentives for and rewarding current land uses that provide indigenous habitats in relation to GHG sequestration and climate change adaption.

55. Indigenous biological diversity on private land needs appropriate and sustained management and investment. To achieve that on private land requires the willingness of the landowner, and financial capability. Importantly indigenous biodiversity should be valued by the landowner. An overly regulatory and prescriptive approach which seeks to effectively 'lock up' indigenous biodiversity acts to penalise those that have already done the most, rewards those where indigenous biodiversity has been lost, and as such essentially creates a policy environment where indigenous biodiversity is a liability to the landowner rather than a jewel.

Summary of the main changes to the NPSIB proposed by B+LNZ and DINZ

56. As such B+LNZ and DINZ are seeking the following main changes to the NPSIB:

- Changes to the Criteria for determining Significant Natural Areas (SNAs) so that only habitats which are 'threatened', 'at risk', or 'rare' are identified, and which provide for management responses which can be tailored to the values of the habitat in ensuring their ongoing sustainable management;

- Recognition for the work undertaken by landowners in protecting indigenous biodiversity within their farming businesses;

- Recognition that protection of indigenous habitats can occur hand in hand with pastoral based farming systems and that the most effective and efficient approach to ongoing successful conservation efforts is to enable the integration of biodiversity within these systems;

- Specific recognition for existing farming activities and the protection of these land uses and activities for the future where they currently co-exist with indigenous biodiversity;

- Recognition and empowerment of farm based and catchment based bespoke approaches to conservation eg through Farm Plans, and Catchment Community Initiatives;

- Focus on non-regulatory methods which work hand in hand with landowner and communities rather than prescriptive rules and prohibitions, exclusion, and land use grandparenting;

- Acknowledgement and support (provision of technical expert support, farm planning, and where appropriate fencing, and or planting), including financial support, for current conservation activities, and for the sustainable management of existing habitats and species, not just where restoration is to be prioritised.

57. Farmers take an integrated and holistic view of the sustainable management of natural resources. They actively seek solutions that enable and empower multiple benefits across New Zealand's range of natural assets including biodiversity, aquatic ecosystem health, soils, climate, and healthy vibrant communities.

58. We seek provisions that will deliver on New Zealand's Indigenous Biodiversity imperatives and enable and empower New Zealand's pastoral farmers to continue to build diverse, resilient, productive landscapes for the benefit of all New Zealanders and in maintaining vibrant thriving rural communities.

SPECIFIC SUBMISSION

59. The following sections detail B+LNZ and DINZ's key issues and concerns with the proposals contained in the proposed National Policy Statement on Indigenous Biodiversity, and also highlights where we support the intent of proposals or the proposals themselves.

Hutia Te Rito

60. B+LNZ and DINZ support the intent of provision 3.2; the use of Hutia Te Rito as an overarching concept which local authorities are required to recognise and give effect to.

61. We particularly support the requirement for local authorities to work to protect, maintain, and enhance indigenous biodiversity in a way that recognises that reciprocity is at the heart of the relationship between people and indigenous biodiversity (provision 1.7(1)).

62. This recognition is fundamental to rewarding and incentivising integrated landscapes in agriculture - biodiversity which includes ecosystem services within productive profitable pastoral based systems. An example of this integrated, reciprocal landscape is deer farming and tussock grasses (or rushes in places like the West Coast region). Tussock provides shelter for the deer at fawning, and sheep at lambing including shelter for new born and young animals. This is extremely important for regions where weather can be extreme such as Southland and Otago in Sept/Oct when a southerly front moves through. The tussock and fauna which live in and on it benefit from remaining as a productive part of the farmer's system, and the farmer benefits from high survival rates in the fawns and lambs, which translates to higher production and income.

63. As stated in our submissions on the NZBS, words are important. For this reason, we consider that the word 'stewardship' is inadequate to recognise our farmers' relationship with the land, which includes a sense of responsibility and connectedness with the land, associated identity and place, and often and intergenerational culture. The word kaitiakitanga has been used with regards to tangata whenua in the NPSIB, and stewardship has been used for everybody else. We consider that kaitiakitanga is a more appropriate word to use to describe the relationship farmers have with the land and its indigenous biodiversity, for the same reasons we submitted against the use of the word 'stewardship' in the NZBS, namely that the difference between kaitiakitanga and stewardship is arguably as great as the difference between governorship and tino rangatiratanga. Kaitiakitanga is a much richer word that denotes deeper responsibility and connection to the resources being managed than stewardship does. Using the two different words for different sectors of society raises several potential issues:

    a. It creates a greater obligation of care for one sector of society than for everybody else. The NPSIB essentially hopes to see a paradigm or culture shift in New Zealand where indigenous biodiversity is something that all New Zealanders value and secure for future generations by working together as communities. On the one hand, setting different standards of care across communities can work against this goal by creating different expectations of what that culture shift looks like and who is responsible for making it;

    b. On the other hand, equity is important to ensure that communities can work together to meet their responsibilities, where all the members of that community understand that they share the same obligation to contribute to indigenous biodiversity. This would strengthen communities and bring diverse aspects of those communities together, especially in rural and remote areas;

    c. Farmers work with their land every single day; their livelihoods depend on it. The land and the way they manage it often form part of their own culture, their identity, their place in their community, their family history and the legacy they see themselves leaving to their children. Most farmers would consider themselves kaitiaki of their land. Assigning a lesser label of 'steward' fails to recognise the deep connection that many farmers have to the resources they manage and the natural environment they live in, as well as the work they do to contribute to indigenous biodiversity which is not necessarily for commercial gain. Devaluing the relationship that farmers have with indigenous biodiversity

disincentivises developing that relationship and their contribution to improving intrinsically valuable elements within it.

64. B+LNZ and DINZ seek that the term "*stewardship*" is deleted and replaced with the term 'kaitiakitanga' to more accurately reflect the values farmers place on indigenous biodiversity on farm and as part of their families' history and their future, and their relationship and ties to their land.

65. We support provisions which recognise and empower ground up, landowner, and community led conservation actions, and which prioritise non regulatory over regulation management frameworks and seek that these provisions are retained where they have that effect.

Integrated Approach

66. B+LNZ and DINZ support provision 3.4 Integrated approach.

67. Pastoral farmers take an integrated and holistic view of the sustainable management of natural resources. They actively seek solutions that enable and empower multiple benefits across New Zealand's range of natural assets including biodiversity, aquatic ecosystem health, soils and climate, contributing to the wellbeing of healthy vibrant communities.

68. Policies need to be written to incorporate the goals and requirements of all relevant regulation, to ensure that there are no tensions between policies and to provide clear and consistent messaging. It is important that policies work together and do not compete. This will allow both rural and urban land users to understand what their priorities are.

69. B+LNZ and DINZ however have concerns about Government policy and legislative proposals currently being deliberated on or out for public consultation that do not seem to have been developed in an integrated manner. This is particularly true regarding how proposed climate change legislation (the Emissions Trading Reform Bill currently before the Environment Select Committee) and policy proposals (the Emissions Trading Scheme (ETS) regulations for which consultation has recently closed) interact with the proposed NPSIB.

70. The emissions trading proposals provide significant financial incentives for participants in the ETS to offset their emissions through the planting of large areas of exotic plantation forestry (mainly pinus radiata), and much fewer incentives to plant native species. Thinking about it from a biodiversity perspective, a landowner who is a participant in the ETS would essentially be asked to trade-off the biodiversity values and benefits from current or future land use for carbon sequestration, which also would provide him with an additional income stream.

71. Using a practical example, a farmer who may have considered allowing a hillside to regenerate into native bush might be better off putting that hillside into pine plantation in order to offset carbon emissions because pine trees capture carbon more quickly than indigenous vegetation and as such are incentivised over indigenous habitats, through

tools such as Emission Trading Scheme and planting subsidies. As such indigenous biodiversity loses out because climate change policy and biodiversity policy have not been designed to work together.

72. Similarly, a farmer who uses flood irrigation may need to consider more efficient irrigation systems, like pivots, to meet obligations under freshwater policy. Changing the system to allow for pivots, however, might necessitate the clearing of exotic shelterbelts. There is a risk that under, for example, proposed provision 3.15 of the NPSIB, a local authority may consider that mobile fauna might sometimes be present in the exotic shelterbelts. Policy should first and foremost avoid this kind of tension, and secondly provide guidance on how farmers should prioritise their obligations.

73. B+LNZ and DINZ seek that provision 3.4 is retained as proposed.

Resilience to Climate Change

74. B+LNZ and DINZ support the general intent of provision 3.5, Resilience to climate change, and submits that amendments are required to other provisions in the NPSIB to give effect to this provision. B+LNZ and DINZ also requests officials to consider how climate change policy and legislative proposals currently being considered by the Government are consistent with provision 3.5. In B+LNZ and DINZ views there are some significant inconsistencies and tensions between current climate change policy proposals and biodiversity proposals.

75. B+LNZ and DINZ for example note that the proposals to reform the Emissions Trading Scheme provide some significant incentives for large-scale afforestation of exotic forestry for the purposes of carbon farming. Converting land, in particular good pastoral land, to exotic forestry to offset carbon emissions is not only a short-term solution that is unlikely to meet New Zealand's long-term climate change objectives, it will likely also threaten the ability of New Zealand's landscapes and biodiversity to be resilient to the impacts and damage climate change is expected to inflict. NIWA is for example forecasting a 400-fold increase for fire risk with large-scale afforestation of exotic species.

76. B+LNZ and DINZ advocate for policy to be designed in a way that empowers farmers to:

- deliver positive outcomes across multiple benefits across environmental domains including freshwater outcomes (reducing erosion and managing overland flow pathways of contaminants), enhancing indigenous biodiversity, sequestering of GHG emissions, and adapting to climate change and;
- contribute to multiple wellbeings, including economic, cultural, social and environmental

77. We do not believe that the Government's recent proposals on climate change, freshwater, biodiversity and soils policy have been developed in an integrated manner. This in our view is leading at best to inconsistencies between proposals, and at worse

to perverse outcomes and unintended consequences achieved through trade-offs created by these inconsistencies.

78. We consider that the NPSIB, generally, fails to give effect to provision 3.5. A changing environment is likely to see distribution of species change and move, and having the space and resources to do so will be critical to the survival of many indigenous species. Pastoral farming land use is one of the only anthropocentric land uses mentioned in the NPSIB which still provides a space for indigenous life. This space, or habitat, is not typically provided by mining, infrastructure, residential development, or plantation forestry which will inevitably be cleared to bare earth.

79. The habitat comprises pasture, exotic vegetation, mixed scrub and pasture, as well as areas of mainly indigenous vegetation. It offers food, water, breeding opportunities, and reduced predation through the inherent characteristics of pastoral systems and farmers' own pest control measures.

80. Farmers will continue to provide this space through their systems where they feel safe to do so. The general bias of the NPSIB is towards exclusion of humans and livestock from indigenous biodiversity, which has the effect of disincentivising the provision of that space, particularly disincentivising mixed or wholly indigenous vegetation as part of a farm system. That puts farmers in a difficult position – while they value the species they see and often nurture on their property, perceived appropriation of private land for public good can devalue indigenous biodiversity by making it the object of perceived and actual unfairness and inequity in relation to productive opportunity. This approach discourages other landowners who might have considered encouraging indigenous biodiversity on their property, due to a loss of property rights and increase regulatory burden.

81. Failure to recognise this through the rest of the NPSIB results in the failure of provision 3.5 to have meaningful effect. Establishing significant natural areas is not enough to provide for climate resilience in indigenous biodiversity. Pastoral farms provide habitat, food, a degree of safety, and a genetic bank outside of dedicated indigenous environments, like SNAs, which would serve to buffer indigenous fauna and flora in the face of climate change effects on New Zealand. Disincentivising indigenous biodiversity on farm undermines that buffer and movement corridor, and therefore undermines climate resilience for indigenous species.

82. B+LNZ and DINZ seek that provision 3.5 is retained as proposed, but that it is given substantive effect to throughout the rest of the provision in the NPSIB.

Precautionary Principle

83. B+LNZ and DINZ support the precautionary principle provision 3.6, but seek in relation to relief sought that the NPSIB is amended to provide greater clarity to regional councils and communities around the relationship between an activity and what is considered to be an effect, including determining the magnitude of a potential effect, and options to avoid, remedy, or mitigate the effect based on land uses or activities.

84. Provision 3.6 which requires local authorities to adopt a precautionary approach in respect of uncertainty about effects on indigenous biodiversity, acts to put the onus on

the landowner or consent applicant to prove what effects might be expected and how minor or significant they might be in relation to their impact on Natural Resources.

85. As currently proposed the provisions of the NPSIB are drafted in such a way that even expert ecologists are unlikely to provide consistent advice on how the NPSIB should be implemented by councils or/and how individuals and organisations should determine if an activity has an effect or how to manage potential effects in a consistent way. The outcome ultimately will be inconsistent implementation of the NPSIB, continuing legal challenges in relation to Regional Plans and implementation, and uncertainty for landowners and communities.

86. While it can be difficult to predict with absolute certainty an indirect effect, ecologists generally have robust guidance to support their assessments and mitigation design in relation to most natural resources and human mediated activities. National Policy Statements such as the NPSFW and Regional Plan provisions, also generally provide clear direction in relation to what is required to sustainably manage natural resources. This then guides individuals and organisations when they are considering what is an effect, the magnitude or scale of the effect, and the tools available to them to avoid, remedy, or mitigate the effect. For example the NPSFWM sets out a range of values for freshwater, and numerical attribute states which councils must apply through regional plans.

87. The NPSIB however, establishes a management framework and ecological requirements which are highly subjective, based to a large extent on technical jargon, and as such are not easily discernible to an informed audience, let alone the public. Additionally, a great deal of New Zealand's indigenous biodiversity has not yet been described, is poorly or inadequately described, and is little known and understood. Therefore, the effects of activities would tend towards being uncertain, unknown, and little understood. The precautionary principle therefore sets an automatic bias, particularly in light of the general bias through most of the NPSIB towards avoidance in relation to activities within or adjacent to SNA's or areas used by highly mobile species.

88. Provision 3.6 as implemented through regional plans is likely to put the onus on the landowner to prove what effects might be expected and how minor or significant they might be from an activity including an existing activity. The vast majority of pastoral farmers are not qualified as ecologists or environmental scientists. Even where they might engage, at often significant cost, ecologists and environmental scientists; effects on our indigenous biodiversity are often unknown and little understood even by technical experts. This is an unenviable task, where the stakes are high for the farmer and the farmer's ability to meet the requirements are prejudiced from the outset.

89. It is also foreseeable that there will be a high degree of subjectivity in relation to how provisions are written at a district and regional level.

90. We seek greater clarity in the way provisions are written so that it enables individuals to understand what is to be required, consistent interpretation and implementation by councils, and enables management responses to be targeted at the values of the habitat cognisant of its threat status.

91. B+LNZ and DINZ also seek that the precautionary principle is not to be used, as the NPSIB currently requires, as a default position when assessing pastoral farmers ability to undertake new or existing activities as part of their farm system.

Social, economic and cultural wellbeing

92. We support with amendments provision 3.7, which aims to provide for social, economic, and cultural wellbeing in the efforts to maintain and enhance indigenous biodiversity. We submit that the NPSIB requires amendments, however, to give effect to the provision.

93. We support provision 3.7(b), which requires local authorities to recognise that the maintenance of indigenous biodiversity does not preclude the use and development of land within Significant Natural Areas. This needs to be given effect to throughout the rest of the policies. The NPSIB currently does not do so.

94. B+LNZ and DINZ support the recognition that people and communities are critical to conservation actions and the protection and enhancement of indigenous biodiversity, and we strongly support those provisions in 3.7 which empower and support landowner and community conservation activities and local approaches.

95. We seek that 3.7 is amended to recognise the importance of providing for farming land uses and business resilience, in supporting indigenous biodiversity protection.

96. B+LNZ and DINZ seek that the NPSIB be amended so that policies and rules reflect Objective 3.7 including prioritising non regulatory approaches and partnerships over regulatory frameworks, and the establishment of conservation frameworks which recognise that the protection and where required enhancement of indigenous biodiversity can be provided within pastoral based farming land uses and alongside pastoral based activities, and that these are not mutually exclusive.

97. We also seek that provision 3.7, particularly 3.7(b) and (e), is given substantive effect to throughout the NPSIB. At present, provisions 3.9, 3.12, 3.13, and 3.15 fail to give even nominal effect to provision 3.7.

Identifying significant natural areas

98. B+LNZ and DINZ oppose provision 3.8 Identifying Significant Natural Areas.

99. While we support the identification and sustainable management of indigenous biodiversity, we do not support the grandparenting of land use. This provision, when applied in conjunction with other provisions in this proposed NPSIB (for example provisions 3.9, 3.12, 3.13, 3.15) have the effect of grandparenting land use because it locks down land that has indigenous vegetation cover. This affects farmers ability to use their land and can create restrictive management rules that exclude livestock, with corresponding losses in productivity, income, land value, and farmer engagement. The farmers who have contributed the most to providing a space for indigenous life are the farmers who will be hardest hit by the losses and by costs associated with SNAs. We consider that this provision requires amendments.

100. We support the intent of provision 3.8 in identifying indigenous biodiversity which is significant, by experts working with communities and in partnerships with landowners. This assessment should be undertaken in a consistent manner, with the significance of habitats verified or refined through an on the ground assessment, rather than just through reliance on spatial maps.

101. We also support the establishment of a consistent approach to determining whether or not a habitat is significant, and what its values are, which should guide management responses.

102. B+LNZ and DINZ however, oppose the broad reach of the currently proposed criteria as it is likely to capture all remaining indigenous habitats irrespective of whether they are significant and vulnerable. The criteria that provision 3.8 and associated Appendices 1 and 2 propose capture any indigenous biodiversity irrespective of how common it is, or its threat status. It could capture entire catchments as significant. As such it does nothing to direct the application of limited resources to those habitats which are most at risk of loss and vulnerable to human mediated activities.

103. We seek that provision 3.8 is amended to the effect that the significance criteria are narrowed so that only habitats or species which are endangered, or threatened, are identified. Management frameworks can then be tailored to the level of risk that the habitat faces and the values that underpin the habitats significance.

104. We also seek that the provision is amended so that numerical thresholds are included for example an area minimum threshold, that direct when a habitat that meets other criteria is to be considered significant. The criteria applied through the Manawatu Whanganui Regional Plan (One Plan) provides a robust framework which B+LNZ and DINZ support, and ask to be adopted through the NPSIB[3].

105. We seek consequential amendments to ensure provisions are aligned in identifying and then establishing management frameworks specific to the risk status of the habitat e.g. “endangered”, or “threatened”, and which support clear numerical thresholds in relation to when a habitat should be considered significant.

106. B+LNZ and DINZ oppose the requirements on local authorities that the assessments have to be completed within 5 years. This is because it is unlikely that the technical expertise is available within New Zealand to be able to undertake the assessments appropriately including through on the ground verification of the significance of habitats, in partnership with landowners. Timeframes should be established through Regional and District plans as appropriate, which support a partnership approach with landowners and communities to identifying significant indigenous biodiversity, understanding their values, and informing how these habitats and species can be sustainably managed.

107. For this reason, we seek that provision 3.8 is amended to enable local authorities the time to undertake this work in a robust manner. The ability for experts to work with landowners in identifying these habitats and in informing the ongoing management of

[3] Horizons One Plan Schedule F Indigenous Biological Diversity

these habitats within pastoral based land uses and activities, is an essential element to providing successful and enduring conservation outcomes.

A critique of the significance criteria

108. A set of criteria were developed for the Collaborative Group, by a respected ecologist (Mike Harding) with some additional ecological input. Those criteria (which we generally support) were ecologically based, provided attributes with useful qualifiers to avoid ambiguity, and did not result in the capture of vegetation and habitats that had low ecological value. The original criteria have been reworded several times through development of the NPSIB to the point that the proposed SNA criteria bear little resemblance to the original, and remove important ecological context, thresholds, and qualifiers.

109. Instead, the core premise of the Collaborative Group's thinking on this matter appears to have driven the rewrite of the significance criteria, such that the proposed significance criteria and attributes in the NPSIB are now focused on:

- Elevating the rarity of indigenous biodiversity, with rarity containing 12 individual attributes, any one of which will trigger significance, and those attributes being defined in such a way that little vegetation or habitat will not trigger at least one of them;

- Diminishing the importance of representativeness, which is traditionally considered by ecologists to be the key criteria for determining significance, and replacing important and measurable qualities with ambiguous and ill-defined phrases;

- Capturing within the criteria common species and modified systems, which are largely on private land and typically consist of native species which are either invasive of pastoral landscapes (bracken, ring fern, tauhinu, mingimingi, manuka, kanuka) or are part of the farming 'infrastructure' (such as shelter belts).

- Specifying criteria in such a way that no indigenous vegetation or habitat is likely to be found to have less than moderate value (low value has been removed).

110. One of the principal issues with the NPSIB is the 'ease' with which the criteria allow an area to be identified as SNA. A feature qualifies as an SNA if it meets any one of 29 attributes within the 4 criteria. This is then followed by a range of provisions in the NPSIB which act to regulate for use, and development, including existing use where the activity may impact on the 'Ecological Integrity' of a habitat or other broad ecologically based measures of overall health. The combined effect of the broad reach of the significance criteria, matched with the requirement to essentially avoid a wide range of effects (including extent and change in shape and any impact on ecological integrity) is to establish a framework largely based around the avoidance of activities and landuses including existing from SNA's and potentially areas around SNA's.

