BEFORE THE MINISTER FOR THE ENVIRONMENT

IN THE MATTER OF the Resource Management Act 1991 ('the Act')

AND

IN THE MATTER OF of the Draft National Policy Statement for Indigenous Biodiversity

EVIDENCE OF SALLY STRANG ON BEHALF OF THE NEW ZEALAND FOREST OWNERS ASSOCIATION

Date: 13 March 2020

Presented for filing by:

Forest Owners Association
Venise Comfort
Forest Owners Association
9/93 The Terrace
Wellington 6011
T 04 473 4769
E venise.comfort@nzfoa.org.nz

INTRODUCTION

1 My full name is Sally Barker Strang. I hold the qualification of Bachelor of Civil Engineering. I have 19 years experience in environmental management roles in plantation forestry. I am currently employed as Environment Manager for Hancock Forest Management (NZ) Ltd (HFM NZ) a position I have held for 13 years. Prior to this I worked for Carter Holt Harvey Forests for 6 years in environmental roles (Environmental Forester and Environmental Manager).

2 I am currently the Chair of the New Zealand Forest Owner's Association Resources and Environment Committee and I am a member of the NZ Institute of Forestry.

3 Through my role as Environment Manager for HFM NZ and previously Carter Holt Harvey Forests, I have had involvement in all aspects of environmental management related to forestry operations. This has included:

(a) Industry input to the development of regulation for the plantation forestry sector.

(b) Prioritising the funding of research to better understand ecological values within our plantation forests and the use of the forest by key species.

(c) Providing industry input to the development of best practice guides for key species in collaboration with relevant specialists (falcon, long-tailed bats and kiwi).

(d) Developing and overseeing HFM NZ's network of stewardship projects to maintain and where possible enhance biodiversity values within our forests.

(e) Developing and maintaining our company Environmental Management Systems to ensure our operations are carried out in compliance with relevant environmental regulations and the requirements of our third party certification.

4 I was a member of the working group that developed the National Environmental Standards for Plantation Forestry (NES PF) and I am currently a member of the Stakeholder Implementation Working Group undertaking a one year review of the NES PF.

5 I was a member of the Stakeholder Reference Group for the current review of the New Zealand Biodiversity Strategy.

6 . Through my role I am familiar with the requirements of both FSC ® (Forest Stewardship Council) and NZS AS 4708 *NZ Standard: Sustainable Forest Management* endorsed by PEFC (Programme for the Endorsement of Forest Certification). I am currently a NZ representative on the trans-Tasman working group reviewing NZS AS 4708.

7 I have read the Environment Court's Code of Conduct and agree to comply with it. My experience and qualifications as an expert are set out above. I confirm that the issues addressed in this statement of evidence are within my area of expertise.

8 The data, information, facts and assumptions I have considered in forming my opinions are set out in the part of the evidence in which I express my opinions. I have not omitted to consider material facts known to me that might alter or detract from the opinions I have expressed.

SCOPE OF EVIDENCE

9 In my evidence I address the following issues:

(a) Overview of environmental values that typically exist within plantation forests

(b) Management of biodiversity values within plantation forests

(c) Forest Owners Associations involvement in the Biodiversity Collaborative Process (BCG)

(d) Our concerns with the approach of the proposed approach of the NPS IB

(e) Unintended consequences of the NPS IB

(f) Potential costs to landowners

(g) Proposed alternatives

EXECUTIVE SUMMARY

10 The Forest Owners Association (FOA) supports the goals of the Draft NPS IB. It is now well understood that plantation forests provide valuable habitat for many indigenous species through the different stages of the growing cycle. The fact this can be achieved within a working productive land use is extremely positive from a biodiversity aspect, increasing the range of habitat available for such species. The FOA and our members have collectively expended a significant amount of effort to support biodiversity restoration through many local biodiversity inititiatives along with research and development of best management guidance at a national level.

11 The FOA is very concerned at the approach proposed in the NPS IB that it will introduce significant costs to the industry, potentially will little benefit. To the contrary we believe the approach could deter biodiversity initiatives in plantation forests.

12 Our key concerns with the proposed NPS IB are:

(a) The potential for productive forest areas to be identified and regulated as Significant Natural Areas (SNAs) and therefore encounter excessive regulation, costs and delays at harvest time, with the potential for harvesting to be prevented.