111. In determining the rating of the SNA (High or Moderate / Medium) if a single attribute from within the full list of attributes has a "high" rating, then the feature entire must be

considered a High SNA and regardless of the applicant adverse effects must be avoided for the entire SNA and without consideration of the mitigation hierarchy or offset

112. Because not all attributes refer directly to being indigenous, the attributes as drafted could technically encompass any exotic vegetation that provides habitat for an At-Risk species (e.g. D3 c) – f)).

113. As an example, if exotic forest/scrub provides a link for long tailed bats foraging between two areas of indigenous forest, the exotic vegetation technically meets Ecological Context attributes for providing a link between important habitats and for providing critical habitat (feeding) for indigenous fauna. While an ecologist might question the validity (and value) of such an assessment, technically this assessment is completely correct based on the draft NPSIB as currently drafted.

114. The Government's "Protecting our Places" (Ministry for the Environment (MFE) and Department of Conservation (DOC), 2007a; MFE and DOC, 2007b) identified four national priorities for biodiversity protection as follows:

- To protect indigenous vegetation associated with land environments (defined by Land Environments of New Zealand at Level IV) that have 20% or less remaining in indigenous cover;
- To protect indigenous vegetation associated with sand dunes and wetlands; ecosystem types that have become uncommon due to human activity;
- To protect indigenous vegetation associated with "originally rare" terrestrial ecosystem types not already covered by priorities 1 and 2; and
- To protect habitats of acutely and chronically threatened indigenous species.

115. These criteria have been extrapolated upon in the NPSIB to the point where the original intention of the Governments "Protecting our Places" national priorities, and the criteria as developed by Mike Harding (with other expert ecological input) for the Collaborative Group, have been lost. There appear to be little of these criteria remaining in the NPSIB, or where it remains changes have been made to the text that makes the wording less precise, and more open to interpretation. As such we propose that the original wording as proposed by Harding et al, with inclusion of thresholds as operative within the Horizons One Plan, be applied in determining whether or not a habitat is significant.

116. In the following, we critique the proposed SNA criteria in the NPSIB. We note that the original set presented to the Collaborative (although still encompassing of most indigenous features) was a better set than the proposed NPSIB criteria, with the original criteria each having a definition, explanation and then guidance of use, allowing appropriate flexibility to ecologists describing and assessing each site on its individual merits.

Representativeness

117. The current draft NPSIB directs the assessor to consider commonplace indigenous vegetation and habitat, and includes degraded systems and areas / features that are

typical of what remains, not of a pre-1840 (pre-European) state, or a reference state (i.e., the best of what remains).This leads the assessment to find features typical of the new (today's) condition, which is a reflection of the levels of modification and young nature of many systems, as representative. That is, they are typical of themselves, they are their own reference. This is a considerable lowering of the bar and it becomes common (or easy) to consider modified assemblages as being representative of the typical modified state – i.e. the criteria will be met most of the time.

118. An assessment criterion for representative should not pick up all indigenous features because of a perspective that modification and absence of unmodified systems means the bar can be substantively lowered (be it integrity or composition). We consider the representative criteria should continue to follow the EIANZ 2018 Guidance and the Canterbury (2013) RPS criteria, or the assessment criteria developed by Harding for the Collaborative Group which require consideration of: expected species, structural composition, ecological functioning, the dominance of indigenous species, and the presence of most guilds expected in that habitat type. The EIANZ guidance still takes account of modified sites but by adjusting thresholds adjusted where all examples of a type are strongly modified – i.e. the reference is the best of the remaining rather than pristine.

Diversity and Pattern

119. We submit that species diversity is a redundant attribute, as it is fully addressed by the representativeness criteria, as representative vegetation or habitats will have the appropriate species or community diversity.

120. An important departure from Harding that the NPSIB has taken is the inclusion in the Appendix 1 criterion for Diversity and Pattern, of the "presence" of an ecotone, and/or of a complete or partial gradient, and/or of a sequence. The presence of any of these is sufficient to make a feature significant.

121. An Ecotone (which the NPSIB does not define) is the boundary or transitional zone between adjacent communities or biomes – the space where habitats / communities / ecosystems blend as they change. Such zones are technically present in every feature and between every different habitat – forest to shrub, shrub to grassland, herbfield to sedgeland, water to reedland etc. As it stands, therefore, the criterion in the draft NPSIB could, technically, see this attribute associated in most, if not all, cases.

122. 'Complete' or 'Partial' gradients (neither of which are defined in the NPSIB) means an increase or decrease in the magnitude of a property. An ecological gradient typically means transition in abundance or condition of an abiotic factor such as: pH, nutrient, conductivity (saltiness), air pressure, temperature, humidity, concentration of a soil mineral etc which results in a changing plant and animal assemblage to a recognisable new community. We have no idea what a "partial" gradient refers to.

123. Gradients lead to the development of sequences (which are defined in the NPSIB as "a series of ecosystems or communities, often physically connected, that replace one another through space") and ecotones lie between each community in a

sequence. Commonly referenced sequences are altitudinal (along a gradient of temperature) and hydrological sequences (along a gradient of moisture).

124. All indigenous communities will contain gradients, sequences and ecotones. The simple presence of these should not, in and of themselves, be sufficient to trigger significance – but currently under the draft NPS it does.

Rarity and Distinctiveness

125. The draft NPSIB states that this criterion covers "the presence of rare or distinctive indigenous taxa, habitats of indigenous fauna, indigenous vegetation or ecosystems."

126. On this aspect, Harding et al in advice to the Collaborative Group stated the rarity and distinctiveness should have:

    - The presence of: populations of 'threatened', 'at risk' or 'data deficient' species; vegetation depleted to less than **20%** in the ecological district (ED); indigenous vegetation/habitat of sand dunes, wetlands, water bodies, and 'naturally uncommon' ecosystems; species at distribution limits; or intact ecological sequences and gradients.

127. In its development, the draft NPSIB has seen a number of rewrites of this criterion that are not in keeping with ecological practice.

128. The draft NPSIB lists 4 key principles, but C4, the depletion of indigenous systems, is not necessarily a rarity aspect – the result of depletion may be rarefication but that is covered by C1 rarity.

129. In terms of the attributes, we note that item (d) has shifted the level of rarity, quoting a 30% level of indigenous vegetation type remaining in its ED, whereas most published and ecological information (e.g. the Harding advice to the Collaborative Group) recommends a 20% threshold – indeed, the draft NPSIB in Appendix 2 under rarity reflects a 20% threshold as the qualifier to be "high".

130. Items (g) and (i) have no foundation as significance criteria – "the presence of 'special ecological or scientific feature' or as a type location does not make the feature ecologically significant.

131. Also, it is highly debatable that the type locality (item f) has any ecological relevance, it is simply the place where the species was first encountered by a scientist and collected as the reference specimen so has cultural/scientific value only. This attribute might be included as one aspect of a "special scientific feature" but has no basis for ecological significance in itself and does not contribute to achieving any of the NPSIB objectives.

Ecological Context

132. Ecological context, as historically taught, had the meaning of 'the situation within which something exists, and that can help explain its presence and form'. During the development of criteria for significance for the NPSIB, this criterion has been reduced to

the consideration of buffering, connectivity, provision of critical habitat, and provision of natural functions. It needs to revert to the ecological meaning.

133. Being a buffer, if this is the only attribute that is scored, is not sufficient in and of itself to determine that a habitat is significant. It is unclear if this is relative to the significance of the ecosystem being buffered or an absolute/standalone value. If buffering is a standalone value, then exotic vegetation that provides buffering to an indigenous feature could meet this criterion and therefore be considered an SNA.

134. We submit that item (f) is superfluous. The habitat types listed as being "critical" simply refer, in effect, to habitat of an indigenous species which is provided for in both A4 b) and B5 a) and C6 a). The only other relevant aspect of habitat for fauna besides feeding, breeding, refuge and rest is migration or transit which will principally be via waterways or air, neither of which are covered by the NPSIB (except in consideration of climate change).

Managing adverse effects on SNAs

135. B+LNZ and DINZ oppose provision 3.9, Managing adverse effects on SNAs, and seeks amendments.

136. While we appreciate the need for managing adverse effects on SNAs, this provision as currently drafted contributes significantly towards a bias in favour of exclusion of human and livestock in SNAs.

137. The *King Salmon* case has established that the word 'avoid' means 'not allowed'. It introduces an inappropriately stringent – even impossible - threshold for land users to meet. New activities will include old activities which now or in the future need a resource consent, especially under impending regional and national freshwater regulation. The impossible thresholds will likely see very few resource consents being granted, especially when assessed in conjunction with the precautionary principle in provision 3.6.

138. This, in turn, fails to recognise and reward work done by pastoral farmers in integrating indigenous biodiversity into their systems, penalises farmers who have contributed to the maintenance or enhancement of indigenous biodiversity on their property, rewards land users who have not provided a space for indigenous life on their property, and encourages perverse outcomes by creating a risk in allowing indigenous biodiversity to persist on farm.

139. Provision 3.9 as it is currently drafted will have the effect of precluding almost any activity that physically interacts with a SNA, for example grazing, despite many activities having only an indirect impact on ecological function. Coupled with the broad SNA classification criteria that will effectively capture all areas under indigenous cover, this provision can serve to exclude landowners from even the most extensive use of their land.

140. Provision 3.9 thereby fails to provide for provision 3.5, Resilience to climate change. The bias towards exclusion, rather than management, in SNAs renders provision 3.7 Social,

economic, and cultural wellbeing, impotent – particularly provision 3.7(b), which requires councils to recognise that the maintenance of biodiversity does not preclude use.

141. We seek that the word 'avoided' is deleted; and replaced with the word 'mitigated' or 'managed', which would give effect to the provisions mentioned above.

142. B+LNZ and DINZ further seek that provision 3.9 is amended so that the effects management hierarchy is based on the level of the habitat's significance e.g. "endangered" or "threatened"; and is tailored to the values which underpin the habitats significance.

143. We seek that provision 3.9 is amended so that the requirements relate to consent applications and the assessment of effects only, with requirements to avoid, remedy, or mitigate the effects as are practicable. New activities should be provided for where the effects of the activity on the values that underpin the habitats significance (such as representativeness, rarity, and distinctiveness) can be avoided, or remedied, or mitigated.

144. We further seek that the provision is amended so that the ability to offset effects should only be provided for where the offset can occur in the same ecological area. The ability to offset an activity in the urban environment, onto the rural environment should not be allowed.

Existing activities in SNAs

145. B+LNZ and DINZ oppose provision 3.12, Existing activities in SNAs as currently drafted, and seeks amendments

146. B+LNZ and DINZ support the intention of 3.12, which is to allow existing activities within SNAs to continue. The fact that an area within a pastoral system demonstrates biodiversity values worth qualifying as a SNA is often due to the way that the area has been managed and integrated into that pastoral system. Farmers manage pests, weeds and competition from exotic species through their land use practices, and this allows indigenous biodiversity to flourish. Indigenous reptiles, for example, have been found to thrive in pastoral systems due to reduced predation. Existing activities should therefore be allowed to continue.

147. The provision as it is currently drafted, however, reinforces a document-wide bias towards exclusion rather than providing for existing activities. In this regard it does not give effect to proposed provision 3.2 and the reciprocal relationship between humans and indigenous biodiversity, provision 3.7 and its recognition of the importance of people and partnership in maintaining indigenous biodiversity, or the requirement on local authorities to recognise that maintenance does not preclude use and development of land in a SNA. Importantly, 3.12 undermines provision 3.5 Resilience to Climate Change by disincentivising indigenous biodiversity on farm due to the risk that existing activities will, in fact, not be allowed or will be significantly restricted.

148. The effect of this provision is to place significant restrictions around existing pastoral farming activities and land uses, for example the grazing of livestock within or around a

SNA. It creates a liability because the land owner risks a loss in the ability to use that land, therefore a reduction in productive land, and a reduction in corresponding productivity, system resilience, and income and loss of opportunity, as well as a reduction in land value and saleability as a result of those factors.

149. This section of the draft NPSIB is of particular note/concern to a wide range of farming land users. The suite of clauses here is complex and full of uncertainties – it appears, for example, that if the seral regenerated vegetation can qualify as SNA (which many would under the criteria), then the clearance cannot progress as it once did –irrespective of past activity and proof of that activity i.e. one must 'avoid reduction in extent etc' (section 3.9). We do not think that this is a theoretical issue but a real one related to extensive areas of hill country shrub reversion (there are 49,266ha of such vegetation recognised in NZ (NZ environmental reporting series)).

150. Even if an indigenous feature (such as shrub reversion) is not an SNA, it still appears that clearance could require a consent as 3.13.(4)(b) goes on to say that while the clearance may be part of a regular cyclic activity, and probably will not have an effect on indigenous biodiversity, section (c) (which follows an "and" after (b)), says consideration of effects is required - that is, some form of consent with an assessment will be required to consider those effects (of pasture shrub reversion clearance for example).

151. To then obtain that consent (other than time and money), an applicant will need to prove the regular (historic) cyclic nature of clearance, that the clearance will be of no greater scale etc than previously, and it will not involve threatened or at-risk species, which for example could be manuka and kanuka. In this circumstance (clearance) we do not see the exemption (3.9, 4, b) whereby if manuka and kanuka presence are the only "value" causing a feature to be significant then to not "count" the manuka or kanuka, is true of section 3.123(4),c. We suggest that clearance of either manuka or kanuka is strongly resisted in this implementation section.

152. If, through an assessment, the vegetation is found to be significant, or if At Risk species are identified within the site (manuka or kanuka) to be cleared, then no consent would be granted as one must avoid a reduction in extent etc (Note: mobile fauna (section 3.15) and habitat may also feature in this component).

153. B+LNZ and DINZ seek that 3.12 be amended to specifically provide for the following activities within and adjacent to an SNA and areas identified as important for mobile species, where this is an existing activity:

- Grazing of productive animals;
- Pasture renewal;
- Cultivation;
- Vegetation clearance.

154. B+LNZ and DINZ seek that 3.12 be amended so that the temporal and spatial nature of existing activities as part of pastoral based farming are recognised. Specifically,

vegetation clearance, cultivation, or pastoral renewal, that may occur within a 10-year rotational basis, along with the pastoral grazing of livestock that also may be temporal in nature for example during drought periods.

155. We seek that 3.12 be amended so that existing activities are provided for as a permitted activity. Where consents are required, then the effects of an activity should be assessed in relation to the attributes which underpin the significance of the habitat such as representativeness, rarity, and distinctiveness.

156. We seek that 3.12 be amended to delete requirements to maintain or protect the 'ecological integrity' of a habitat, where the 'ecological integrity' of the habitat may have been impacted prior to notification of the NPSIB e.g. through existing impacts on the habitats ability to regenerate.

157. B+LNZ and DINZ seek that 3.12 be amended to delete restrictions on the ability to undertake an existing activity in areas which have become SNA's.

General rules applying outside of SNAs

158. B+LNZ and DINZ understand and support the intent of provision 3.13, General rules applying outside of SNAs, but opposes the provision as it is currently drafted.

159. Farmers are holistic, big picture thinkers. It was clear to the farmers who gave feedback through B+LNZ's NPSIB information roadshow that activities around SNAs can affect SNAs. The consistent feedback we received was that that they could appreciate the thinking behind the creation of this provision. The provision as it is drafted, particularly when assessed in conjunction with the suite of other provisions in the NPSIB, for example provisions 3.6, 3.8 and 3.9, compounds and increases risk for pastoral farmers in making a space for indigenous life as part of their farm systems.

160. The broad drafting of the provision means that there is no limit on the extent of the area which might be required to be managed. A local authority might, under this provision, be able to deem an entire catchment as the area around a wetland SNA that needs to be managed.

161. While it makes sense to take into account how activities around SNAs might affect SNAs, and to manage one's effects in that regard, the bias towards exclusion, implied land use restrictions, grandparenting effects, failure to provide for existing uses, and the inappropriately broad SNA identification criteria have the potential for perverse environmental and economic consequences. Provision 3.13, read in conjunction with related provisions, creates a second-class SNA.

162. Provision 3.13, which implies the power to declare a catchment wide or 10m exclusion buffer second class SNA, comes with all of the risks that a regular SNA does: livestock exclusion and reduced ability to use the land, corresponding reduced productivity, reduced income, reduced saleability and loss of land value.

163. B+LNZ and DINZ, first and foremost for this provision, seek that that subclause (2) is deleted, and that provision 3.13 is amended to prioritise non regulatory, partnership, and

landowner led approaches to managing areas around SNAs in order to protect the attributes that make a SNA significant.

164. We seek amendments to 3.13 to ensure that existing activities are provided for. We are concerned that provision 3.13 as proposed may result in areas around SNAs being 'locked up' from pastoral based farming activities, and farmers essentially being excluded from using their land under this second class SNA.

165. We further seek that 3.13 is amended to prioritise engagement with the technical expert and landowner to co-design management frameworks for the farm which ensures that indigenous biodiversity is provided for as an intrinsic and integral part of the farming business. These plans can be provided for through tailored Farm Plans, bespoke to the individual biodiversity values and the farming business.

Highly mobile fauna

166. B+LNZ and DINZ understand and support the intent of provision 3.15, Highly mobile fauna; but opposes the provision as it is currently drafted.

167. As with provision 3.13, farmers who gave feedback through B+LNZ's NPSIB information roadshow indicated that they could appreciate the intent behind this provision. However, we oppose the provision as it is currently drafted for the following reasons:

- The criteria for what is essentially a third class SNA – that highly mobile fauna might sometimes be present – is inappropriately broad. This is especially true considering that, as with provision 3.13, the area that might be captured for management under this provision is unlimited. Additionally, no guidance is given on what constitutes highly mobile fauna.

- As discussed above, although it seems logical to take into account the need for highly mobile fauna to be able to move around freely within a reasonably wide area in order to survive and thrive, other provisions in the NPSIB creates a significant risk for pastoral farmers if they are required to manage effects for fauna that might, sometimes, be there. The NPSIB's bias towards exclusion, implied land use restrictions, grandparenting effects, failure to provide for existing uses, and the inappropriately broad SNA identification criteria have the potential for perverse environmental and economic consequences, as they do for provision 3.13.

- The risks that this provision poses to pastoral systems does not instil a sense of pride of care in having highly mobile fauna possibly, sometimes, present on the property, but instead can serve to exacerbate issues around potential livestock exclusion and reduced ability to use the land, corresponding reduced productivity, reduced income, reduced saleability and loss of land value.

- We submit that this provision is poorly drafted and has not taken into account the practical workability or fairness of the provision's wording. The provision has the potential to affect pastoral farmers' ability to generate a living and their social, economic, and cultural wellbeing. Where regulation proposes to have such major

effects on people's ability to support themselves, it should require far better certainty than that a species might, and sometimes, be present on a property.

168. Further, under the NPSIB, Councils will need to identify where highly mobile threatened and at-risk fauna have been and are likely to be: this will require a large element of guessing. There is no guidance as to what constitutes a "highly mobile" species but it will likely be threatened species that are very common such as: Long fin eel, NZ pipit, long tailed cuckoo, Ngahere gecko, and many invertebrates. We seek clarification on whether high mobility refers to the distance over which that species travels, their speed of travel, their frequency of travel or something else? Most farms will have such features which were or could be, sometimes, "habitat".

169. One can raise several examples where threatened at risk mobile taxa occupy a wide range of "habitat" varying year to year that include areas such as quarry tailing sites, rubbish dumps, amenity ponds, farm dams, river edges, gully remnant bush and shrub, and parks (e.g. a black billed gull colony in Napier this year (2019/2020), derelict properties (a Christchurch demolition site). These areas will qualify as mobile threatened species habitat, and so must activity cease on these?

170. The Council must put in place "best practice techniques" for managing adverse effects to those fauna and their habitats. Does this mean the avoidance of adverse effects? The obvious answer is yes one must avoid adverse effects to these areas -in effect another type of SNA. This will "lock" up additional area (although see below as to whether any such areas will be identified).

171. B+LNZ and DINZ submit that this provision should be redrafted. The provision would achieve greater gains for highly mobile fauna and better engage landowners by taking an education and support approach, rather than a regulatory one. We submit that the provision should be redrafted to require councils to provide advice, education, information, and support for farmers who might sometimes have highly mobile fauna on their properties, to help them understand what that fauna might be and how they can provide for those species to persist and thrive. This should not be a regulatory provision which has the effect of restricting activities, land use, or locking up land in a third class SNA.

Restoration and enhancement

172. B+LNZ and DINZ support provision 3.16 in principle, and in part. We seek amendments to the provision.

173. We note and support the provision for non regulatory methods and support, including financial support. We seek that this provision be retained.

174. We note, however that financial support is not recommended for the protection and management of existing indigenous biodiversity. We seek that the provision be amended to include support for the management of existing indigenous biodiversity.

175. B+LNZ and DINZ oppose clause (6) of provision 3.16. Restoration as an ecologically defined word is an onerous obligation and one which is very hard to achieve in an

environment which has been so dramatically altered by human beings, disease, weeds and pests. Imposing restoration conditions on resource consents, especially in these broad terms, can create conditions that the consent holder cannot afford to meet, or which are simply unachievable. We seek that this clause is deleted.

Increasing indigenous vegetation cover

176. B+LNZ and DINZ support provision 3.17 in part and opposes it in part, and amendments are sought.

177. We support 3.17(4) and request that that provision be retained. As stated in B+LNZ's submission on the NZBS, indigenous biodiversity is the responsibility of every single person in New Zealand, regardless of whether that person is in possession of land or not. Promoting this responsibility is part of what is needed to effect the culture shift that the draft NZBS hopes to achieve, and every single person in New Zealand who enjoys or wants to enjoy the country's indigenous biodiversity should contribute to it.

178. The provision as a whole has value because it demonstrates a degree of innovation in the way that New Zealand approaches the maintenance and enhancement of indigenous biodiversity beyond the (thus far ineffectual) 'silver bullet' of locking land up in SNAs. It starts to introduce the concept that we all need to contribute to our indigenous biodiversity if we would like to continue to enjoy it, and this approach could be used to enable a more partnership focussed approach, as required by Hutia Te Rito and provision 3.7, to reinforce that sense of responsibility through community action and ownership.

179. We have identified potential issues when read with the rest of the NPSIB, however, and for this reason we oppose provision 3.17(5) as it is currently drafted.

- Unlike urban areas which are likely to see the burden of increased vegetation cover shared by all district ratepayers and implemented through public spaces, it is very likely that the burden of increasing indigenous vegetation cover will fall on individual private land owners in rural areas, at their own private cost and without adequate support. This provision should be redrafted to ensure that that support is given to rural landowners, and that the costs – one of many that the NPSIB introduces – are distributed fairly, with resource and financial assistance provided to landowners to achieve the vegetation cover targets.

- Since the work and cost burden is likely to fall on private landowners in rural areas, we are concerned that the lack of a cap in provision 3.17(5) may encourage local authorities to be ambitious about what can be achieved at pastoral landowners' expense.

- Pastoral farm systems in particular face a compounding risk as a result of other provisions in the NPSIB because of the bias towards exclusion and loss of use of their land. Increasing indigenous vegetation on farm under the proposed provisions already discussed above carries a risk of losing more productive land to SNAs and areas around SNAs. As discussed above, the failure of provision 3.12 to meaningfully provide for existing activities and NPSIB's failure to give effect to

provision 3.7 through the rest of the provisions means that this risk is very real. With this risk comes with the corresponding reduced productivity, reduced income, reduced saleability and land value.

180. B+LNZ and DINZ submit that provision 3.17(5) be amended as follows (amendments underlined, deletions struck through):

> *For rural areas, if the assessment indicates an area has less than 10 per cent indigenous vegetation cover, the regional council must include in its regional policy statement a target (expressed as a percentage figure within a specified time) for increasing indigenous vegetation cover in the area, up to 10 per cent of the area.*

181. To address the disproportionate burden that provisions 3.6, 3.8, 3.9, 3.13, and 3.15 propose to place on pastoral farmers while effectively offering exemptions to a number of other land uses, and in light of the failure of provision 3.12 to genuinely provide for existing uses, and in light of the NPSIB's failure to give substantive effect to objective 6, policy 10, and provision 3.7; we further submit that provision 3.17(6) be amended as follows to help more deliver fair, practical, and meaningful policy (amendments underlined, deletions struck through):

> *For any urban ~~or rural~~ area where the assessment indicates the areas already has 10 per cent or more indigenous vegetation cover, the regional council may include in its regional policy statement targets (expressed as a percentage figure within a specified time) for increasing indigenous vegetation cover in the area.*

CONCLUSION

182. To conclude, B+LNZ and DINZ supports the Government's intent to maintain and enhance indigenous biodiversity.

183. B+LNZ and DINZ, however, have a number of concerns with the proposals and requests further engagement with officials to ensure that the decision that are taken now, which will have long-term impacts on the New Zealand economy and in particular on the red meat sector and the rural communities and economies the sector supports, are made with full understanding of these impacts.

184. Ultimately, we are concerned that the NPSIB will not achieve its goals for indigenous biodiversity, but that it will encourage perverse outcomes and unintended, but serious, social and economic losses for pastoral farmers and New Zealand.

185. Additionally, B+LNZ and DINZ do not believe that the proposed National Policy Statement for Indigenous Biodiversity will be effective at maintaining and enhancing indigenous biodiversity or, importantly, safeguarding the future of indigenous biodiversity for future generations and against the effects of climate change. This is because the SNA approach, locking up land that contains indigenous vegetation, fails to address the cause of species loss in New Zealand, and serves to disengage

landowners from indigenous biodiversity by turning indigenous-pastoral integrated landscapes into a liability.

186. We reiterate our request that the NPSIB be amended as follows:

- Changes to the Criteria for determining Significant Natural Areas (SNA's) so that only habitats which are 'threatened', 'at risk', or 'rare' are identified, and which provide for management responses which can be tailored to the values of the habitat in ensuring their ongoing sustainable management;

- Recognition for the work undertaken by landowners in protecting indigenous biodiversity within their farming businesses;

- Recognition that protection of indigenous habitats can occur hand in hand with pastoral based farming systems and that the most effective and efficient approach to ongoing successful conservation efforts is to enable the integration of biodiversity within these systems;

- Specific recognition for existing farming activities and the protection of these land uses and activities for the future where they currently co-exist with indigenous biodiversity;

- Recognition and empowerment of farm based and catchment based bespoke approaches to conservation;

- Focus on non regulatory methods which work hand in hand with landowner and communities rather than prescriptive rules and prohibitions, exclusion, and land use grandparenting;

- Acknowledgement and support, including financial, for current conservation activities, and for the sustainable management of existing habitats and species, not just where restoration is to be prioritised.

187. B+LNZ and DINZ believe that without these changes there is a significant risk of perverse outcomes and unintended consequences from these proposals.

188. Our organisations are committed to working with government to achieve a policy framework that safeguards the future of indigenous biodiversity in New Zealand. We look forward to helping the Ministry for the Environment and the Department of Conservation achieve this through policy that recognises, rewards, and incentivises biodiversity work on farm. A policy framework that achieves this will empower our farmers to continue to be custodians of their land, with the safety to coexist with indigenous biodiversity to provide an integrated farming landscape that allows both pastoral farmers and indigenous biodiversity to adapt and flourish.

APPENDIX 1:

Beef + Lamb New Zealand Limited Submission on the New Zealand Biodiversity Strategy 2019

TO THE

DEPARTMENT OF CONSERVATION

ON THE

New Zealand Biodiversity Strategy Discussion Document – Te Koiroa o Te Koioroa

BY

Beef + Lamb New Zealand Ltd

SUBMISSION TO THE DEPARTMENT OF CONSERVATION ON TE KOIROA O TE KOIOROA

Submission on the New Zealand Biodiversity Discussion Document

Te Koiroa o Te Koiora

To: NZBS Consultation Team
The Department of Conservation
Wellington

Email: nzbs@doc.govt.nz

Name of submitter: Beef + Lamb New Zealand Limited

Contact person: Lauren Phillips
Environment Policy Manager – South Island
Beef + Lamb New Zealand

Address for service: lauren.phillips@beeflambnz.com

The specific provisions of the proposal that Beef + Lamb NZ Ltd submission relates to and the decisions it seeks from the Department of Conservation are as detailed on the following pages. The outcomes sought and the wording used is as a suggestion only, where a suggestion is proposed it is with the intention of 'or words to that effect'. The outcomes sought may require consequential changes to the Strategy or restructuring of the Strategy, or parts thereof, to give effect to the recommended amendments.

Beef + Lamb New Zealand Ltd wishes to be heard in support of its submission.

INTRODUCTION

1. Beef + Lamb New Zealand (B+LNZ) is an industry-good body funded under the Commodity Levies Act through a levy paid by producers on all cattle and sheep slaughtered in New Zealand. Its vision is 'Profitable farmers, thriving farming communities, valued by all New Zealanders'.

2. B+LNZ supports the general intent and purpose of the proposed New Zealand Biodiversity Strategy in providing a framework by which New Zealand can develop and implement clear and meaningful biodiversity policies that contribute to safeguarding the future of our indigenous species and in meeting our commitments to the international Convention of Biological Diversity ('CBD').

3. As an organisation and as a sector we welcome opportunities to build partnerships with the Department of Conservation, and other crown entities, along with our wider communities, to collaboratively work to protect and strengthen the health and resilience of our communities and our environment.

4. As kaitiaki of their land, sheep and beef farmers are host to 2.8million[1] hectares of native biodiversity, including 1.4million hectares of native forest. This is the second largest holding of native forest and native biodiversity – bettered only by the Crown estate. In some regions, such as the East Coast, there is more native biodiversity on sheep and beef farm land than in the Crown estate. Added to this is an estimated 180,000 hectares of forestry blocks. This means that the sheep and beef sector is particularly invested in indigenous biodiversity; and this is why B+LNZ has, through its Environment Strategy, committed to leading the sector towards its vision of sheep and beef farms providing habitats that support biodiversity and in protecting our native species.

Figure 1: B+LNZ's Environment Strategy Pillars

[1] Norton D., Pannell J., 2018. Desk-top assessment of native vegetation on New Zealand sheep and beef farms.

5. The sheep and beef sector takes an integrated and holistic view to the sustainable management of natural resources. The sector is actively seeking solutions that enable and empower multiple benefits across New Zealand's range of natural assets including biodiversity, aquatic ecosystem health, soils, climate, and healthy vibrant communities.

6. B+LNZ is actively engaged in environmental management, with a particular emphasis on building farmers' capability and capacity to support an ethos of environmental stewardship, as part of a vibrant, resilient, and profitable sector based around thriving communities. Protecting and enhancing New Zealand's natural capital and economic opportunities and the ecosystem services they provide is fundamental to the sustainability of the sector and to New Zealand's wellbeing for current and future generations.

7. There is no doubting that the challenges facing New Zealand are significant, and will require step changes in how New Zealand values and manages the natural resources that support our way of life.

8. Farmers, and sheep and beef farmers have an in-built capacity for change. The shifts in the industry in the 1980s when subsidies were removed and farming businesses were restructured are an extreme example, that saw new farming systems develop to maximise economic opportunities within the constraints of the natural environment. However, the policy changes of the 1980's were not without significant costs to the industry, farming businesses, and the rural communities they supported. These changes, at the less extreme end, saw sheep and beef farmers adapt to climatic, societal, consumer and regulatory requirements, provided there was the flexibility and time to do so.

9. Since 1990 sheep numbers have reduced by over 50%, while the volumes of production are just 8% less. This has been achieved through a range of improvements, termed eco efficiency gains, including improved genetics and breeding, feed management, reproductive rates, and increased individual animal size. Beef cattle numbers likewise have reduced by around 20% since 1990. These reductions in capital stock while improving productivity has resulted in not only improvements in environmental performance such as 21% reduction in nitrate leaching per kg saleable product, but has been accomplished while the sector has increased its exports by 83% to over $9 billion.

10. The sheep and beef sector is essential to maintaining the vibrancy of rural communities and their cultural, societal, and environmental wellbeing, as well as contributing regionally and nationally to the country's economic wellbeing. While reducing its environmental footprint, the New Zealand sheep and beef sector has increased its contribution to New Zealands economic wellbeing. The Sheep and Beef sector's total value of production was $10.4 billion in 2018, with exports worth over $9 billion and domestic sales worth $2.9 billion. The sector has 80,000 employees, 59,000 of those are directly employed and an additional 21,000 are indirectly employed. The sector exports over 90 percent of its production and is New Zealand's second largest goods exporter and New Zealand's largest manufacturing industry.

11. To build resilience across all our well-beings and provide for current and future generations, B+LNZ's view is that environmental policy and implementation

pathways should incentivise behaviour change if and when required including rewarding early adoption, be transformative in design, and enable and empower individuals and communities to build resilience across all their well-beings, including ecosystem services, community and cultural wellbeing, and economic wellbeing. While policy and pathways need to provide for clear and timebound outcomes to enable business and community certainty including investment certainty, they will also need to provide carefully crafted frameworks which enable flexibility and innovation and provide for business and community adaptation.

12. As such it is imperative that domestic biodiversity policy is not created in silo and that instead it provides a transformational policy foundation which will deliver not only on New Zealand's international commitments but will also enable and empower New Zealand's sheep and beef sector to continue to build diverse, resilient, productive landscapes for the benefit of all New Zealand and in maintaining vibrant thriving communities.

13. The principles B+LNZ adhere to are:

    i. Policy should recognise, reward, and incentivise biodiversity work on farm.

    ii. Biodiversity is a valued and inherent part of productive farming systems.

14. B+LNZ welcomes the opportunity to further discuss any of the points above with the Department of Conservation, should you require more information.

15. For any inquiries relating to this feedback please contact Lauren Phillips on 027 279 0117 or lauren.phillips@beeflambnz.com.

Yours faithfully

Lauren Phillips

Environment Policy Manager – South Island

20 September 2019

Part 1: Aotearoa New Zealand Needs a Renewed Strategy for Nature

How well does Part 1 of the discussion document set out the problem and consider the challenges and opportunities facing nature now and in the future.

16. Overall, the discussion document sets out the problem well and considers most of the obvious challenges and opportunities facing the natural environment now and into the future. There are however, nuances which have been overlooked and areas where B+LNZ proposes changes. These are addressed below.

17. B+LNZ proposes that the New Zealand Biodiversity Strategy (NZBS) reconsider some of the key words it has used, as these will impact on other policy tools and the way that they are received and implemented.

18. The document uses the word 'Nature' to describe the living environment 'to a focus on re-establishing ecological processes, strengthening resilience and restoring connections between species, including humans, ecosystems and the environment.' It is intended to convey the wider processes, functions, and connections of the natural environment, including non-indigenous species and systems.

19. B+LNZ supports this holistic and integrated approach to valuing our environment[2] and working across it in a way which recognises: humans as part of the environment; the provisioning of ecosystem services; interconnected nature of ecosystems; and the importance of building resilience. We ask for this to be retained.

20. The Oxford English Dictionary, however, defines 'nature' as: *The phenomena of the physical world collectively, including plants, animals, the landscape, and other features and products of the earth, as opposed to humans or human creations.*

21. Words are important. The word 'nature' has significant plain English connotations and associations which differ between people and cultures. To some it can mean the natural world to the exclusion of human beings and anthropogenically modified environments and non-indigenous species. Modified environments constitute the vast majority of New Zealand's land cover, substantially reducing the NZBS's scope. Moreover, use of the word in other culturally influential parts of the world lends itself to a far less relevant or local interpretation. B+LNZ suggests that another term might be more appropriate and more relevant to use instead of 'nature'. It is noted that the discussion document uses another term on page 9, Te Taiao.

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[2] RMA (1991) Defines the Environment as: **environment** includes—

(a) ecosystems and their constituent parts, including people and communities; and

(b) all natural and physical resources; and

(c) amenity values; and

(d) the social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) or which are affected by those matters

22. Te Aka defines Te Taiao as: *The light of day, world, Earth, nature, enduring world, or the natural world.*

23. As stated on page 9, Te Taiao underpins our identity and wellbeing. Te Koiroa o e Koiora recognises that non-indigenous species and systems have been an important mainstay of New Zealanders prosperity and wellbeing since the country was settled by human beings. In that light, B+LNZ suggests that Te Taiao offers a more inclusive and holistic definition of New Zealand's wider processes, function, and connections of the natural environment, including humans, ecosystems and other species than the word 'nature'.

24. The discussion document is clear that New Zealand's indigenous biodiversity is something very special and unique to this country; it can and does form an important part of New Zealanders' sense of identity. New Zealand's indigenous language is another intrinsically valuable, threatened, unique, and special asset the country should be able to identify with; and offers words that are imbued with meaning beyond what we have available to us in the English language. A number of these terms are used throughout the discussion document and it would be appropriate to carry this through to provide a more accurate and meaningful description of the living environment with a distinctly New Zealand interpretation.

25. Because words are important, Te Koiroa o Te Koiora's use of kaitaikitanga and stewardship have also been noted. B+LNZ supports the discussion document's statement that all New Zealanders have a responsibility to care for natural places, and that activities need to be sustainable and work within environmental limits to protect Te Taiao. This is true irrespective of land ownership, location, or whether one is an individual or a company. The word kaitiakitanga has been applied almost solely to tangata whenua, however; while the word stewardship has been used for everyone else.

26. The difference between kaitiakitanga and stewardship is arguably as great as the difference between governorship and tino rangatiratanga. Kaitiakitanga is a much richer word that denotes deeper responsibility and connection to the resources being managed than stewardship does. Using the two different words for different sectors of society raises several potential issues:

    i. It creates a greater obligation of care for one sector of society than for everybody else. The NZBS essentially hopes to see a paradigm or culture shift in New Zealand where indigenous biodiversity is something that all New Zealanders value and secure for future generations by working together as communities. On the one hand, setting different standards of care across communities can work against this goal by creating different expectations of what that culture shift looks like and who is responsible for making it.

    ii. On the other hand, equity is important to ensure that communities can work together to meet their responsibilities, where all the members of that community understand that they share the same obligation to contribute to Te Taiao. This would strengthen communities and bring diverse aspects of those communities together, especially in rural and remote areas.

    iii. Farmers work with their land every single day, their livelihoods depend on it. The land and the way they manage it often form part of their own culture, their identity, their place in their community, their family history and the

legacy they see themselves leaving to their children. Most farmers would consider themselves kaitiaki of their land. Assigning a lesser label of 'steward' fails to recognise the deep connection that many farmers have to the resources they manage and the natural environment they live in, as well as the work they do to contribute to Te Taiao which is not necessarily for commercial gain. Devaluing the relationship that farmers have with Te Taiao disincentivises developing that relationship and their contribution to improving intrinsically valuable elements within it, for example indigenous biodiversity.

27. The way that resources are managed in productive systems can play a positive role in creating environments that support or benefit indigenous species, for example grazed pasture as habitat for indigenous herpetofauna with reduced predation by rodents, or poplars planted for shelter and erosion control providing roosting sites for native bats. Te Koiroa o Te Koioroa recognises the benefits that non-indigenous species offer and recognises that New Zealand's ecosystems can't return to the state they were 800 years ago. B+LNZ supports this and the discussion document's understanding that a balance needs to be reached which accepts the place of non-indigenous species, and human modified habitats, in providing for multiple well-beings across New Zealand, including in supporting and building ecosystem services.

28. B+LNZ also acknowledges that land use has been and continues to be a key pressure on indigenous biodiversity.

29. European settlement in New Zealand brought with it a focus on taming the land, and government at every level helped to institutionalise and incentivise this as native habitats were cleared to make way for pastoral farming and urban development, and species were introduced to provide food and fibre and also for amenity values. Indigenous flora and fauna were considered of lesser value, and were subsequently controlled in order to make the best use of resources, as best use was defined at the time. This direction from the top, resulted in the devaluing of indigenous species and their decline across New Zealand's landscapes. Bounties were offered for kea beaks and eels, and farmers who didn't drain and graze wetlands were considered inefficient by others in the community.

30. This was not and is not unique to rural and farming communities. Indigenous biodiversity is not prioritised or integrated into most urban spaces, in part because it wasn't/isn't valued or considered aesthetic. Indigenous flora tends to be cryptic, and often requires more nurturing to help get it going than exotic species. Green lawns are preferred in back gardens because they are more lifestyle-friendly than tussock grass; and flowering cherries are more popular in public spaces than slow growing kahikatea.

31. Perspectives changed to valuing New Zealand's indigenous biodiversity in the last century, and as page 16 of Te Koiroa o Te Koiora recognises, focus shifted to addressing threats to New Zealand's indigenous flora and fauna rather than addressing the drivers of those threats.

32. Direction from the top over the last decade in particular has changed from a mandate to control and eliminate, to recognising and protecting indigenous habitats through Protected Natural Areas and Significant Natural Areas. This approach can have the effect of alienating and essentially penalising rural land owners who have retained and protected indigenous habitats and species

within their productive landscapes, and in installing views that indigenous habitats and productive landscapes are mutually exclusive. Farmers who had retained and protected /or enhanced indigenous habitats are penalised through loss of autonomy, fundamental property rights, and a loss in land value. This approach has endorsed the view that indigenous biodiversity is, and has to be kept, apart from productive landscapes and systems, even where it had been an inherent part of the productive system.

33. Perceived appropriation of private land for public good can devalue indigenous biodiversity by making it the object unfairness and inequity in relation to productive opportunity. This approach has discouraged other landowners who might have considered encouraging indigenous biodiversity on their property, due to a loss of property rights and increase regulatory burden.

34. These issues in relation to the recognition and potential policy approaches for protecting indigenous biodiversity, in both rural and urban communities, is a challenge which the discussion document has failed to adequately address. The sheep and beef sector is part of the solution to this challenge in rural areas and the NZBS could make strides towards achieving the culture shift it hopes to instil by recognising the social and institutional factors required to recognise, value, and protect New Zealand's indigenous biodiversity.

35. The success of the NZBS in rural areas relies on dismantling the institutionalised separation of indigenous flora and fauna from productive landscapes, to allow farmers the space socially and economically, to re-evaluate their relationship to and with it. To incentivise and support farmers and communities to value, recognise, and enhance indigenous biodiversity as part of healthy and resilient landscapes, which improve the health and wellbeing of people and their communities. The NZBS needs to establish a framework for farmers to review their place in Te Taiao.

36. The NZBS should encourage the inclusion and use of biodiversity as a valued and inherent part of productive farming systems. Its framework must also provide farmers with the safety to include and use biodiversity as part of their systems without threat of personal loss.

37. Doing so would offer part of the solution to another of the key pressures on indigenous biodiversity which is climate change.

38. As Te Koiroa o Te Koiora explains on page 15, we do not know how our indigenous species will respond to changes caused by climate change. Species with small populations, which do not enjoy a wide distribution, or which rely on habitat and food sources that are themselves at risk, are particularly vulnerable.