(b) Broadening of the SNA criteria such that almost any indigenous vegetation would meet the SNA criteria and would therefore be protected, including vegetation growing under and around a plantation forest during the growing cycle. Protection of this newly grown vegetation could make the forest inaccessible and unharvestable.

13 As it stands the NPS IB creates significant uncertainty for the forest industry and the potential for significantly escalated costs of doing business

associated with consenting processes, none of which will benefit biodiversity values.

14 The NPS IB perversely will penalise those landuses that support higher biodiversity values and therefore deter voluntary efforts to enhance biodiversity values and deter planting.

15 While the NPS IB has attempted to resolve some of these concerns through a special category of SNA for plantation forests (Plantation Forest Biodiversity Areas), the intent of this provision is not at all clear. The result is a high potential for protracted, expensive and repetitive consenting processes and significantly increased costs jeopardising the economic viability of plantation forestry.

16 We propose an alternative approach that recognises the clear difference between naturally occurring indigenous vegetation remnants that require full protection in perpetuity, and species making adventive use of planted productive exotic vegetation. We also propose that measures for managing habit values within plantation forestry are best developed at a national level, utilising best information, resources and science, and ideally outside of regulatory processes as has been progressively undertaken to date.

17 We believe this approach is far more efficient and effective than delegating decision making to district councils that lack the required resourcing and expertise. This approach recognises the significant efforts made by the industry to date and aligns and support biodiversity goals. Importantly it will remove from the NPS IB the strong disincentive for forestry companies to undertake voluntary initiatives to improve biodiversity outcomes.

INTRODUCTION

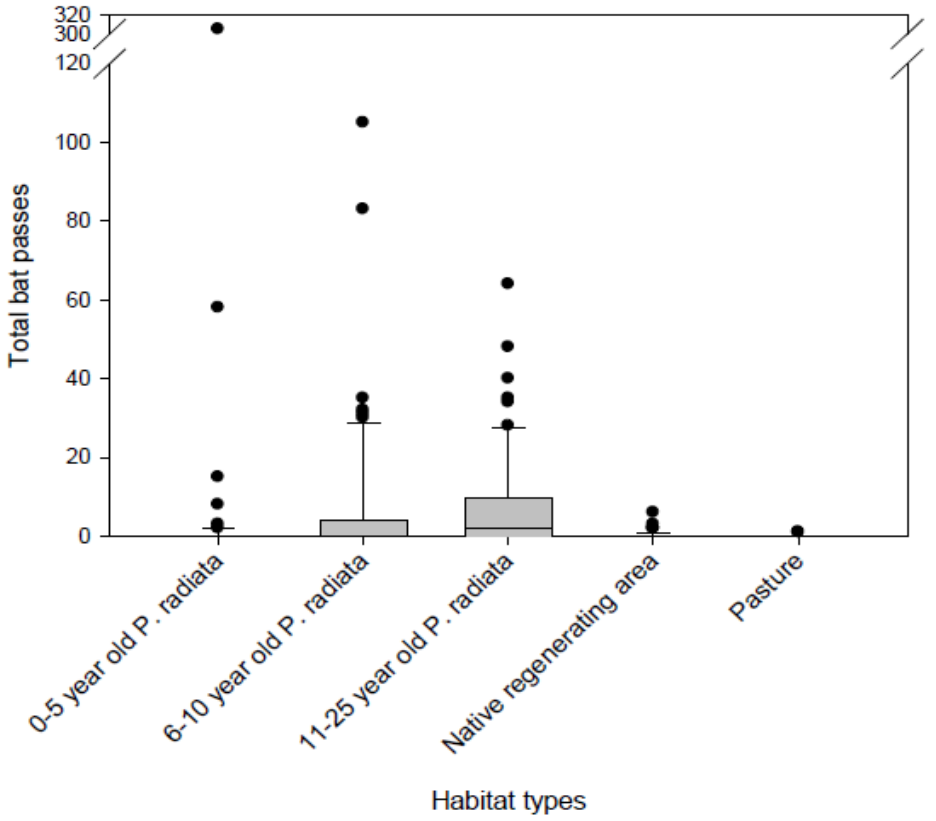
18 **The New Zealand Forest Owners Association Incorporated (FOA)** is the representative membership body for the commercial plantation forest growing industry. FOA members are responsible for the management of approximately 1.2 million hectares of New Zealand's plantation forests and over 80 % of the annual harvest. FOA is submitting on behalf of their national membership.