39. Providing farmers with the ability to manage their productive systems in a way that includes and integrates indigenous vegetation will help to make indigenous species more resilient to climate change. Increased indigenous vegetation – and therefore fauna – across New Zealand's landscapes will provide a bigger gene pool and one that has already adapted to persist in challenging environments, for example where they co-exist with non-indigenous browsers. It would provide automatic corridors, linkages across the islands from mountains to the seas, for species to travel along and increase their distribution. It would also provide shelter and food for indigenous species where

exclusively indigenous areas suffer losses and are no longer able to support other species in the same capacity, for example through fire or diseases.

40. Te Koiroa o Te Koiora identifies two main drivers of biodiversity loss. B+LNZ does not consider the discussion document has adequately identified the drivers of loss, as mentioned above. B+LNZ nevertheless supports Te Koiroa o Te Koiora's focus on the drivers of loss, and the recognition that these need to be addressed in order to understand the threats to loss.

41. In terms of the two drivers that have been identified, the legal and regulatory frameworks as drivers of loss have already been alluded to in the paragraphs above.

42. B+LNZ would like to comment on the other driver which Te Koiroa o Te Koiora identifies, which was that our decision making and economic systems often fail to account for the value of nature. The discussion document states that:

    i. our decision making frameworks are not sophisticated enough to value biodiversity, the services it provides, or the impacts of its loss; and

    ii. the market fails when individuals are able to benefit at the expense of the natural environment and therefore society in general; and

    iii. individual decision making fails to account for or foresee the cumulative impacts of those decisions; and

    iv. that New Zealand offers few incentives for landowners to conserve biodiversity.

43. B+LNZ supports these statements and wishes to reiterate that New Zealand also offers significant disincentives for individual landowners to conserve biodiversity.

44. Economic decision making in New Zealand post European settlement has been encouraged as an individualistic endeavour rather than a collectivist one, and this is representative of European and western culture generally. Changing this mentality will require a framework that actively encourages and empowers collective action for biodiversity gains. Communities need to be empowered and supported to act across social sectors; and that action needs to be recognised and rewarded. Acting in a collective setting, for farmers, allows participants to achieve greater net gains for biodiversity and helps decision makers to understand how their decisions and actions both achieve wider gains or have cumulative impacts.

45. B+LNZ would like to emphasise that decision making, whether on an individual or community level, is not helped by tensions between policies and the confusion that this creates over priorities. Policies need to provide clear and consistent messaging to ensure that both urban and rural land users understand what their priorities are. It is important that policies work together and do not compete. For example, a farmer who may have considered allowing a hillside to regenerate into native bush might be better off putting that hillside into pine plantation in order to offset carbon emissions because pine trees are currently considered to capture carbon more quickly than indigenous vegetation and as such is incentivised over indigenous habitats through tools such as Emission Trading Scheme and planting subsidies. As such indigenous

biodiversity loses out because climate change policy and biodiversity policy have not been designed to work together.

46. B+LNZ supports the proposed scope of the new biodiversity strategy as one for all New Zealanders to own and implement, and to cover all ecological domains and type of tenure – land, freshwater, estuaries, wetlands, and the marine environment.

47. B+LNZ also supports the NZBS system in its aim to act as an over-arching canopy to provide direction and coordination to the instruments that follow it. B+LNZ suggests a small but important change to the figure on page 22, however. The second pillar Figure 5 lists landowners, conservation volunteers, restoration groups, ecosanctuaries, and recreational users as the range of private people (who are not Treaty partners) involved in the biodiversity system envisioned by the NZBS. That list is incomplete.

48. As Te Koiroa o Te Koiora repeatedly states, indigenous biodiversity is for everyone and it is everyone's responsibility. The list in Figure 5 needs to account for individuals who use land but do not own it, and individuals whose lives and lifestyles can have a positive or negative effect in indigenous biodiversity. This will allow urban people who are not necessarily part of a volunteer group to find their place in Te Taiao and understand how they can contribute to New Zealand's indigenous biodiversity. Leaving them off the list does not allow a large swathe of society to see their own obligation or capacity to drive change, whether that is desexing their pets to reduce feral predator pressures or choosing native plants for their gardens to provide a food source for urban indigenous fauna.

Part 2: Proposals for a Strategy

Part 2.1: The Proposed Strategy Framework

Question 2: what do you think of the proposed strategy framework? Does it provide a useful way of linking the elements of the strategy together?

49. B+LNZ supports the proposed strategy framework in principle, but proposes several changes in the table below to help the framework achieve the outcomes that the NZBS seeks.

50. Generally, B+LNZ would like to reiterate feedback given at the consultation workshop on the discussion document held in Christchurch 30 August 2019. This document will apply to all New Zealanders and so needs to be written in plain language that makes obligations created and implications of what the document says clear. While the current language is inspiring, it does not necessarily make those obligations and implications clear. For example, landowners need to understand what where the strategy says '*All New Zealanders can connect with nature and recognise its value in supporting intergenerational wellbeing*', it needs to be made clear that this is more than an aspirational sentiment. It signals that the strategy wants to ensure there is enough indigenous biodiversity across New Zealand that everyone will have access with it (*connect with nature*) and that the strategy will require

intergenerational justice (*intergenerational wellbeing*) in policies and decisions which affect indigenous biodiversity going forward (*recognise its value*).

Table 1: Feedback on the Proposed Strategy Framework

Item	Position	Discussion
Action – Assess – Action template for all three pillars	Support	Retain this structure
Whakahau – Empower		
Connect and value	Support in part	The language needs to be clearer as per paragraph 50 above. Replace 'nature' with Te Taiao and amend the wording to be more clear on the outcomes sought.
Tangata Whenua	Support in part	B+LNZ acknowledges the discussion document's need to recognise the special role of tangata whenua with regards to Te Taiao. However, all New Zealanders need to be able to consider themselves as kaitiaki, and empowered to act as kaitiaki over the resources within their influence in order to give effect to the intent of the NZBS. The wording should provide for that. An additional provision should be included in this pillar which reflects this, as the rest of the framework does not.
Tiaki – Protect + Restore		
Ecosystems	Support	
Species	Support in part	Please amend the wording as follows:

		Aotearoa New Zealand's indigenous species and their habitats are ~~secured and~~ thriving, and their future is secure
Threats	Support	
Wananga – Systems + Behaviour		
Economic Activity	Oppose in part	Please amend the wording as follows *Aotearoa New Zealand's economic activity provides for the ~~restoration~~ integration, management, and ~~protection~~ enhancement of indigenous biodiversity*
Non-Indigenous Species	Support	
Global	Support	

Part 2.2: Vision

Question 3: What do you think of the proposed vision for Aotearoa New Zealand and its timeframe

51. B+LNZ proposes that Te Taiao is used instead of 'Nature' for the reasons given in paragraphs 20-24 above. If only indigenous biodiversity and its systems are considered for this vision then the vision needs to be clear about that and simply call it 'Indigenous biodiversity.' B+LNZ otherwise supports the first part of the vision, which is that by 2070 '[Te Taiao/ Indigenous biodiversity] in Aotearoa is healthy, abundant, and thriving.'

52. The second part, 'Current and future generations connect with nature, restore it and are restored by it.' The drafting of this part of the vision doesn't offer a meaningful addition to the first part, and B+LNZ suggests rewording it. It is also unclear in parts with several interpretations possible for the same word. For example, restoring indigenous biodiversity suggests rehabilitation. This is serious obligation and does not align with Te Koiroa o Te Koiora's acknowledgement that we can't return the environment to the state in which we found it 800 years ago.

Part 2.3: Values and principles

Question 4: What do you think about the proposed values and principles? Is there anything you would add or change? Which of the values and principles do you think are most important?

53. B+LNZ supports the proposed values with the following reservations and qualifications:

    i. We do not consider stewardship and kaitiakitanga to be interchangeable words of equal value, and the values of the NZBS should not use them as such.

    ii. As stated above, words matter. B+LNZ would like reassurance that the Department of Conservation sought guidance from appropriate Te Reo experts to ensure that the Maori words used in the values have been accurately translated for the purposes of the NZBS.

54. B+LNZ supports the principles listed in Te Koiroa o Te Koiora and propose an additional principle: Recognition.

55. Policy should recognise and reward biodiversity work, particularly on farm where costs are largely carried by individuals for no commercial gain. This is important for shifting peoples' perceptions around the value of biodiversity on their land and the value of their efforts for the wider community. Current policy and tools do not offer this recognition.

Part 2.4: Long-term outcomes

Question 5: What do you think about the proposed long-term outcomes? Is there anything you would add or change?

56. Feedback has already been provided on the long-term items in Table 1 above, and only minor additions are provided in this section.

57. With regards to Whakahou, B+LNZ reiterates the points made in paragraphs 25 and 26 about kaitiakitanga.

58. With regards to Tiaki, B+LNZ reiterates the points made in paragraphs 29-38 above.

59. With regards to Wananga, B+LNZ reiterates the points made in paragraphs 44 and 45 above.

Part 2.5: Goals – tracking our progress

Question 6: What do you think of the proposed set of goals? What are the most important things to track to measure our progress? What else should be included?

60. B+LNZ supports the short term goals with the following qualifications and suggested additions:

i. Where pest control and eradication is envisioned on private land, support must be given to private land owners to achieve this.

ii. By 2025, communities are empowered and supported to achieve biodiversity outcomes in their catchments.

iii. By 2025, farmers' biodiversity work on farm and within their communities is recognised and rewarded for providing a service on their private land for the good of wider New Zealand.

iv. By 2025 all New Zealanders are responsible for indigenous biodiversity.

Part 2.6: Implementation

61. B+LNZ supports the proposed plan for implementation planning provided that substantive consultation is held with potentially affected stakeholders, particularly when developing the five-yearly implementation plans themselves.

62. B+LNZ supports the proposal for progress reporting and review provided that it is conducted in good faith, with transparency and no surprises for potentially affected stakeholders.

Part 2.7: Five system shifts to support change

Question 9: What do you think about the five system shifts? Are they the right areas to focus on in the near term are there other areas that should be included?

63. B+LNZ supports System Shift One in principle.

64. B+LNZ supports System Shift Two in principle.

65. B+LNZ supports System Shift Three in part and in principle, and requests that the system shift is amended to:

    i. reflect the feedback provided at paragraphs 18-27, 35, 43, 44, 45, 47, 48, 54, and 55 above.

    ii. provide more than mere assessment and review of funding and support to communities. To empower communities to take action, more funding and support needs to be given.

66. B+LNZ supports System Shift Four.

67. B+LNZ supports System Shift Five in principle, and would like to see that any data commons is easily available to individuals in a user friendly format and at no cost.

Part 3: International Context

68. A global vision and targets for biodiversity should allow for local variation, diversity, priorities and cultural norms. B+LNZ does not support blanket approaches to resource management. The vision and targets should also allow for flexibility so that the people working to achieve them are able to adapt to changing conditions in the environment, technological and knowledge advancements, and to work within financial and resource constraints particular to the locality in question.

69. Our commitment to any global instrument should reflect what we have committed to at a domestic level in order for that to

    i. Be attainable; and

    ii. Reflect the values and priorities of the New Zealand people; and

    iii. Ensure that what we commit to reflects what we are capable of achieving.

APPENDIX 2:

Action Bio-Community - In search of the right mix – Investigation of tools for Biodiversity Management

Action Bio-Community

In Search Of The Right Mix

An investigation of tools for biodiversity management

Kessels
& Associates Ltd
ecology & environmental planning
Te Pahu Road
R.D.5
Hamilton

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Version: final 1.1 18 May 2004

Prepared by: Gerry Kessels with contributions from Jan Hoverd[1] & Karen Denyer[2],

Reviewed by: Alison Newell[3] & Peter Horsley[4]

Approved by: Sarah Wilson & Glen Lauder - Action Bio-Community Co-ordinators

Acknowledgments: Terry Parminter[5], Allan Turner[6], Peter Russell[7], Maggie Bayfield[8] & John Crawford[9],

This report is dedicated to Michael Hope –Raglan farmer and long-serving Waikato District Councillor who passed away earlier this year

[1] Member, Kakepuku Mountain Restoration Project
[2] Senior Ecologist, Environment Waikato
[3] Senior Policy Planner/Ecologist, Far North District Council
[4] Senior Lecturer, School of Resource & Environmental Planning, Massey University
[5] Social Scientist, AgResearch
[6] Environmental Planner, Waikato District Council
[7] RPMS Programme Manager, Environment Waikato
[8] Special Projects Co-ordinator, QEII National Trust
[9] Member, Waimate North Landcare Trust

EXCUTIVE SUMMARY

The primary objective of the report is to provide a summary of the key instruments available to communities to achieve biodiversity conservation on private and adjoining public land and summarise several case studies on how councils, non-government agencies and communities are achieving biodiversity protection and management on the ground, with a particular focus on examples from the Waikato Region.

The Ministerial Advisory Committee on Biodiversity and Private Land in their final report[10] state:

"It is most unlikely that public funds will be available to assist at every site or every landholder. Similarly, it is unreasonable to expect landowners to assume full responsibility. We have characterised this dilemma as the "gap of frustration". The gap is the difference between what the landowner and public authorities can collectively contribute and what the goal demands. There are only three ways to close this gap: increase landholder contribution, increase public contribution, or lower the goal."

Working directly with landowners or community groups on a one to one basis increase both landowner/group **AND** public contribution at the same time - we don't need to lower any goals using this approach. One-to-one approaches work, but they are expensive, time consuming and resource hungry, so this tool needs to be used in conjunction with other tools. It is most useful for targeting the most important sites or biodiversity management issues.

What does seem to be crucial is that the landowner/community group, agency staff and NGO's must be given the ability and opportunity to **'mix and match'** for each unique situation.

Local and regional communities must determine the approach which works best for them, because at the end of the day successful, long-term biodiversity management will only work when the people on the ground believe in what they are doing and trust those whom they are working with. They also need to be well supported and resourced by central, regional and territorial agencies.

The most successful biodiversity gains appear to occur when landowners and community groups are given the space to find their own path to achieve their biodiversity objectives for their land/project with initial and ongoing financial and technical support from relevant agencies. For their part, agencies must ensure that landowners and community groups are well informed and well resourced (in terms of initial and ongoing financial and technical assistance).

[10] Ministerial Advisory Committee, 2000. Biodiversity and Private Land. Ministry for the Environment, Wellington.

1 Introduction

1.1 Report Objectives

Action Bio-Community (ABC) is a *Local Government New Zealand* initiative that is working amongst New Zealand councils and communities to build capacity for biodiversity management. It is funded by the Sustainable Management Fund.

As part of the lead-up to the 'Biodiversity Summit 2004' this report is a 'work in progress', which will be finalised after additional information has been gathered from the summit. Once complete, it will be published on the ABC website. The objectives of the report are to:

- Provide a summary of the key instruments available to communities to achieve biodiversity conservation on private and adjoining public land.
- Summarise several case studies on how councils, non-government agencies and communities are achieving biodiversity protection and management on the ground, with a focus on the Waikato Region.
- Investigate how the mix of instruments works together, as well as their individual strengths and weaknesses.
- Provide options for improving the "toolbox".

This report is not a platform for the 'non-regulatory/voluntary versus regulatory' debate nor does it provide an analysis of council obligations under the Resource Management Act or Local Government Act or suggest what the 'best' or most 'effective and efficient'' approach is to meet their obligations. What it does provide is example of different approaches which the author has experienced, mainly within the Waikato, but also further afield, along with some anecdotal commentary on how well the author perceives these approaches are to be working in practice.

1.2 The Players and Tools Involved

Traditionally, the main players involved in initiation of biodiversity management projects have been central or local government and nationally based non-government organisations. In recent years tangata whenua, business, local communities and individuals have become leading players in many initiatives throughout the country. The players involved these days can include:

- Central government agencies (e.g. Department of Conservation – DOC, Ministry for the Environment – MFE);
- Regional councils;
- Local territorial authorities (LTA's - district or city council);
- Local community (e.g. private individual, community group such as a Landcare Group or hapu);
- Non government organisations (NGO's e.g. Landcare Trust, Forest & Bird, Federated Farmers);
- Iwi authorities;

  or

- A combination of some or all of the above.

Some of the key tools which these players can use are summarised by Table 1. The top box shows that the Resource Management Act (RMA) has specific references to biodiversity and can been viewed as the principal 'driving' Act at a national level. The Local Government Act (LGA) and the Biosecurity Act, while not necessarily implicitly providing for biodiversity conservation, provide additional legal and plan based tools which can be used to help facilitate biodiversity management. Combined, these Acts provide the legal mandate and basis for developing biodiversity management tools.

A regulating agency can apply rules through the provisions of the RMA to control activities which may affect areas that have biodiversity value and this is shown in the far left box of the diagram. In order to address issues such as what is a "Significant Natural Area" (SNA), significance assessment criteria are usually developed in association with a rule. Mapping of sites using existing DOC information complimented with additional surveys is also a common approach. 'Ecological triggers' are prescriptive criteria which may triggered by potential adverse effects of an activity. An example is, the maximum area of a natural feature area which can be cleared (e.g. 1ha) before an activity becomes discretionary under a district plan. Note, however, that SNA and ecological trigger criteria can also be used for other methods and are particularly important when applying conservation lot subdivision incentives or for allocating contestable funds for projects.

Other methods which can be applied have been grouped into "Incentives" and "Advocacy" categories. Incentives can be further divided into financial and technical incentives. Financial incentives can be direct financial 'subsidies' which can be provided to projects, such as a contribution towards fencing off a natural area from stock or for pest control. Indirect financial incentives may involve some type of monetary or entrepreneurial gain as a 'reward' for protection/management (e.g. allowing for additional titles as part of a subdivision consent as a trade-off for protection of a natural area). Technical incentives can include providing technical staff or specialists to assist with a project, such as a pest control operator or to help facilitate meetings and prepare management plans.

The Advocacy category contains tools which educate, promote, inform or disseminate information on biodiversity management, either to individuals, community groups, sectors within a community (e.g. dairy farmers) or the public in general. There are a huge array of ways in which advocacy can be achieved, such as newsletters, public workshops on particular aspects of management or fostering networking, such as regional 'Bio-Forums'.

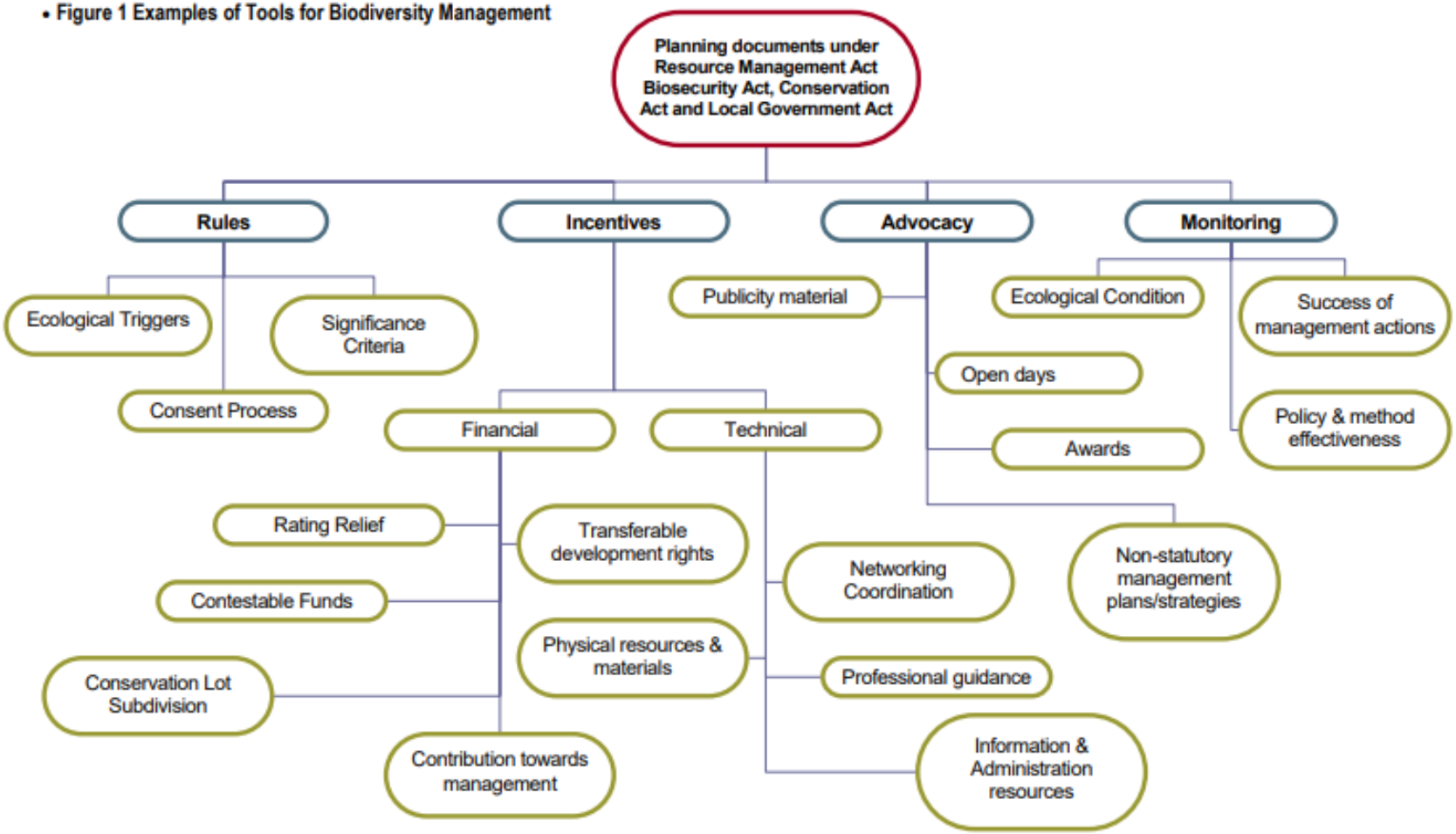
The farthermost right box in the diagram indicates that monitoring is a category in its own right. However, monitoring is a tool which ideally could be used as part of any of the other categories shown.

The case studies outlined in Section 2 provide a small cross-section of examples of how these tools can be applied in practice. Most of these case studies also highlight that in practice, a variety of tools are often used, that not all projects are agency initiated and that biodiversity projects, more often than not, involve input from several players along the way.

Although it is now dated in the data provided, a detailed and comprehensive review of different tools which councils can use by local authorities is given in the NZ Planning Institute/DOC funded report: "*Implementing the Biodiversity Protection Provisions in the Resource Management Act*" [11]. Review of this report also shows that since 1997 the use of alternatives to rules by councils (particularly TLA's), such as financial assistance and educational related tools, has greatly increased.

[11] Froude, V. 1997. Implementing the Biodiversity Protection Provisions in the Resource Management Act. Pacific Ecologic Resource Management Associate, Wellington

• **Figure 1 Examples of Tools for Biodiversity Management**



2 Examples of Community Initiatives within the Waikato Region

2.1 Key Ecological Sites – Environment Waikato

The Biosecurity Group of Environment Waikato (EW) implements plant and animal pest management under the Regional Pest Management Strategy (RPMS). In addition to the traditional approach of pest control to protect primary production, the RPMS places emphasis on managing high priority animal pests (possums, goats, ferrets, and stoats) for environmental protection purposes and to improve biodiversity on privately owned land.

In 1999 a 'direct control' activity was established called the "Key Ecological Sites" (for Pest Control) Programme (KES). The objectives of the programme are to:

1. Identify key ecologically significant areas in private ownership in the Waikato Region and rank each site for priority for animal and/or plant pest control; and

2. Undertake (with landowner support) initial pest control and reduce pests to a level where landowners can undertake all ongoing maintenance.

Where land owners and communities are willing, EW can assist through a variety of means. These include:

- where appropriate, provide a 33% financial contribution to fencing[12] to exclude stock;
- funding initial pest control operations (for animals and plants) to reduce pests to low levels that are more easily managed;
- provide materials at wholesale cost for the ongoing maintenance of pest control by landowners;
- monitoring the impact of pest control and changes in biodiversity;
- help organise & contribute to workshops, seminars and training courses for community members;
- provide landowners with technical pest control advice for their properties;
- provide access to information and services such as maps, scientific information and alternative funding contacts;
- liaison staff for ongoing project support, and
- remission of the Biosecurity Rate, from 1 July 2003, for indigenous bush areas which are fully fenced to exclude stock, on application to Council.

The KES project takes a site-led, rather than a species-led, approach to pest management. This allows Environment Waikato to take a more holistic and integrated approach to pest control based on the particular threats to a site. So far two KES programmes are underway – one in the Waikato/Franklin Districts[13] and another for the Coromandel Ecological Region[14]. The programme entails an initial survey to ascertain

[12] A budget of typically $50,000 per annum is set aside for this aspect of the KES project.

[13] Wildland Consultants Ltd and EPRO Ltd 1999: Key ecological sites for pest control in private tenure in Waikato Region - Waikato District and part Franklin District. Environment Waikato Contract Report No. 236. Environment Waikato, Hamilton

[14] Stanway, E. A., Kessels, GHA; Christie, K. 1999: Key Ecological Sites in the Coromandel Ecological Region. EcoFx & Kessels Associates for Biosecurity Unit, Environment Waikato, Hamilton.

where these significant sites are. This assessment is based on existing data (usually Department of Conservation Protected Natural Area Programme [PNAP] reports where available) and on site visits and discussions with affected landowners. Site selection was partially based on the responsiveness of landowners to a pest control programme on their property. The method of any possible pest control operation was discussed onsite with the landowner. Tangata whenua and key community stakeholders have also been consulted to obtain information on local community conservation initiatives and to discuss a broad range of methods which are acceptable to them for pest control.

While the KES project is voluntary, EW has formalised arrangements when individual pest control/fencing programmes are finalised with landowners. Written agreements (similar to a memorandum of understanding) outlining the responsibilities of both EW and landowners in the future maintenance of the sites.

The Regional Pest Management Strategy places the majority of pest control responsibilities on landowners to remove a range of pests from their properties. Enforcement procedures can also be initiated in respect of individual pests (e.g. woolly nightshade and wild ginger), which, in theory, allows EW to require that a landowner removes pests. However, EW staff appear to prefer to "*work alongside and in partnership with interested landowners and community groups, thus in most instances the use of enforcement procedures would be a disadvantage to establishing these partnerships*"[15].

Progress to Date

However, several issues have arisen, particularly on the Coromandel Peninsula, concerning this project. These include:

- a perception that Environment Waikato was going to 'confiscate' land or exercise control over it. This perception was not helped by the fact that various consultants and environmental groups actually using the KES reports as surrogate PNAP reports for resource consent purposes.
- that landowners would be forced to spend large amounts of money on fencing and pest control;
- that lands would become ungrazable and therefore unproductive, and
- that it was a demeaning policy for landowners who were doing good control work themselves.

However, several pest control groups have now formed as a result of the KES programme and are working with EW staff in Franklin, Western Waikato and Coromandel to control animal and plant pests in KES sites. The formation of local groups is particularly valuable in that many of the KES sites are contiguous with other natural areas. Pest control is therefore implemented on all of the connected sites, ensuring re-infestation is considerably reduced, as well as resulting in reduced operational costs. It also provides opportunities for co-ordination of effort between different groups which will likely aid in the long-term maintenance of each KES or biodiversity project as well as fostering valuable community networks.

One of the features of the KES programme is the recognition that animal pest control must go in with keeping stock fenced out of bush and wetland areas. Thus, there is an offer of 33% contribution towards fencing costs. Staff also suggest to the owner that if they are interested in additional financial assistance, they can proceed with a QEII

[15] Group Manager, Biosecurity, 19/11/2002. report to Biosecurity Committee, Key Ecological Sites Programme – Update Report . internal memo, EW, Hamilton.

covenant, and thus obtain an additional 33% contribution towards fencing by QEII. In effect a 66% subsidy of fencing costs is offered. This offer has resulted in several KES areas being formally protected by covenants.

2.2 Clean Streams & Project Water-Shed – Environment Waikato

Clean Streams is an Environment Waikato project to encourage and support farmer efforts to reduce the impacts of farming on waterways. The project runs for 10 years and commits up to $10 million from the earnings on the EW investment fund to provide advice and financial support of up to 35 percent for farmers who want to exclude stock from water margins.

Project Watershed, another EW programme, has a more targeted soil conservation and river control focus. Proposals which have received funding from this scheme include landowners (both rural and urban) who have property receiving flood protection, needing drainage or requiring protection from soil erosion and its effects. EW state that prime benefits of the works and services being proposed are increased land productivity and reduced flood damage.

Progress to Date

The interesting indirect outcome of these two schemes is that significant biodiversity conservation gains are also occurring. Apart from the aquatic biodiversity improvements, large areas of wetland and bush fragments adjacent or within Clean Stream or Project Watershed projects are being fenced from stock, are receiving goat and possum control and in some cases being formally protected by QEII covenants.

There is a similar joint initiative for funding contribution with QEII to the KES programme mentioned above. A landowner can accrue a 66% plus subsidy on total fencing costs. The uptake has been good for the first year and interest appears to be increasing.

2.3 Priority Wetlands on Dairy Farms – Environment Waikato

The Waikato Region is a national stronghold for wetlands, and many are located on private (non-reserve) land. Threats to wetlands include introduced plants and animals, pollution, stock grazing, fire and drainage. There is a need to identify regionally significant wetlands and their management needs to assist landowners in actively protecting their biodiversity values.

The Fonterra Clean Streams Accord initiative to fence regionally significant wetlands presented an opportunity for Environment Waikato to assist landowners to fulfil the Accord and physically protect wetlands on or adjacent to dairy farms.

Environment Waikato has developed policies to increase the quantity and quality of wetlands. Methods to achieve this objective include: "*Identify, in consultation with territorial authorities, DOC and other interested parties (including regional communities), wetlands of regional significance and through regional and district plans, develop measures which ensure their protection.*"

A non-statutory set of guidelines to identify wetlands of regional significance has been developed. Regionally significant wetlands are defined as those that are relatively large wetlands, or that contain species that are threatened or endemic to the Waikato Region (e.g. black mudfish, giant cane rush). Wetlands that are of international or national significance area also considered to meet the criteria for regionally significant wetlands.

As part of this non-regulatory approach, the regional council has instigated a project to assist dairy farmers in the region who have wetlands on their property –"*Priority wetlands on dairy land: assessment of significance and specific management needs.*"

Freshwater palustrine wetlands that are on or adjacent to dairy farms have been identified, and their status as an existing wetland verified from 2000-2002 air photographs. Around 100 individual wetlands were identified on or adjacent to a dairy farm. Recent colour aerial photographs were used to verify that those wetlands are still present[16].

EW also funds a Waikato Biodiversity Advisory Service operator (a dairy farmer) who has phoned landowners of the 15 highest priority wetlands on dairy farms. This method was selected to make the process less formal for the landowners, and provide an independent point of contact.

For each wetland, the landowner is offered the full cost of services of an independent consultant for up to three days. The consultant visits at a time convenient to the landowner to:

- Discuss their objectives/goals for the wetland.
- Traverse the site looking at special features, threats and management needs.
- Help the landowner complete a management plan (using a template produced by Environment Waikato).
- Help the landowner apply for funding to complete the actions in their plan.

The landowner is asked that in return Environment Waikato be given a copy of their management plan and the opportunity to follow up with their progress. Landowners are told that implementation of their management plan is optional, but that Environment Waikato will provide ongoing support where appropriate, including further advice and site visits.

Progress to Date

Landowners of nine wetlands readily accepted the offer. Two have said no. Others are still considering it (particularly in situations of trust land in multiple ownership).

The independent contractor has visited 6 wetlands and found the landowners to be very appreciative of the support. Each of the landowners are working through detailed management plans in order to address management issues of their wetland such as willow invasion, water control and animal pest control.

2.4 Conservation Lot Subdivision Incentives

2.4.1 Franklin District Council

Under the operational Franklin District Plan, a property owner in the Rural Zone can create an additional one or two titles if they formally protect a natural area which meets the significance criteria outlined in the plan. This approach is commonly used by a number of district councils throughout New Zealand. A feature of the Franklin situation is the huge uptake of this plan method by landowners. There are now over 350 Franklin administered Reserves Act covenants in Franklin, protecting over 1,000ha of land.

A Proposed Rural Plan Change was notified last year, in which there are significant amendments to the existing Environmental Lot method. The ecological significance

[16] The exercise also revealed that 14 of wetlands in dairy country have been totally drained and 28 partly drained since 1992.

criteria have been changed to make the assessment criteria more scientifically robust. The proposed change also provides for restoration projects to be eligible for the Environmental Lot provisions subject to a number of performance criteria. In this regard, the Auckland Regional Policy Statement is helpful as it gives particular regard to the restoration of degraded ecosystems. These criteria require a management plan which lists the planting schedule, weed control and animal pest control programme and a detailed works schedule with monitoring at key dates.

Progress to Date

Council has required reports to be prepared by qualified ecologists assessing the natural feature on the Environment Lot(s). These reports have usually been of a high standard and have provided useful information for the landowner (and Council) regarding the existing values of the natural area and pest management requirements.

However, in the past Council has not monitored the covenants on a regular basis and thus are unable to assess the ecological state of the covenants. This year, Council monitoring staff have been trained in basic ecological health assessment skills and have instigated a monitoring programme of existing covenants.

2.4.2 Waikato District Council

Waikato have a similar approach to other councils in how it has achieved formal protection of natural features within the district. Under the operational Waikato District Plan there are provisions for conservation lot subdivision, whereby the greater the are protected the more lots that can be created (e.g. 20 ha protected can results in 4 additional lots). To date 115 separate covenant areas agreements spread between 65 bush and wetland fragments (total area 347ha) have been formally protected by Reserve Act covenants. Interestingly, not all of these covenants were as a result of subdivision - many were covenanted voluntarily. The majority of these conservation covenants protect areas of significant ecological and landscape value, which are important additions to the protected natural area network within the Waikato District.

The Council has achieved this protection by simply asking the landowner or developer if they would like to protect their natural area as part of the subdivision process.

Progress to Date

The council has engaged an ecologist to monitor these covenants. Table 1 shows the level of compliance with the covenants agreement conditions compared to QEII covenant compliance.

- **Table 1 Level of Compliance of Waikato District Council covenants as compared to QEII covenants (as percentages)**

Compliance Ranking	Percentage of Compliance of Waikato District Council Conservation Covenants (2001-2002)	Percentage of Compliance of QEII Open Space Covenants (2001/2002 & 2002/2003- nationally)
Poor	10.7%	2.25% - 2.6%
Fair	53.8%	16% - 15.3%
Good/Excellent	35.4%	81.75% - 82.1%

At the conclusion of the monitoring programme a report was prepared with the following conclusions[17]:

- Appoint one key staff member within Council to be responsible for ongoing covenant management and monitoring, and ongoing liaison with tangata whenua, relevant agencies and community groups
- Provide covenantors with an annual newsletter specifically focused on covenants and "success" stories, as well as providing useful management tips and contacts.
- Visit and monitor every covenant at least once every two years and store information on a database.
- Set up a resource "library" in which Council could stock possum traps etc to loan out to covenantors, as well as useful books and guidelines.
- Investigate setting up an ongoing, dedicated, fund to provide for contributions for initial and ongoing management efforts.
- Target active management assistance to covenants suffering the greatest ecological threat at present (e.g. stock access).
- Assist and promote community or individual landowner applications to funding sources for contributions toward ongoing covenant management costs.

Council has now employed the Waikato Biodiversity Advisory Service operator to contact each of the owners of covenants with the greatest threats and ask if they would like assistance with management (including assistance with preparation of funding applications). Contact has been by letter inviting the landowners to phone the service. Uptake has been slow so far, with only two landowners responding. Council is now considering face-to-face contact for each site to illicit better response.

One approach to overcome this individual landowner reluctance to participate is to support a local community group with specific pest control objectives. For example, Far North District Council supports the 'South Hokianga Ginger Group' who's specific aim is to help landowners control wild ginger on their property.

Waikato District Council is also developing a Conservation Strategy for the District. This strategy has been developed in consultation with a number of key players, including Tainui, Federated Farmers, DOC and EW. The strategy will provide useful tool in bridging the gap between the District Plan policies and objectives and setting financial commitments in the Annual Plan process as well as providing a useful leapfrog start in meeting it's obligations to engage the community through its Long-Term Council Community Plan.

As part of the District Plan review, Waikato DC have not developed a detailed schedule of significant sites using traditional methods of file review and site inspection. Instead, they are working with EW using Land Environments of New Zealand (LENZ) to help identify the highest priorities for action[18]. This has involved confirming which LENZ 'Environments' are primarily in the Waikato District, then confirming what percentage of

[17] Kessels, GHA. 2003. Covenant Lot Assessment and Options for Management. Kessels & Associates report for Waikato District Council

[18] Leathwick, J; Morgan, F; Wilson, G; Rutledge, D; McLeod, M; Johnston, K. 2002. Land Environments of New Zealand –Nga Taiao o Aotearoa – Techical Guide. Ministry for the Environment, Wellington.

native vegetation cover presently remains within that LENZ type. For example, there is one LENZ 'Environment' that has 96% of its national total in the Waikato District and of that area, only 2.5% has native vegetation cover. The next steps will be to determine the exact location of these remnants and see what, if any, are protected. The Council then proposes to approach the landowners to inform them of the significance of their area and offer assistance (perhaps with the help of other agencies).

2.5 Application of Rating Relief Provisions in the Waikato

There are a variety of ways in which property owners and Councils can come to agreements on the conservation of natural features and receive some agreed rates remission. The most common is that a council will provide rating relief for a natural feature formally protected by a Reserves Act or QEII National Trust covenant.

All district councils within the Waikato region claim that they may provide 100% rating relief for QEII open space covenants[19]. While all councils indicate rating policy goals, there are inidcations that the letter of the law is not being applied correctly in all cases. As many councils do not actually specify the amount of rating relief that is applied, it is very difficult to ascertain whether the correct amount of rating relief is being granted in accordance with council policy in all cases. Some councils only provide rating relief if the covenant is voluntary and not part of a subdivision covenant, while others state that they will only provide relief if the public has unencumbered public access.

Another limitation relates to the valuation of the land subject to rating relief. Valuation judgements appear to be directed principally to the fact that the land is "locked up" in perpetuity. The absence of choice and the limitations on use are seen as significantly reducing the value of that land and the rating apportionment is prepared accordingly. In many cases the land in the covenanted areas occupies steeper country, or gullies, or swampy ground where its productive value is seen as being limited anyway. This approach is directly principally at the land's direct economic productive value, and is therefore limited by it. One of the outcomes is that covenant holders are often disappointed at the low level of rates reduction that the covenant generates.

Nonetheless, many owners of covenants say that the amount of rating relief does not mean as much to them as the principle that Council has recognised and acknowledged that they have forgone potential productive economic use and protected this portion of their private property for the greater public good.

Some councils have also given landowners options for temporary rate relief for those who do not want to protect in perpetuity by the way of a covenant. For example, Far North District Council have a 'rates postponement option. If a landowner protects a natural feature for, say ten years, they then don't pay rates over that period. However, after that (or at any point in time) the values get destroyed, then they will have to pay rates as well as pay the previous ten years rates.

2.6 Waitomo Landcare Group

The Waitomo Landcare Group was one of the first community based Landcare initiatives supported by Environment Waikato and its predecessors. Sedimentation in the Waitomo caves was the primary motivation for the establishment of the Landcare group. This had a direct link to biodiversity in that excessive sedimentation of the

19 Henshaw, D. 2001: Rating Relief Mechanisms and Opportunities for Partnerships for Open Space Covenants within the Waikato Region. Environment Waikato.

waterways within the caves adversely affected glow-worm habitat. Between 1984 and 1996 about 65km of fences were constructed, 624ha of privately owned native forests and wetland protected by QEII covenants and a further 350ha of land put into production forestry. Over 10% of the total catchment effectively protected.

These projects were funded through contributions from local tourism businesses (including those in hapu ownership), regional council, district council and QEII National Trust. The Native Forests Restoration Trust also assisted with native plants and volunteer efforts.

One farmer involved noted that extensive work done to retire significant portions of his property did not result in any reduction in stocking rates on his farm[20].

Perhaps the key reasons why this project was successful are that a clearly identified and highly valued objective has been established (looking after the caves), which is being well supported by DOC, EW and two NGO's. Notwithstanding this, one of the real strengths of this group is that there is a very good and open working relationship between all of the players, with landowners in particular, providing the leadership role in terms of direction for future retirement, protection and restoration efforts.

Phase two of the project is now underway. The group's targets for phase two include 12km of fencing around several new bush covenants; 5km of further stream bank fencing and planting and 6km of fencing to retire tomos or cave entrances.

2.7 Kakepuku Mountain Historic Reserve Project

The Kakepuku Historic Reserve comprises two reserves, about 10km south of Te Awamutu - 133 hectares of Historic Reserve land administered by Department of Conservation and 65 hectares belonging to Waipa District Council. The Kakepuku Mountain Historic Reserve Project was formed by adjacent landowners with the aim of the ecological restoration of the 'reserve'. It is an informal group of concerned locals (mostly dairy farmers) who have initiated and run their own ecological restoration project on publicly owned land for over 15 years.

Pest management aimed at reducing possum and rat numbers has been carried out since spring 1995. Goat eradication has been maintained by local residents for about fifteen years.

The funding for the pest management programme has been provided by Waipa District Council. During the 2003 spring Bayer Industries donated Ratcumen paste to the project.

Because of the impressive reduction of pests on the mountain the Kakepuku Project committee decided to apply to the Department of Conservation to translocate 30 North Island robin (toutouwai) from Pureora Forest Park to Kakepuku. Accordingly approval was given and the birds were translocated in June 1999. Subsequent monitoring results indicated an excellent survival and breeding rate. There now have been confirmed sightings of North Island robin on Mount Pirongia, which have previously not been recorded for 20 years. The birds have to travel a distance of 8-9 kms across pastoral land between the two forests.

[20] Richie, H. 2000. Good Farm Management? – A Review of Hill Country Resource Management Issues in the Waikato Region. Environment Waikato, Hamilton.

This committee has been the recipient of two Trust-Power conservation awards in 2000 and 2002 and is in the process of developing a strategic management plan to ensure ongoing pest control occurs and to secure additional financial support for the project.

2.8 New Zealand Native Forests Restoration Trust

The NZ Native Forests Restoration Trust (NFRT) is a nation-wide non-government organisation formed in 1980 as a lobby group opposing the clear-felling of native Forests in the central North Island. The primary objective of the NFRT is to encourage and undertake restoration of degraded or destroyed New Zealand indigenous habitats and plant communities. The NFRT has achieved this aim primarily by the direct purchase of privately owned natural features (bush or wetland) and subsequent protection of the area by the way of a QEII covenant. Funding for purchase has been obtained by donations[21], bequests and substantial grants over the years from Trust Waikato and the DOC administered Nature Heritage Fund.

The NFRT owns and manages nine reserves in the Waikato region (all in the King Country) totalling almost 2,300ha. Nationally the NFRT owns over 5,00ha of land.