BIODIVERSITY IN PLANTATION FORESTS

Indigenous Fauna

19 In the past exotic plantation forests were generally considered to have very low biodiversity values and were often referred to as 'mono species' plantations, with the assumption that they provided very little if any habitat for indigenous species. Despite observations of a number of indigenous species in the pine forests, it was generally assumed by ecologists that these species were predominantly living in indigenous forest remnants embedded within the exotic forest.

20 Over recent decades a lot of work by ecologists, researchers, students and forestry companies has confirmed this is not the case, with a wide range of indigenous species confirmed to inhabit plantation forests. Research projects such as the long-tailed bat studies in Kinleith Forest and NZ Bush Falcon studies in Kaingaroa Forest have confirmed that a range of key species have found a niche habitat within working plantation forests, and are successfully living and breeding in exotic forests, in some instances in higher numbers than in the surrounding indigenous forests. By way of example the following graph is taken from the PhD study by Kerry Borkin, showing bat pass numbers in different vegetation types in Kinleith Forest in the Central North Island.



Bat passes in different vegetation types, Kinleith Forest (source: Kerry Borkin PhD thesis, Ecology of NZ's Long-tailed bats in exotic plantation forest, 2010)

21 Plantation forests have been confirmed through surveys and studies to be providing habitat for a large number of threatened and at risk indigenous species including North Island brown kiwi, NZ bush falcon, long-tailed bats, weka, hochstetters frogs, long-tailed cuckoo, NZ robin, rifleman, whiteheads, kaka and kea. A further range of species utilise the waterways and indigenous forest remnants within plantation forests.

22 A commonly held view is that plantation forests provide habitat only during the growing phase with the habitat destroyed at harvest time. Unquestionably some of the species that utilise the mature forest lose their localised habitat at harvest, particularly if they are roosting or nesting within mature stands. However for some species it is the disturbance created by harvesting that actually creates the range of conditions to provide the habitat they require. Some ecologists have postulated that harvesting mimics natural disturbance that would have occurred in native forests due to storm

damage, and is therefore being exploited by the same species that would have utilised such areas.

23 Many of the species that inhabit plantation forests are insect feeders, or prey on insect feeding species. The plantation forest cutover is full of woody matter which breaks down and in turn rapidly attracts a wide range of invertebrate species providing an abundant food source for insect feeding species. For species such as falcon and long-tailed bats, the interface between mature stands and cutover is a particular niche habitat that provides the nesting and foraging habitat they require. Based on the studies a plantation forest without any harvest would not necessarily create greater biodiversity values – it would benefit some species, but would be detrimental to others. A key factor for survival of many species is the ongoing supply of a range of forest age classes to provide for their habitat needs.

Indigenous Flora

24 Commonly plantation forests were established due to the land being unsuitable for farming, typically due to geology, topography or soil limitations. As a result plantation forests are generally on steeper terrain and have areas of land that are not suitable for productive use. Any indigenous remnant vegetation that existed at the time of planting has generally been set aside as indigenous forest reserves. This has been added to over time by areas that are retired from production either at establishment or in subsequent rotations.

25 A particular feature of exotic forestry in New Zealand is that the trees species planted do not tolerate wet ground conditions. For production forestry it is not practical or economic to construct and maintain a network of effective drains to drain wet land to put it into production. As a result production forestry is one of the few (possibly only) productive land uses that has the full extent of original wetlands remaining intact. If anything the extent of wetlands is generally increased due to the creation of fire ponds that regenerate into wetland species over time.

26 In the past native forest clearing was undertaken to establish plantation forests. This was effectively stopped by the signing of the NZ Forest Accord

in 1991, a voluntary agreement between the FOA and a number of environmental groups that protects indigenous vegetation from clearance for conversion to plantation forest. This has been replicated by more recent mapping of some of the indigenous vegetation remnants as significant natural areas (SNAs) under section 6(c) RMA with associated protection rules. For companies certified to FSC or PEFC, this is further reinforced by requirements to identify and set aside areas of high biodiversity value. As a result, for plantation forestry there is now a clear delineation between the productive forest area, that is a working environment periodically clearfelled and replanted, and the reserve areas that are set aside and protected from disturbance as far as is practical. This is accepted by the industry. The only disturbance is at the margins between remnants and production areas where inevitably some localised temporary damage will occur at harvest time. In such areas the reserve boundaries are maintained and any temporary damage to reserve areas left to regenerate.