Ongoing management of these reserves has traditionally been undertaken by a dedicated but small group of trustees and adjacent landowners. However, increasing and ongoing fence repair and pest management issues have meant that a part-time contractor has been employed nationally to monitor these areas and help with ongoing management. The Trust has made good use of the EW Environment Initiative fund and the DOC Biodiversity Condition Fund to obtain the necessary funds for management such possum control and fence repair, using both volunteer and professional labour as required.

The efforts of the Trust are not generally well known outside conservation circles.

2.9 Ballance Farm Environment Awards

The Ballance Farm Environment Awards (FEA) was conceived in the Waikato 12 years ago by a group of concerned farmers to demonstrate that sustainable farming is practical, achievable and profitable. It is now a national organisation, with the awards being held in seven regions throughout the country in 2004. The awards' key objectives are to show farmers they need not compromise economic productivity for environmental enhancement and, in the best examples, can in-fact restore environmental values. Through feedback and profiling winners, the awards encourage farmers to be more proactive in their resource management and provide them with role models for sustainable land management.

On of the important tasks of the FEA is to provide role models for environmental practices and to demonstrate to the wider community some of the best examples of environmental enhancement by farmers. In 2002 the Trust received funding from the MAF Sustainable Farming Fund to carry out extension work on some of the good examples seen. Five publications were published[22] and in 2003 the FEA Trust assembled a small team of environmental specialists to help prepare a new information brochure on natural feature management. This has involved interviewing FEA entrants in the Waikato who have stood out as managing natural features on their farms particularly well. The focus has not only been looking and practical tips to manage natural features, but also looking at the direct on-farm economic benefits of biodiversity conservation.

[21] notably EW and Forest and Bird make up a significant portion of local donations
[22] other brochures are on tracks & races, pasture & nutrient management and waterways on farms

This brochure has been distributed widely by Environment Waikato and on a national basis by the QEII National Trust.

2.10 Application of the Rule Approach

The Proposed Waikato Regional Plan has rules which relate to controlling adverse effects of effects on 'natural' wetlands that provide habitat for indigenous vegetation or fauna communities via the consent process outlined in the RMA.[23]

Several years ago a farmer in northern Waikato drained and cleared about 20ha of wetland on his property without first seeking a resource consent from Environment Waikato. The drainage was discovered by EW staff, who rather than prosecute decided to make the farmer apply for a consent in retrospect. This process included having to consult with potentially affected parties as well as prepare an assessment of environmental effects report (which cost the farmer almost $10,000). As a result of this process DOC and EW staff resolved that the farmer was to formally protect two other areas of un-drained wetland on his property and undertake a restoration project for them.

The farmer has fenced the areas off and formally protected by the way of a covenant and has commenced with restoration. This particular farmer is now also considering covenanting other natural features on his property.

3 Some Examples of Council Approaches Elsewhere in the Country

3.1 Taranaki Regional Council

Taranaki Regional Council allocates $100,000 for significant wetland enhancement and protection. The Council prepares a management plan for the wetland and covers 100% of the costs of implementation of fencing, weed control and restoration planting. The QEII National Trust covers the survey and legal costs if the owner wants formal protection. The funding only applies to wetlands that are considered regionally significant and noted in the Regional Freshwater Plan. These wetlands also require consent (discretionary) for drainage or other modification. The Council pays the landowner or contractors directly. Other projects are assisted through the Taranaki Tree Trust (see below).

3.2 South Taranaki District Council

Based on guidelines for Significant Natural Areas (SNAs) identified in the District Plan the Council will contribute a half share towards one-off fencing if the owner is formally protecting the SNA (by the way of a covenant). Requests for a higher level of the Council's contribution are considered in exceptional circumstances. All such requests go to the Environment and Hearings Committee for approval. Requests for a funding contribution for other projects associated with a SNA site (such as weed control) are considered but such requests are not guaranteed funding.

For non-SNAs the Council will contribute a one-third share towards one-off fencing. In any one financial year, a maximum of 30% of the total fund is allocated to non-SNAs. If funds are still available towards the end of the financial year, then additional funding may be made available for non-SNAs. All funding is dependent on availability of money

[23] Criterion 6 of Appendix 3 of the Waikato Regional Policy Statement excludes wetlands that have been constructed for waste treatment or wastewater renovation purposes as being significant indigenous vegetation or significant habitat of indigenous fauna.

in the fund at any time. The Council's funding contribution decisions cannot be contested.

The approach of South Taranaki District Council appear to be effective as the landowners know what level of financial support can be expected, and the fund can be accessed at any time until the available funding for that year has been completely allocated. By providing a greater level of support for SNA's the South Taranaki District Council ensures that the funding is mostly directed at key sites, while still supporting other biodiversity management initiatives.

3.3 Whangarei District

This District provides funding of up to $30,000 per annum for the establishment of covenants after the QEII National Trust contributed $30,000 of funding in the District. In this case QEII invoices the Council at the end of the financial year with details of expenditure. The funding provided covers QEII's costs including fencing, survey and legal costs (above the $30,000 threshold) rather than providing assistance to the landowner.

3.4 The Contestable Fund Approach

All regional councils and most territorial local authorities use a contestable funding approach. The total contribution by councils throughout the country is almost 5 million dollars per annum for biodiversity management[24]. There are a number of different approaches. For example, Kapiti Coast District Council, Auckland Regional Council, Environment Canterbury, Far North District Council and Northland Regional Council have contestable funds to which landowners apply for specific projects. Landowners make applications for management and/or formal protection. While this system allows the council to allocate funding to the most deserving projects it can cause a significant delay for a keen landowner particularly when allocations are only made annually or twice yearly.

3.5 Council Services

Some councils have set up nurseries to supply plants directly to community groups or individuals, or have helped co-ordinate the supply of plants from nurseries run by prisons or similar institutions.

3.6 Council Created Trusts

A number of councils have set up Trusts (eg Taranaki Tree Trust, Tasman Trust, Te Hini Awa (in the Manawatu) to administer funds for environmental protection projects. As charitable trusts they have financial and promotional advantages and are able to attract funding from other sources. The Taranaki Tree Trust, for example, was set up at a time when the Council believed it did not have a direct legislative mandate to be involved in the protection of terrestrial biodiversity protection and enhancement projects. The recent amendment to the RMA for biodiversity protection has changed this position.

[24] Source: National Survey of councils, MfE and LGNZ 2004

4 Conclusions

4.1 The Value of Direct One- to-One Contact with Landowners

There appears to be a general lack of awareness and knowledge about assistance programmes that are available to landowners to assist with ongoing management of their natural feature. Initiatives, such as the FEA awards publications, work by Landcare Trust staff and the regional Biodiversity Forums are making rapid progress, but a large number of landowners still don't know where to seek help. Others feel that they cannot trust regional or district councils to help them without potentially onerous strings being attached.

The sheer cost and time required to undertake ongoing animal and plant pest control can also deter landowners from actively managing their natural feature. But perhaps the most noticeable barrier to ongoing biodiversity management seems to be a lack of knowledge of the special features of their "patch", the threats it faces and the confidence in where to begin and what methods would be most effective

Terry Parminter from AgResearch in Hamilton has researched why people do and do not protect natural habitats and possible ways to encourage greater participation in biodiversity conservation.[25] His conclusions are summarised as:

- **Finding One** - People who are active in protecting biodiversity on their property think their peers support them in their activities; people who are inactive think their peers won't support them. **Suggested Action** - Identify people who are respected in the community (for various reasons) and who are protecting areas, and work with them to promote work by others. The farmers who provide role models will already be widely recognised in the farming community as being "good farmers". Farmers can tell you (by name) who they are, if asked. When these (role model) farmers participate in biodiversity programmes they should be recognised through Award programmes because of their contribution towards making biodiversity management part of "normal farming practice". Families are important peer groups and some Enviroschools programmes are helpful.

- **Finding Two** - Emotions are important reasons for looking after native bush. People feel it is "the right thing to do" for various reasons including wanting to protect native species, improve landscape values, and maintain clean water. **Suggested Action** - Publicise success stories of remnant areas being protected and the environmental benefits of doing so. Council could encourage successful farmers to enter Farm Environment Awards. But while emotions are important, publicity isn't necessarily the way to give people "good feelings" about biodiversity. Councils should be thinking of new ways to help landowners ENJOY the wild areas on their properties, e.g. fishing, hunting, bunny-shoots or by ways to encourage native birds onto their properties.

- **Finding Three** - People need to have confidence that they know what to do and that their actions will be effective - "What I do makes a difference." **Suggested Action** Distribute "how to do it" brochures (for protection, restoration and monitoring activities) and publicise monitoring results from successfully managed sites. Probably the best way to help farmers learn how to do stuff is to give them access to demonstration sites

[25] Parminter T.G. and Wilson J.A., 2002b. National Farmer Survey on Preserving and Conserving Bush Remnants. AgResearch Report for theFoundation of Research Science and Technology, AgResearch, Hamilton, New Zealand.

and workshops so they can see what to do. Reading about it in a brochure is just the first step usually. Councils also need to work out novel ways to provide feedback to landowners about the success of programmes for example, the number of successful kiwi nesting in an area or the number (percentage and area) of SNA's voluntarily protected in a locality.

- **Finding Four** - Rational reasons such as cost/benefit analyses are also useful. For example, topics such as the property saleability (price may not increase but may sell quicker) and enhanced amenity values. **Suggested Action** – Find examples where there was difficulty in grazing next to bush areas and show how fencing off bush made mustering and general stock management easier. Look at other advantages such as animal shelter, erosion control, wildlife habitat, and pest control. These need to be compared to direct costs such as fencing, weed control on boundaries, loss of property rights, loss of production etc.

- **Finding Five** - Unless intervention[26] changes people's values and attitudes then there will be no long-term effect from intervention. **Suggested Action** - Don't do more work than people are willing to support. When an owner develops a personal stake in a project they are more likely to have an interest in the long-term success of the project and will promote such projects to their peers.

A number of these points has been highlighted in similar studies and Council experience. The Ministerial Advisory Committee on Biodiversity and Private Land in their final report[27] state:

"It is most unlikely that public funds will be available to assist at every site or every landholder. Similarly, it is unreasonable to expect landowners to assume full responsibility. We have characterised this dilemma as the "gap of frustration". The gap is the difference between what the landowner and public authorities can collectively contribute and what the goal demands. There are only three ways to close this gap: increase landholder contribution, increase public contribution, or lower the goal."

As the Environment Waikato KES, Clean Stream and Priority Wetlands case studies examined above suggest, working directly with landowners on a one to one basis increases both landowner **AND** public contribution at the same time - we don't need to lower any goals using this approach.

One-to-one with landowners works, but it is expensive, time consuming and resource hungry, so this tool needs to be used in conjunction with other tools. It is most useful for targeting the most important sites or biodiversity management issues.

4.2 Conservation Lot Subdivisions – A Useful Tool but Fish Hooks Exist

Conservation Lot subdivisions results in the formal protection of natural features and is an effective tool, but it does have some potential pitfalls. For example, the increased density of dwellings can lead to increased domestic pet (i.e. predators) populations in sensitive areas, such as kiwi habitat in the Coromandel. More houses can mean more gardens, resulting in more weeds in the adjacent natural feature. Management can also be a problem where a distinct natural feature is separated into a number of different property boundaries (conversely it also could mean more motivated people to carry out active ecological management). Further, the selection process for

[26] Intervention means either a regulatory or incentive
[27] Ministerial Advisory Committee, 2000. Biodiversity and Private Land. Ministry for the Environment, Wellington.

conservation lot covenants can be, from an ecological perspective, totally random, in that the protection area are not necessarily concurrent with the most important biodiversity sites or greatest threats.

All of these potential issues can be addressed through the development of suitable planning conditions and criteria. However, the crucial issue to overcome any potential long-term management problems associated with conservation lots is monitoring. Covenant agreements are not worth the paper they are written on unless councils monitor them on an ongoing basis and then implement the recommendations of the monitoring programme.

Monitoring allows councils to act in two roles - one as an 'inspector' and the other as 'educator and facilitator' of information. It is apparent that the latter role is the more important one and likely to be more successful in the long-term. However, given the continual turnover of new landowners, the inspector role is also considered to be essential, as a new landowner may not be as conservation-inclined as the original covenanters. Indeed, less responsive landowners may respect Council more for actually taking the trouble to monitor conservation areas.

There are also ongoing pest problems to consider. Unfortunately, possums, other animal pests and exotic weeds continue to degrade these areas once they are covenanted and fenced off from stock. They thus need ongoing management in order to survive into the future. Sound policies and assistance with management and restoration is also required. The council funding can go considerably further where partnerships are established with relevant landowners, Landcare groups, tangata whenua, Fish & Game and other agencies.

4.3 Financial Contributions –Some Tips for Application

Financial contributions towards biodiversity conservation appear to be a successful tool used by a large majority of councils and NGO's around the country.

A number of variables influence progress with a biodiversity conservation project, including weather (e.g. for stock shelter when fencing is not possible), landowner ability to pay (e.g. fluctuations in agricultural commodity prices) and landowner priorities. A financial commitment made to a project in year 1 may not come to charge to year 2 or, in some cases, year 3. It is critical, therefore, that accounting systems are established to track commitments and expenditure within and between financial years. It is also desirable for councils to carry forward financial commitments from one financial year to another. The ability to roll over unspent funds is crucial due to the time it can take to complete a project. It is appreciated that council financial systems make roll over of funds difficult, but from a biodiversity management project point of view, flexibility to allow for roll over to the next financial year will result in greater uptake by landowners.

Some tips for applying financial tools are:

- Ensure that priorities and methods for inventory and ecological significance and threat ranking are fair, robust and inter-agency compatible;
- Ensure there is at least some contribution by the landowner to give a sense of ownership to the project and ensure ongoing active participation in management;
- Details of funding approval, tracking and release procedures need to be extremely well documented and monitored, with provision to roll over funds to the next financial year.

- Put in several application rounds during the year.

- When involved in covenanting with QEII or other covenanting agencies, equitable funding assistance for survey, as well as fencing funding, is necessary to avoid distortions and pressures on the other parties involved. It is important to note that the process of establishing a covenant can take between six and twenty four months.

- The whole point using of this approach is to get resources out to people so it is important to not make application forms too complicated

Another point worth noting is that funding for biodiversity initiatives by councils has been given greater flexibility since the Rating Act reforms of 2002. The three main purposes of the Local Government (Rating) Act 2002 (LGR) are:

- To provide local authorities with flexible powers to set, assess and collect rates.
- To ensure rates reflect decisions made in a transparent and consultative manner.
- To provide processes and information to ensure ratepayers can identify and understand their liability for rates.

In effect, this means that the LGR gives regional authorities the same powers and rating mechanisms as territorial local authorities. In particular LGR replaces the range of separate rate and charge powers available under the old Act with a single flexible generic power to levy targeted rates. LGR allows regional councils to use differential rates, targeted rates and uniform annual charges to set focused rates. Making use of these new provisions, Environment Waikato has proposed to set a rate for 'Natural Heritage Enhancement' projects (about $5 per ratepayer is proposed at present). The fund generated from this rate can then be allocated specifically for biodiversity conservation.

4.4 Monitoring –the Forgotten Tool

It is considered that regular on-site monitoring is the only effective way that anybody can be assured that a biodiversity conservation project is successfully meeting its objectives.

Monitoring can be defined as "*the assessment of change in specific characteristics, over time or between areas.*" (Hanford, 2000). Monitoring not only includes sampling of predetermined plots over a period of time but can also include surveys that assess a natural area at a single point of time using a predetermined assessment method. Examples of the latter would be Protected Natural Area Programme surveys - PNAP (e.g. Humphreys & Tyler, 1990). Whatever monitoring methods are used, they should be as simple as possible, standardised and repeatable. Further, to be effective the monitoring framework must be timely, practical, relevant, and ongoing.

In the context of council's broader statutory obligations, councils are required to continue to develop and maintain monitoring systems and databases to monitor natural areas and their ecological processes. This needs to include a number of biodiversity parameters such as:

- Recording and collating the loss of indigenous natural area resources as a result of approved activities from the district plan consent processes;

- Keeping a database of the additions to the covenants in order to assess whether a diverse and representative range of natural resources is being preserved or protected;

- Establishing, in conjunction with relevant agencies, a baseline of the natural area coverage in their district or region; and

- Monitoring trend and status conditions of key ecological processes and ecosystems in conjunction with other agencies.

In light of the above, monitoring is considered to be an integral tool in anybody's toolbox. In particular, council's ability to assess the state of the existing environment and evaluate the effectiveness of its policies in sustaining the district's important biodiversity values cannot be achieved without regular monitoring and implementation feedback systems.

4.5 The Right Mix

As a general observation, biodiversity management throughout the country, both of private and public land, appears to becoming increasingly a collaborative, ecosystem based affair that is often being initiated and driven by private individuals or local community groups. This integrated, collaborative, ecosystem based approach has a number of advantages, from ecological, community and economic perspectives:

- From an ecological perspective, managing biodiversity at an ecosystem level, rather than say a property or administration boundary level creates opportunities to control pest threats and carry out restoration programmes much more effectively. For example, wandering willy (*Tradescantia fluminensis*) control can be controlled throughout an entire stream catchment rather than just at one site, significantly reducing the risk of re-invasion from an upstream source.

- From a community perspective, integrated, collaborative approaches allow for all members of a community to become involved in biodiversity management. The benefits in terms of shared knowledge, shared resources and shared motivation can strengthen a community. Projects often can become focal points for a community and bring together people from different backgrounds, who while having different 'world views', form friendships and commonalities by working together towards a common goal.

- From an economic aspect, integrated, collaborative approaches allow for a wider pool of monetary support becoming available for a project and can reduce overall costs associated with 'economies of scale'. For example, a shared native plant nursery could be established by a number of landowners with joint property boundaries within a large contiguous stand of bush, allowing for the efforts and costs associated with growing and planting large quantities of locally sourced plants to be shared by all of the landowners.

However, it is important to realise that there is no template for the "right mix" of tools which a community or agency can use.

Local and regional communities must determine the approach that works best for them, because at the end of the day successful, long-term biodiversity management will only work when the people on the ground believe in what they are doing and trust those

whom they are working with. They also need to be well supported and resourced by central, regional and territorial agencies.

What does seem to be crucial is that the landowner, agency staff and NGO's must be given the ability and opportunity to **'mix and match'** for each unique situation.

The most successful biodiversity gains appear to occur when landowners and community groups are given the space to find their own path and to work out their biodiversity objectives for their project with adequate support from the involved agency(s). For their part, agencies must ensure that the landowners and community groups are well informed and well resourced (in terms of financial and technical assistance). Provided this occurs and that the people are motivated, good things will happen.

Two departing quotes:

> *"Sharing responsibility for land management is fundamental. Ecosystems cross boundaries, making the need for co-operation, coordination and partnership essential for managing the entire ecosystem. The complexity and uncertainty of natural resource management calls for stronger teamwork between scientists, natural resource managers, iwi and the community……While environmental problems are shared problems, it is important to remember that a range of diverse community conservation responses is not only possible, it should be activity encouraged."*[28]

> *"Some of us make and administer laws to regulate what we can or cannot do. Some of us are bureaucrats who enjoy controlling others. Some of us think we are environmentalists by stopping others from using resources to make a dollar. There are others who get 'stuck in' and do things. When the business of production and environmental enhancement coincides, then we are getting the mix about right……Let us continue trying to get that environmental mix right and let us recognise those who do*". Jock Patterson, Awhitu Peninsula dairy farmer and Franklin District Councillor[29]

[28] Sunde, C; Taiepa, T; Horsley, P. 2000. Nature Conservation Management Initiatives for Whanganui Iwi and the Department of Conservation. School of resource and Environmental Planning, Massey University, Palmerston North.

[29] Awhitu Peninsula Landcare. 2000. Environmental Projects on the Awhitu Peninsula 1996-2000. Auckland Regional Council, Auckland.

….And the best thing after a hard day fencing off a kahikatea stand – the cup of tea and homemade scones afterwards…

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APPENDIX 3:

Beef + Lamb New Zealand Submission on Reforming the Emissions Trading Scheme

TO THE

MINISTRY FOR THE ENVIRONMENT

ON THE

Reforming the New Zealand Emissions Trading Scheme: Proposed Settings consultation document

BY

Beef + Lamb New Zealand Ltd

SUBMISSION TO THE MINISTRY FOR THE ENVIRONMENT ON THE REFORMING THE NEW ZEALAND EMISSIONS TRADING SCHEME: PROPOSED SETTINGS CONSULTATION DOCUMENT

Submission on consultation material

To:	Ministry for the Environment PO Box 10362 Wellington 6143
Email:	etsconsultation@mfe.govt.nz
Phone:	04 439 7400
Name of submitter:	Beef + Lamb New Zealand Limited
Contact person:	Corina Jordan Environment Strategy Manager Beef + Lamb New Zealand
Address for service:	Corina.jordan@beeflambnz.com

Beef + Lamb New Zealand Ltd wishes to be heard in support of its submission. Beef + Lamb New Zealand may provide further technical information and data to underpin its position in further discussions with Ministers and officials.

INTRODUCTION

1 Beef + Lamb New Zealand (B+LNZ) welcomes the opportunity to submit its views to the Ministry for the Environment (MfE) on the *Reforming the New Zealand Emissions Trading Scheme: Proposed Settings* consultation document.

2 B+LNZ understands that the Climate Change Response (Emissions Trading Reform) Amendment Bill (ETR Bill), which sets the legislative framework for the New Zealand Emissions Trading Scheme (ETS), is currently going through the select committee process.

3 B+LNZ considers it is premature for the Government to consult on the operational settings of the ETS through the *Reforming the New Zealand Emissions Trading Scheme: Proposed Settings* consultation document when the legislative framework has not been agreed on or set.

4 B+LNZ is also concerned by the short timeframes set for the consultation process on proposals that will transform the emissions trading legislation, and in turn the impacts this legislation will have on the New Zealand economy. B+LNZ is particularly concerned that the Government is trading-off careful and robust analysis of legislative and policy options to reduce absolute greenhouse gas emissions (particularly emissions of long-lived gases) and the long-term socio-economic impacts of these proposals on New Zealand, for fast-paced action to hastily implement the Zero Carbon Act.

5 B+LNZ does not believe that what the Government is proposing will deliver the environmental outcomes that it seeks to achieve but will result in perverse outcomes both environmentally and economically. In B+LNZ's view a number of proposals that the Government is currently consulting New Zealanders on (e.g. climate change, freshwater and biodiversity policy) will lead to significant wealth transfer and distributional impacts, without delivering sustainable outcomes nor policy frameworks to facilitate climate change mitigation and adaptation.

6 B+LNZ seeks to ensure that policy decisions in different environmental domains are not made in isolation from each other, and advocates for integrated environmental management. That is policy that achieves multiple positive outcomes on New Zealand's environmental, social, cultural and economic wellbeings, without creating perverse outcomes and unintended consequences for sheep and beef farmers and New Zealand's rural communities.

7 B+LNZ requests MfE officials read this submission in conjunction with the submission B+LNZ made on the ETR Bill on 17 January 2020 and the statement it delivered to the Environment Select Committee on the ETR Bill on 31 January 2020. Copies of both these documents are contained in Appendices I and II to this submission respectively.

BACKGROUND

8 B+LNZ is an industry-good body funded under the Commodity Levies Act through a levy paid by producers on all cattle and sheep slaughtered in New Zealand. Its vision is 'Profitable farmers, thriving farming communities, valued by all New Zealanders'.

9 Sheep and beef livestock production is essential to maintaining the vibrancy of rural communities and their cultural, societal, and environmental wellbeing, as well as contributing regionally and nationally to the country's economic wellbeing.

10 In 2017-18, the red meat industry accounted for over 92,000 jobs, nearly $12 billion in industry value added and $4.6 billion in household income, including flow-on effects. It accounts for 4.7 percent of total national employment and over 4 percent of national industry value added and household income when flow-on effects are taken into account. The contribution of the sector to the national economy in absolute terms is substantial.[4]

11 Exports from New Zealand's red meat industry totalled $9.1 billion for the year ended 30 June 2019 – about 16% of New Zealand's merchandise goods exports – and we estimate domestic sales were around $1.6 billion at retail value. The sector exports over 90 per cent of its production and is New Zealand's largest manufacturing industry. The health and wellbeing of the sheep and beef livestock production sector within New Zealand is therefore important to the economy of the country, and the ongoing vitality and wellbeing of rural communities.

12 B+LNZ is actively engaged in environmental management, with a particular emphasis on building farmers' capability and capacity to support an ethos of environmental stewardship, as part of a vibrant, resilient, and profitable sector based around thriving communities. Protecting and enhancing New Zealand's natural capital and economic opportunities and the ecosystem services they provide is fundamental to the sustainability of the sector and to New Zealand's wellbeing for current and future generations.

13 Sheep and beef farmers are up to the challenge of playing their part in the actions needed to achieve New Zealand's climate change objectives. This is why B+LNZ has, through its Environment Strategy, committed to leading the sector to working towards being carbon neutral by 2050.

14 Farmers have an in-built capacity for change. The shifts in the industry following the removal of production subsidies in the late 1980s are an extreme example that resulted in new farming systems being developed to maximise economic opportunities within the constraints of the natural environment. However, the policy changes of the 1980s were not without significant costs to the industry, farming businesses, and the rural communities they supported. These changes, at the less extreme end, saw sheep and

[4] SG Heilbron Economic & Policy Consulting, Economic Impact of the Beef and Lamb Industries in New Zealand, Melbourne, January 2020

beef farmers adapt to climatic, societal, consumer and regulatory requirements, provided there was the flexibility and time to do so.

15 Since 1990, the number of sheep in New Zealand has reduced by over 50 percent[5], while the volume of lamb produced is just 8 percent less. This has been achieved through a range of improvements as farmers have optimised their businesses to meet customer, environmental and farming family needs, including through genetics and breeding, feed management, improving reproductive rates, and increased individual animal size. These "technology" improvements, which have produced more with fewer inputs, have provided eco-efficiency gains. Similarly, the number of beef cattle is around 20 percent lower than in 1990. These reductions in the number of capital livestock and the improvements in productivity have resulted in improvements in environmental performance including a more than 20 percent reduction in nitrate leaching per unit of saleable product, while the red meat industry has increased the value of its exports by 83 percent to over $9 billion.

16 As a result, absolute GHG emissions from the sheep meat sector are about 40 percent lower than they were in 1990, for 8 percent less product produced, and 10 percent less than 1990 levels for the beef sector including dairy beef. Collectively, the sheep and beef livestock production sector's GHG emissions are 30 percent lower than in 1990. The emissions intensity (i.e. emissions per unit of production) has improved (i.e. reduced) at an average rate of about 1 percent per year since 1990. However, it is important to note that there are biological and biophysical limits to the scale and magnitude of eco-efficiency gains that can be accomplished. Further restrictions on systems which have already adopted a number of these eco-efficiency changes will significantly challenge the ongoing resilience and viability of these businesses.

17 As Kaitiaki, in aggregate sheep and beef farmers manage 2.8 million[6] hectares of native habitat, including 1.4 million hectares of native forest. This is the second largest holding of native forest and native biodiversity – bettered only by the Crown estate. In some regions, such as East Coast, there is more native biodiversity on land that sheep and beef farmers manage than in the Crown estate. Added to this is an estimated 180,000 hectares of forestry blocks on sheep and beef farms.

18 Sheep and beef farmers take an integrated and holistic view of the sustainable management of natural resources. They actively seek solutions that enable and empower multiple benefits across New Zealand's range of natural assets including biodiversity, aquatic ecosystem health, soils, climate, and healthy vibrant communities.

19 Climate policy and climate adaptation pathways should be transformative in design, enabling and empowering individuals and communities to build resilience across all wellbeings, including ecosystem services, community and cultural wellbeing, and economic wellbeing. While climate policy and adaptation pathways need to provide for clear and timebound outcomes to enable business and community certainty including

[5] Agricultural Production Statistics, Statistics New Zealand.
[6] Norton D., Pannell J., 2018. Desk-top assessment of native vegetation on New Zealand sheep and beef farms.

investment certainty, they will also need to provide carefully crafted frameworks that enable flexibility and innovation and provide for business and community adaptation.

20 As such, it is imperative that domestic climate policy is not created in a silo (in isolation from freshwater and biodiversity policy for example), without considering the combined impact of multiple policies, and the need to adapt to climate change, rather than just focusing on GHG mitigation. Instead, we encourage domestic climate policy to provide a transformational policy foundation that will deliver on New Zealand's climate change commitments and enable and empower New Zealand's sheep and beef farmers to continue to build diverse, resilient, productive landscapes for the benefit of all New Zealand and in maintaining vibrant thriving communities.

SPECIFIC SUBMISSION

21 The following sections detail B+LNZ's key issues and concerns with the proposals contained in the *Reforming the New Zealand Emissions Trading Scheme: Proposed Settings* consultation document, but also supports some of the proposals. For ease of reading and analysis, the submission follows the order of proposals as presented in the consultation document.

The provisional emissions budget

22 The Government is proposing to set a provisional emissions budget of 354 Mt CO_2-e over the period 2021–2025, which would require New Zealand to stabilise and then reduce net emissions over this period in a straight line towards the Zero Carbon Act targets for 2050.

23 Provided that the ETR Bill is enacted this year, B+LNZ acknowledges the need for a provisional emissions budget to be set for the ETS to operate in 2020–21, while the Climate Change Commission (CCC) develops its advice to the Government (by February 2021) on the first three emissions budgets for the periods 2022–2025, 2026–2030 and 2031–2035 as required under the Zero Carbon Act.

24 B+LNZ tentatively supports the 'straight-line path' from current levels of emissions to the 2050, however is concerned that the proposed approach does not adequately reflect the split-gas approach taken for the targets in the Zero Carbon Act.

25 Indeed, this approach implies that emissions from agriculture, in particular short-lived emissions of biogenic methane, should reach net zero by 2050, whereas the targets in the Zero Carbon Act itself make it clear that they don't[7].

26 B+LNZ therefore seeks that emissions of short-lived gases from the agriculture sector be excluded from the calculation of the provisional emissions budget for the ETS.

[7] The Zero Carbon Act contains three separate targets:
- All greenhouse gases, apart from biogenic methane, to be net zero by 2050
- Biogenic methane emissions to reduce to 10 percent below 2017 levels by 2030
- Biogenic methane emissions to reduce to between 24 – 47 percent below 2017 levels by 2050

27 Additionally B+LNZ understands from MfE officials[8] that the provisional emissions budget provided in the consultation material has been calculated on the basis of gross and net emissions projections as provided in *New Zealand's Fourth Biennial Report* on Climate Change, submitted by the Government to the United Nations Framework Convention on Climate Change (UNFCCC) secretariat on 19 December 2019.[9]

28 B+LNZ has some significant concerns about these emissions projections and the assumptions used to develop them. In particular, B+LNZ is concerned about the land-use change modelled for sheep and beef land as outlined in Appendix B of the 4th Biennial Report, and implications on forecast stocking rates. B+LNZ requests the opportunity to discuss these concerns with MfE and MPI officials in detail, before further advice is provided to Ministers on the ETS settings.

29 Additionally, B+LNZ has further concerns about the Marginal Abatement Cost Curve (MACC) analysis that has been published by the Government during this consultation process.

30 The MACC analysis provides an insight for policy thinking based on many given assumptions but with no subsequent flow-on consequences analysed. This analysis gives a view that New Zealand could be carbon neutral by 2030 by converting all sheep and beef farmland to forestry. This outcome, which current policy proposals will incentivise and facilitate, would result in significant impacts on the country across wellbeings including economic, community, cultural and environmental. In short, it is an outcome which would bear significant negative consequences for New Zealand's economy, and which would be devastating for rural communities.

31 Being carbon neutral with tree offsets is temporary and leaves the obligation to reduce fossil fuel CO_2 emissions still to be addressed if there a no other society changes because of the offset, which simply delays action to actually reduce emissions to later generations.

32 The flow-on consequences from such a move of land-use change would be to remove sheep and beef exports at a value of $10 billion of annual export receipts. Such a move would need policy insights to specify alternative low carbon emission activities that would replace the annual sheep and beef foreign exchange revenue source.

33 B+LNZ questions what the alternative to sheep and beef production is to generate $10 billion of annual export receipts with a low carbon footprint, especially given that pastoral agriculture products are predominantly biogenic and cycling existing carbon.

34 Converting eight million hectares of sheep and beef farmland to exotic forestry would increase the log supply 500 percent, which would oversupply the known log market and impact adversely on log prices. Note that ETS- driven tree planting is divorced from log market demand.

[8] Question asked by B+LNZ at the public consultation meeting in Auckland on Monday 3 February 2020.
[9] Ministry for the Environment. 2019. New Zealand's Fourth Biennial Report under the United Nations Framework Convention on Climate Change. Wellington: Ministry for the Environment

35 In addition, the potential impacts that large-scale conversions of sheep and beef farms will have on strong regional rural communities, landscapes, as well as hazards created from poorly harvested forests on rural infrastructure[10] and the environment, are all of critical concern to B+LNZ.

36 Further, B+LNZ believes the Government should calculate and present to the public its estimate of the impact on New Zealand's economy of such a major change in land use.

37 While B+LNZ has noted the heavily caveated nature of the MACC analysis, B+LNZ also requests to engage with officials on the findings of the MACC analysis, and on how to improve further analysis on marginal abatement opportunities.

Unit supply settings

38 The Government is proposing through the ETR Bill to establish an auctioning mechanism for the Government to sell New Zealand Units (NZUs) to ETS participants with surrender obligations.

39 The Government is proposing six steps in setting annual NZU auction supply (i.e. the volume of NZUs available to be auctioned off to participants every year):

- Set the ETS cap
- Consider technical and forestry adjustments
- Set the annual free allocation volumes
- Set the annual stockpile reduction volume
- Set the international unit limit
- Calculate the remaining available annual auction volume.

40 The Government says that "the amount of emissions participants can emit is also limited" by "limiting the number of NZUs supplied into the scheme".[11]

41 However, this statement is directly contradicted in the following few sentences, which state that:

> *"the cap does not determine the number of NZUs supplied to foresters for carbon absorbed by their forests as their trees. The cap determines the total number of units that will be supplied into the scheme, without limiting the number of units provided for emissions removals. Therefore the cap will limit the emissions produced from sectors covered by the ETS, but it does not determine the number of NZUs supplied to foresters for carbon absorbed by their forests as they grow."*

[10] As witnessed in Tolaga Bay in 2018.
[11] Page 33 of the consultation document.

42 In B+LNZ's view, these statements are both contradictory and misleading, because the NZUs supplied to participants for the carbon they absorb through their forests will be available for ETS participants to purchase on the secondary market, not at auction, at a price to be determined by the market (which could differ from the price at auction).

43 It is therefore B+LNZ's view that statements around the Government limiting the amount of emissions that ETS participants can emit do not hold true, as participants will be able to purchase NZUs from other participants on the secondary market to meet their surrender obligations even if they fail to purchase these at auction.

44 In its submission on the ETR Bill, B+LNZ called for the Environment Select Committee to include controls in the primary legislation that would limit the volume of NZUs available for forestry sequestration, and in turn limit the volume of NZUs from forestry available to ETS participants.

45 B+LNZ notes that several submitters to the Environment Select Committee on the ETR Bill have made related comments on gaps in the proposed legislation to provide for controls to be established on the volume of forestry offsets available in the scheme. This includes a comment from one of the newly appointed Climate Change Commissioners, who stated that "if the Government of the day wished to manage the proportion of forestry removals, that switch is also not identified in the ETR Bill".[12]

46 B+LNZ notes that other emissions trading systems around the world have introduced limits on the volume of offsets available to participants to use to meet their surrender obligations. For example, in the California Cap-and-Trade Program, entities with compliance obligations (i.e. participants with surrender obligations) can offset their emissions up to a limit of 8 percent of their compliance obligations. Additionally, from 2021 the share of offsets that can be used to fulfil compliance obligations in that scheme will reduce to 4 percent for 2021 to 2025 and will remain at 6 percent thereafter. Furthermore, these quantitative limits are complemented by qualitative limits, which basically constrain the origin of offsets/credits to different project types (e.g. US forest projects, urban forest projects, livestock projects etc).

47 B+LNZ requests the Government to seek urgent advice from the CCC on the type of limits that could be introduced in the New Zealand emissions trading legislation and in the ETS operational settings on the volume of forestry offsets available to ETS participants in the scheme. In particular, the Government should seek urgent advice on:

- Limiting the amount forestry offsets that can be used by ETS participants to meet their surrender obligations, akin to the California scheme
- Restricting the amount of NZUs distributed by the Government to forestry participants

[12] Commissioner Leining, appearance before the Environment Select Committee on the Emissions Trading Reform Bill, Monday 17 January 2020.

- Including qualitative limits on the origin of NZUs available for surrender obligations (for example, from native plant regeneration projects).

48 It is B+LNZ's view that limits on the volume of NZUs from forestry sequestration available to participants to offset their emissions would lead to a more effective emissions trading mechanism by truly capping the ETS and achieving actual, real, reductions of gross emissions.

49 Such limits would also help alleviate some of the concerns B+LNZ expressed in its submission on the ETR Bill on incentives for large-scale afforestation of plantation forestry and carbon forests, and their flow-on socio-economic impacts on sheep and beef farmers and the rural communities they are integrally a part of (also see section on "impacts" of this submission below).

50 B+LNZ therefore seeks for provisions to be included in the ETR Bill that would enable the Minister of the day to restrict the amount of offsets that participants can use to meet their surrender obligations, and to restrict the number of NZUs that are provided to participants for their forestry activities every year. The volume or quantity of NZUs provided annually by the Government to participants for their eligible forestry activities could then be set through regulations. B+LNZ recommends that two sub-bullet points be added to Section 30GB(2)(a) of the proposed ETR Bill that would read "(iv) the number of New Zealand Units from eligible forestry activities that can be used by participants to meet their surrender obligations" and "(v) the number of New Zealand units that are provided to participants for eligible forest activities" respectively.

Setting the annual stockpile reduction volume

51 B+LNZ supports the Government's intent to reduce the annual stockpile of NZUs, primarily because the stockpile of NZUs held in private accounts has the potential to impact the NZU price at a level that will not incentivise real, actual reductions of gross emissions from participants.

52 B+LNZ notes however that the current calculations of the stockpile are based on NZUs held in private accounts at June 2019. B+LNZ has gathered information over the past 18 months that suggests approximately 60,000 hectares of new forest plantings have occurred on sheep and beef farmland. B+LNZ therefore asks officials to consider the impact NZUs obtained through recent forest plantings will have on the stockpile of NZUs before finalising their advice to the Government.

53 It is also not evident from the consultation document whether or not officials have forecast the impact of projected increased rates of afforestation, correlated with the change to averaging rules for forestry accounting and the ability for forestry participants to bank NZUs supplied to them by the Government, on the volume of the stockpile in the future.

Price controls

54 The Government is proposing to establish some price controls on the price of NZUs available at auction. The Government is not proposing to intervene on the price of NZUs available through the secondary market.

55 To do this, the Government is proposing to introduce an NZU 'price floor' that will work by placing a reserve price of $20/NZU below which NZUs will not be sold at auction. The CCC may recommend changes to this price floor in early 2021.

56 The Government is also proposing to introduce a new 'price ceiling' mechanism know as a 'cost containment reserve'. This cost containment reserve will work by releasing an additional number of NZUs onto the market if a trigger price of $50/NZU is hit at auction.

57 Additionally, and as an interim measure until the end of 2021, the Government also proposes amending the legislation to increase the fixed price option for NZUs from $25 to $35/NZU for surrender obligations for 2020 activities.

58 Therefore, the potential range of prices of NZUs available at auction for 2020 to 2025 is $20-50 per NZU.

59 B+LNZ notes "the trigger price (i.e. 50$/NZU) is set as a back-up mechanism to ensure NZU prices do not reach a level that would have severe negative impacts on households and the economy".[13]

60 B+LNZ analysis suggest that without constraints put on the volume of forestry offsets, a carbon price gradually rising to $50/t$CO_2$-e would lead to large areas of sheep and beef farmland being converted to carbon forestry and therefore would indeed have severe negative impacts on the economy, particularly in terms of decreased annual export receipts from sheep and beef meat and all the products derived from sheep and cattle. In addition, while these impacts will be significant at a national scale, they would be crippling on economic and community wellbeing at a regional scale, as some areas will be much more severely impacted than others.

61 B+LNZ acknowledges that these proposals for a price ceiling for NZUs are necessary in order to avoid over-inflated NZU prices in the market, but B+LNZ is concerned by the NZU price envisaged by the proposal. While it is uncertain whether and/or when NZU prices through auctions and the secondary market will rise to these levels, it is fair to assume that NZU prices will rise towards these levels in the next few years. This would result in sheep and beef farming becoming unviable compared to plantation forestry and carbon farming, in particular in the hill country.

62 B+LNZ research and analysis shows that at current price levels, afforestation and carbon farming are already difficult for sheep and beef farmers to compete with in some regions/situations. An increasing NZU price would result in more conversions of pastoral farmland to forestry.

[13] Statement on page 59 of the consultation document.

63 To expand, B+LNZ's modelling at a 6% discount rate and NZU price at \$25/tCO_2-e, carbon farming with no log harvest, has a Net Present Value (NPV) of \$6,860 per ha at year 30, which nearly equates to the "profitability" of North Island Hill Country Sheep and Beef Farms, which on average have a NPV of \$7,400 per ha.[14] B+LNZ's analysis is that the break-even with pastoral Hill Country farming is a price for NZUs of \$26.70/tCO_2-e. At \$50/tCO_2-e, the NPV of "carbon farming" is \$14,810 per ha, which is twice that of the average for pastoral hill country farming. This implies all farmers with below average "profitability" would be driven out of business.

64 It is however important to note that these outcomes are the result of policy signals and interventions (e.g. incentives for large-scale afforestation) and are not driven by hill country farming being unprofitable. This is a common misconception that is important for policy and decision-makers to understand as demonstrated in Insert 1 below.

65 It is also important to understand that the value a farm brings to a region is more than what is expressed when a simple metric is considered such as profit. For example, a BakerAg study commissioned by B+LNZ in the Wairoa District shows that sheep and beef properties contribute more than 3 times the number of jobs to local employment than plantation forestry, and 7 times more jobs than carbon farming. The same study shows that sheep and beef farming contributes 3 times more direct local expenditure than plantation forestry, and more than 10 times more than carbon farming.[15]

66 In addition, farmers and landowners make business decisions that are not just profit driven. For example, some farmers will reinvest in their farm by making decisions in relation to environmental protection, such as the protection and enhancement of indigenous biodiversity.

Analysis: Hill Country Farms, profitability and carbon farming

B+LNZ's Economic Service Sheep and Beef farm survey classifies land in different farm classes. There are three Hill Country Farm Classes in the survey, whose size varies with steepness of their average contour, altitude, rainfall and seasonal grass growth patterns that combine to dictate livestock management practices.

The Farm Class 2 South Island Hill Country farms are the largest of the three Farm Classes and the most extensive in terms of stock units per hectare (SU/ha) of grazing land. For 2017-18, Farm Profit before Tax averaged \$269,250 per farm or \$171 per hectare of grazing land.

The Farm Class 3 North Island Hard Hill Country farms are generally steep in contour. Farm Profit before Tax averaged \$212,930 per farm in 2017-18, which was \$260 per hectare of grazing land.

The Farm Class 4 North Island Hill Country farms are the most numerous types of sheep and beef farms, totalling 3,055. These farms are smaller and reported a Farm Profit before Tax of \$143,650 per farm on average, which was \$342 per hectare of grazing land. Of the three hill

[14] Net Present Value of Earnings before Interest Rent Tax and management paid or imputed (EBITRm)
[15] BakerAg, 2019, Socio-Economic Impacts of Large-Scale Afforestation on Rural Communities in the Wairoa District.

country Farm Classes, these farms have the highest average per-hectare profitability of the three.

The steeper, more extensive Farm Classes are larger to be able to support farm family businesses, which can be more variable in profitability than easier hill country that usually has more livestock management options.

In terms of the ETS, an alternative activity to livestock farming on hill country could be *carbon farming* for emissions trading in the ETS.

The table below compares hill country livestock farming with non-harvest carbon farming forestry over a 30-year time period on a Net Present Value (NPV) basis. Treasury's 6 percent discount rate is used and NZU prices of $25 per tonne and $50 per tonne of CO_2 sequestered in trees are the key parameters.

The NPVs for both Sheep and Beef farming and carbon farming are calculated on an Earnings before Interest, Rent, Tax and paid management actual or imputed (EBITRm), i.e. the farm business is standardised to be debt-free, freehold and owner-operator.

The table shows that, at a NZU price of $25/t$CO_2$e, carbon farming is slightly more profitable than livestock farming for the Farm Class 2 South Island Hill Country and Farm Class 3 North Island Hard Hill Country, but Farm Class 4 North Island Hill Country is slightly more profitable than carbon farming.

At a NZU price of $50/t$CO_2$e, carbon farming is 100-160 percent more profitable than the average for livestock farming.

	EBITRm NPV 30 Years		
	Sheep & Beef $ per ha	ETS Forestry No harvest $ per ha	Sheep & Beef Difference $ per ha
NZU		**$25 / t**	
2 S.I. Hill Country	3,200	3,630	-430
3 N.I. Hard Hill Country	5,400	6,130	-730
4 N.I. Hill Country	7,400	6,860	540
NZU		**$50 / t**	
2 S.I. Hill Country	3,200	8,340	-5,140
3 N.I. Hard Hill Country	5,400	13,340	-7,940
4 N.I. Hill Country	7,400	14,810	-7,410

It is important to note the long-term implications of converting land to ETS forestry. Once land is planted in trees and registered for the ETS there is little outlay other than rates, some Repairs and Maintenance ("R&M", primarily maintaining fences) and ensuring the quality of the trees is maintained to maximise revenue if harvested.

At maturity though, under ETS rules the land in trees is committed to remain in trees, though rates payment and R&M of the forest and land remains the responsibility of the landowner. The land-value of an area in mature trees without ETS NZU payments will reflect its nil earning ability and will be low for this reason.

Insert 1: B+LNZ Economic Services analysis using data from the B+LNZ Economic Service Sheep and Beef Farm Survey

67 B+LNZ's view is therefore that the types of policy signals sent and proposed by the Government effectively distort markets and are driving to intentional significant land-use changes. B+LNZ is strongly concerned about this prospect, particularly because the material supporting the proposal fails to include any analysis of the social and economic impacts on both current and future generations that are likely to occur as a result of the $25 fixed price option being removed and uncertainty about the volume of NZUs that will be available for forestry offsets.

Impacts section of the discussion document: concerns over land-use changes and impacts on farmers and rural communities

68 As expressed in its written submission and oral presentation to the Environment Select Committee on the ETR Bill, B+LNZ is deeply concerned with the significant incentives the ETR Bill and ETS operational settings will provide for large-scale afforestation of plantation forestry and carbon forests on profitable sheep and beef farmland, and the flow-on impacts these land-use changes will have on farming families and rural communities.

69 These concerns have been compounded by the fact that to date the Government has provided little evidence or analysis on quantifying and/or qualifying the socio-economic impacts of these legislative and policy proposals on regions and communities. This is despite the fact that the Government is now clearly stating that significant land-use changes will occur on sheep and beef farms in the short- to medium-term as a result of these proposals:

> *"Impacts that the emissions price has on land-use change, such as conversion of farm land to forestry, have the potential to be material. The level of sequestration that could be achieved by planting commercial forestry is significant. The most likely changes in the short- to medium-term are the conversion of sheep and beef farming land to forestry.*
>
> *The scale of such conversions and associated unit supply into the ETS are potentially large in comparison with New Zealand's gross emissions. As such, the price at which conversion to forestry becomes cost-effective could set the emissions price in New Zealand for many years."*[16]

70 The document then goes on to say that:

> *"Further discussions about impacts on land-use change and the effect of forestry offsets on ETS emissions prices need to take place. The Climate Change Commission has been given a mandate within the development of its emissions budgets to consider the role that forestry should play in helping us to meet our future emissions budgets"*

[16] This is evidence on pages 68-69 of the consultation document.

71 B+LNZ judges it unacceptable that the Government simply states that these policy proposals are likely to have significant impacts on the sheep and beef sector, without quantifying or qualifying these statements, and simply stating that *"further discussions are required"*. B+LNZ questions how decision-makers, stakeholders and New Zealanders can be expected to make informed submissions when evidence of such impacts – benefits, costs and probabilities/risks – is not presented in consultation material, or in regulatory impact material that is legally required to support policy and legislation proposals. B+LNZ believes that if implemented these proposals will result in disproportionate impacts on extensive farming systems in relation to more intensive systems, and which are in excess of their environmental effects. These proposals will distort market signals and drive significant shifts in land-uses around New Zealand.

72 B+LNZ recognises that the ETS is currently New Zealand's main instrument to control GHG emissions and help achieve the international commitments that New Zealand has made. However, as currently proposed and with no constraint on the volume of forestry offsets available to participants in the scheme, the ETS settings will assist those entities that emit high levels of carbon dioxide to offset their emissions through forestry, rather than making significant reductions in their absolute gross emissions. As such, we believe the ETS will not put in place a policy framework that will drive absolute reductions in GHG emissions from the use of fossil fuels.

73 Converting land, in particular good pastoral land, to forestry to offset carbon dioxide emissions is only a short-term solution, but one which carries significant risks for farmers, rural communities, the local economies they support, and to the environment. As stated by the Parliamentary Commissioner for the Environment, this short-term solution could be at the expense of delaying serious action on reducing gross carbon dioxide emissions. Yet these forest 'sinks' are themselves vulnerable to the damage climate change is expected to inflict.[17] NIWA is for example forecasting a 400-fold increase for fire risk with large-scale afforestation of exotic species.[18]

74 Additionally, New Zealand is a small economy by global standards that depends on trade and access to world products for its standard of living. While New Zealand is similar to other developed economies in that the service sector accounts for around 80 per cent of its GDP, the Primary Sector accounts for around 8 per cent of the New Zealand economy and 11 per cent is in the secondary-manufacturing sectors, which includes meat and wool processing.

75 Within the Primary Sector, the red meat sector (livestock production and red meat processing) contributed 4.7 per cent to GDP in 2018. This is not trivial. It was the 10th largest of 31 sectors in the economy. The nine sectors larger than Agriculture were all in the Service Sector.

76 B+LNZ notes that the Government's latest[19] projections of the country's GHG emissions assume that sheep, beef and deer farmland will reduce by nearly 20% from current

[17] Parliamentary Commissioner for the Environment, 2019. *Farms, forests and fossil fuels: The next great landscape transformation?* Wellington.
[18] Climate Change Risk Assessment and Adaptation workshop, Wellington, 2019.
[19] Ministry for the Environment, 2019. New Zealand's Fourth Biennial Report to the United Nations Framework on Climate Change.

levels by 2035 (from approximately 8.3 million hectares to 6.9 million hectares), and the area of annual afforestation will increase by 330–670% (depending on scenarios) over the same timeframe (from 6,500 hectares in 2017 to 28,000–50,000 hectares in 2035).

77 Overall, a 20% decrease in sheep, beef and deer grazing area would cut annual export receipts by $2.2 billion at 2018-19 export prices – $1.4 billion at the farm gate (62%) and $0.8 billion (38%) added value from farm to export or local use at export prices (i.e. domestic-use excluding retail margins).[20]

78 Yet, B+LNZ has not seen any information or analysis from the Government quantifying its expectations of:

- Which regions of the country would be affected by these land-use changes;
- The magnitude of the impacts in those regions;
- The socio-economic benefits and costs that land-use changes of this scale will bring to pastoral farming families, the rural communities and economies they are part of;
- The socio-economic benefits and costs that land-use changes of this scale will bring to New Zealand;
- The risks that such a heavy emphasis on short-term offsets could create for long-term shifts in carbon emissions.
- The risk from switching $2.2 billion of overseas exchange earnings being replaced with NZD-denominated NZUs and the flow-on impact to social wellbeing, e.g. higher imported fuel prices in NZD terms may reduce fuel consumption but will make imported battery cars dearer.

79 For the reasons in this submission, B+LNZ considers the analysis that supports the ETS settings proposals is inadequate.

80 B+LNZ requests the Government urgently establishes a forum that Ministers attend to discuss the socio-economic impacts of these proposals on sheep and beef farmers and the rural communities and economies they support.

81 Note that B+LNZ has commissioned some analysis which examines the effects of policy changes on New Zealand's regional areas on aspects like unemployment and income. The preliminary results suggest there is significant variation between regions. We would welcome the opportunity to share the results with officials and Ministers when they are available.

[20] Statistics New Zealand 2017 Agricultural Census, Sheep, Beef and Deer grazed areas plus crop area usually grazed by livestock within crop rotations.

CONCLUSION

82 To conclude, B+LNZ supports the Government's intent to amend the emissions trading legislation and the operational setting of the Emissions Trading Scheme where it will lead to real, absolute reductions of gross carbon dioxide emissions.

83 B+LNZ however has a number of concerns with the proposals and requests further engagement with officials to ensure that the decision that are taken now, and which will have long-term impacts on the New Zealand economy and in particular on the sheep and beef sector and the rural communities and economies the sector supports, are made with full understanding of these impacts.

84 B+LNZ is particularly concerned about the short timeframes for consultation on the emissions trading legislation, as this legislation is technical, intricate and complex. B+LNZ also questions the timing of the consultation on the ETS operational settings, without having full clarity on where the legislation (the ETR Bill) will land.

85 B+LNZ supports the Government's intent of setting a provisional emissions budget should the ETR Bill be enacted before the Climate Change Commission provides its advice on the first three emissions budgets under the Zero Carbon Act.

86 However, B+LNZ is disappointed that the proposed approach for the provisional emissions budget does not reflect the split-gas approach taken for the targets under the Zero Carbon Act, and asks the Government to reconsider this approach.

87 Additionally, B+LNZ does not believe that the ETS will be effective at reducing absolute emissions of carbon dioxide from fossil fuel use if no restrictions are placed on the volume of emissions that can be offset through carbon sequestration. B+LNZ reiterates its request for limits to be placed on a) the volume of emissions that ETS participants can offset by using NZUs from forestry activities, and b) restrictions on the annual amount of NZUs that the Government provides to participants for forestry activities.

88 B+LNZ believes that without these limits there is a significant risk of perverse outcomes and unintended consequences from these proposals. As currently presented, these proposals will provide huge incentives for large tracts of New Zealand's landscapes to be converted to plantation forestry and carbon farming activities. These land-use changes will be to the detriment of sheep and beef farmers, and the rural communities and economies they are integrally a part of.

89 B+LNZ is extremely concerned by the lack of analysis provided in the consultation material on the reform of the ETS in New Zealand on the impacts that New Zealand can expect on its economy, society, and its way of life. B+LNZ requests to be able to urgently engage with officials on these issues, before final decisions are made on legislation that will be transformative for New Zealand.

ABOUT BEEF + LAMB NEW ZEALAND LTD

90 Beef + Lamb New Zealand (B+LNZ) is the farmer-owned organisation representing New Zealand's sheep and beef farmers. It is the organisation with the legal mandate to speak on behalf of New Zealand sheep and beef farmers. B+LNZ is funded under the Commodity Levies Act 1990 through a levy paid by producers on all cattle and sheep commercially slaughtered in New Zealand. B+LNZ's purpose is to provide insights and actions that drive tangible impact for farmers.

91 The contact for this submission is:

Corina Jordan
Environment Strategy Manager
Beef + Lamb New Zealand
Phone: 027 202 7337
Email: Corina.Jordan@beeflambnz.com

APPENDIX 1:

Submission to the Environment Select Committee on the Climate Change Response (Emissions Trading Reform) Amendment Bill

APPENDIX 2:

Statement delivered by B+LNZ to the Environment Select Committee on the Climate Change Response (Emissions Trading Reform) Amendment Bill

To the:	ENVIRONMENT SELECT COMMITTEE
On the:	CLIMATE CHANGE RESPONSE (Emissions Trading Reform) AMENDMENT BILL
By:	BEEF + LAMB NEW ZEALAND LTD

STATEMENT

Dated 30 January 2020

INTRODUCTION

1. Good afternoon, thank you for the opportunity to talk in support of our written submission on the Emissions Trading Reform Bill. My name is Cros Spooner, I am the Chief Operating Officer for Beef and Lamb New Zealand. I have Dylan Muggeridge, Environment Policy Manager – North Island, accompanying me today.
2. B+LNZ is an industry-good body funded under the Commodity Levies Act through a levy paid by producers on all cattle and sheep slaughtered in New Zealand. Our vision is 'Profitable farmers, thriving farming communities, valued by all New Zealanders'.
3. Our organization is actively engaged in environmental management, with a particular emphasis on building farmers' capability and capacity to support an ethos of environmental stewardship, as part of a vibrant, resilient, and profitable sector based around thriving communities.
4. Our farmers have strong environmental credentials already. Collectively, the sheep and beef sector's greenhouse emissions are 30% lower than in 1990, and the emissions intensity (emissions per kg of product) has improved at the average rate of about 1% per year since 1990. Additionally, sheep and beef farmers manage 2.8 million hectares of native habitat, including 1.4 million hectares of native forest between them. This is the second largest holding of native forest and native biodiversity – bettered only by the Crown estate.
5. Protecting and enhancing New Zealand's natural capital and economic opportunities and the ecosystem services they provide is fundamental to the sustainability of the sector and to New Zealand's wellbeing for current and future generations.

6. We will take our written submission as read by members. However, there are a number of points that we want to emphasise here today – I will hand over to Dylan to talk to these.

FEEDBACK ON THE BILL

7. Firstly, B+LNZ supports changes to the emissions trading legislation that will lead to actual reductions of carbon dioxide emissions by ETS participants. This is in line with our position that actual, real reductions of carbon dioxide from fossil-fuel users across the economy are required, as recognised by science.
8. Reducing absolute emissions of carbon dioxide is critical for New Zealand to meet the 2050 target of reducing emissions of long-lived gases to net zero—and we acknowledge that a number of amendments contained in this Bill – including removing the $25 fixed price option, and introducing a cap on emissions covered by the ETS—should in theory lead to reductions of gross carbon dioxide emissions, which we welcome.
9. We are however very concerned about provisions in this Bill that will provide significant incentives for fossil fuel users to simply offset their emissions of carbon dioxide through large-scale afforestation of plantation forestry, and investments into carbon farming. We do not believe these types of incentives will serve New Zealand right in achieving the climate change objectives set by the Government, and the contribution New Zealand needs to make to the global effort. They are likely to simply enable New Zealand to continue to buy its way out of de-carbonisation.
10. Offsetting carbon emissions is only a short-term solution, and one which carries significant risks for farmers, rural communities, the local economies they support, and the environment.

11. As stated by the Parliamentary Commissioner for the Environment last year, this short-term solution is at the expense of delaying serious action on reducing gross carbon dioxide emissions. In addition, these forest sinks are themselves vulnerable to the damage climate change is expected to inflict, including increased risks of large-scale fires.
12. It is in our view essential that restrictions are placed on the amount of carbon dioxide that can be offset through the ETS in order to achieve New Zealand's climate change commitments and to ensure the social, economic, and environmental wellbeing of our rural communities. We therefore request the select committee to introduce provisions that will limit the volume of carbon dioxide emissions that can be offset through the scheme.
13. Large-scale afforestation of plantation forests and carbon farming, by their very nature, bring with them some significant land-use changes. We are extremely concerned that this will be to the detriment of our farmers, and the rural communities they are integrally part of.
14. A recent case study we commissioned in the Wairoa District shows that the land-use change from sheep and beef farming to plantation forestry and carbon farming would have some significant impacts on local employment and direct local expenditure.[21]
15. We are disappointed and concerned about the lack of analysis that has been provided by government agencies on the expected socio-economic impacts from the land-use changes we can expect to see arising from this Bill, and from other environmental policy and legislation currently considered by the Government, for example on freshwater and biodiversity management.

[21] sheep and beef farming generates 7.4 jobs per annum per thousand hectares, compared to 2.2 jobs per year per thousand hectares for forestry (excluding the year of harvest). In addition, sheep and beef farming in that district generates a regular direct local expenditure of $316,000 per annum per 1,000ha compared to $107,000 per year per 1000ha for plantation forestry, and $27,500 per year for carbon farming.

16. We note that through the Zero Carbon Act both the Minister for Climate Change and the newly established Climate Change Commission must have regard to the following matters, in section 5ZC of the Act:
    a. The likely impact of actions to achieve an emissions budget and the 2050 target;
    b. The distribution of those impacts across regions and communities of New Zealand, from generation to generation; and
    c. The implications, or potential implications, of land-use change for communities.
17. We do not believe that due consideration has been given to these matters before this Bill was introduced for its first reading.
18. We therefore ask this select committee, before it concludes its deliberations on this Bill, to urgently request the Minister to task the Climate Change Commission to provide advice on:
    a. The likely impacts of the ETR Bill and changes to the ETS, as the ETS is the Government's key action that will help achieve the 2050 target;
    b. The distribution of those impacts across regions and communities of New Zealand from generation to generation; and
    c. The implications, or potential implications, of land-use change arising from this Bill and from changes to the ETS for communities.
19. We also encourage this select committee to request additional information from officials on the expected socio-economic impacts of this Bill on farmers and rural communities, as well as the cumulative impacts of climate change, freshwater and biodiversity policy before it concludes it work.

FEEDBACK ON HE WAKA EKE NOA

20. B+LNZ welcomed the Government's decision in October 2019 to select He Waka Eke Noa – the primary sector climate change commitment – as the preferred approach to managing GHG emissions from the agriculture sector.
21. We wish to reiterate our commitment to He Waka Eke Noa and to making rapid progress on its implementation. We therefore welcome the introduction of He Waka Eke Noa into this Bill.
22. We also reiterate our disappointment, which was expressed at the time of the Government's announcement to include 'backstop' provisions in the ETR Bill, with the proposed introduction of agriculture into the ETS should the Government judge that insufficient progress has been achieved on the implementation of He Waka Eke Noa by 2022. B+LNZ opposes these changes and requests the Select Committee remove these provisions from the Bill.
23. We confirm our opposition to agriculture being brought into the ETS, particularly as He Waka Eke Noa offers a unique opportunity to designing and implementing a pricing mechanism that is practical and cost-effective for reducing agricultural emissions at the farm level by 2025.
24. We provided some specific suggestions in our written submission to improve provisions on He Waka Eke Noa which we invite the select committee to consider.
25. One particular point we wish to emphasise however, is that we consider the ability of our farmers to be able to recognise the sequestration that is happening on-farm, from vegetation and land parcels that do not meet the definition of a forest under the ETS, as being a key to the success of He Waka Eke Noa. We have therefore made some specific wording suggestions in our submission to ensure that appropriate methodologies are

developed as part of He Waka Eke Noa to recognise on-farm sequestration from different types of vegetation.

CONCLUSION

26. To recap, we support the policy intent of this Bill to amend the ETS where it leads to absolute reductions of carbon dioxide from fossil-fuel users.
27. However, B+LNZ has significant concerns about the incentives this legislation will provide for ETS participants to simply offset their carbon dioxide emissions through sequestration from forestry, rather than actually reducing those emissions. In our view this is inconsistent with the Government's policy objectives on climate change, and also with the long-term efforts New Zealand has to make to contribute to the global effort on climate change.
28. We therefore request the select committee to introduce provisions that will limit the volume of carbon dioxide emissions that can be offset through the scheme.
29. We believe this legislation will lead to significant amounts of land-use changes in New Zealand's rural areas, which are likely to be devastating for the sheep and beef sector and for the rural communities our farmers are integrally a part of.
30. We are disappointed by the lack of supporting analysis and material on the expected amounts of land-use changes, and on the socio-economic impacts these land-use changes are expected to have on rural communities across New Zealand. We urge the select committee to request further information on these impacts from officials, and from the Climate Change Commission, consistent with requirements under the Zero Carbon Act.
31. Finally, we thank you for the opportunity to submit on behalf of sheep and beef farmers today, and remain available to assist the select committee with its deliberations on this Bill over the course of the next few months.