MANAGEMENT OF BIODIVERSITY VALUES IN PLANTATION FORESTS

27 Many FOA members have a range of biodiversity initiatives underway in their forests, both for voluntary reasons (desire to contribute positively to biodiversity outcomes) and to meet the requirements of FSC and/or PEFC certification. Biodiversity initiatives are wide ranging from undertaking species surveys, to threatened species and reserve restoration projects, , predator control and in some instances financial or in kind support for local biodiversity initiatives. By way of example, FOA surveyed a selection of our larger members and a list of their key stewardship projects is attached as **Attachment 1**.

28 Management of North Island Brown Kiwi in Northland has been a particularly successful example of a broader scale initiative, with forestry companies working together with species experts from Kiwis for Kiwi and Kiwi Coast along with regulators and DOC to protect kiwi over large areas of Northland, including within plantation forests. A short case study of kiwi management in Northland from a forestry perspective is provided as **Attachment 2**. Also attached to my evidence is a letter from the coordinator of the Northland Kiwi Forum that comments on the significant voluntary contribution from larger

forestry companies and farm foresters to enhance kiwi survival within plantation forest (**Attachment 3)**.

29 Forestry companies have individually and collectively contributed to a number of key research projects that have improved understanding of the use of plantation forests by key species. Falcon have been a particular focus with two PhD studies of falcon populations in Kaingaroa Forest now completed, and a research study currently underway in plantation forests in Otago, supported by forestry companies and the NZ Forest Levy Trust.

30 Similarly Masters and PhD theses in of long-tailed bat populations in Kinleith Forest supported by forestry companies, extended understanding of long-tailed bat use of plantation forests. These studies confirmed for the first time bats roosting and raising young within the pine forest.

31 FOA has engaged Wildland Consultants to collate information about species utilising the production forest to members and this is made available through the Rare Species website at https://rarespecies.nzfoa.org.nz. The information on this website is intended to educate members on what species may be occupying their forests and how best to go about managing them.

32 The FOA Resources and Environment Committee has recognised the need to develop best practice guidance for the management of key species and has made it a priority to work with species experts to develop species management guides for forestry companies. To date forestry guides have been produced for NZ Brown Kiwi (in conjunction with Kiwis for Kiwi), NZ bush falcon (in conjunction with Wingspan Birds of Prey Trust), Long-tailed bats (produced for NZFOA by Wildland Consultants) and Kea (in conjunction with the Kea Conservation Trust). It is the FOAs intention to build on this work with further species guides in future.

33 60% of the area of plantation forest in New Zealand is managed by companies that are voluntarily certified to FSC® (Forest Stewardship Council). The FSC Principles and Criteria and the FSC NZ National Standard have a range of specific requirements relating to the identification and protection of biodiversity values.

National Environmental Standard for Plantation Forestry

34 The NES PF includes rules to protect indigenous bird nesting in production forests. Regulation 102 contains rules relating to the protection of nest sites for any bird species with a threat classification of nationally critical, nationally endangered or nationally vulnerable along with North Island brown kiwi, Eastern falcon, Bush falcon and North Island weka. This is the first time such rules have been incorporated into RMA plan rules relating to plantation forestry, or as far as I am aware any landuse.

35 The NES PF is currently under review and is planned to be further reviewed periodically going forward. These reviews provide the opportunity to align provisions of the NES PF with the NPS IB once finalised. It is the FOAs preference that where possible, rules relating to forestry are applied consistently through the NES PF rather than a plethora of varying approaches through district plans.

NZFOA INVOLVEMENT IN THE BIODIVERSITY COLLABORATIVE GROUP PROCESS

36 Two FOA representatives were involved in the Biodiversity Collaborative Group process. Early on they expressed concerns with the direction that was being proposed. A particular area of concern was the implications for plantation forestry of productive areas of vegetation being identified and mapped as SNA (due to meeting the SNA criteria) and therefore encountering the full range of current SNA protection measures designed to protect indigenous forest remnants. When coupled with policies requiring protection from disruption, fragmentation etc this could clearly have rendered large areas of plantation forest unable to be harvested (as now acknowledged in the discussion document). For obvious reasons this was not a tenable outcome for the FOA.

37 Numerous meetings took place. As Chair of the Resource and Environment Committee I became involved in the latter stages attempting to find a mutually acceptable resolution. Unfortunately this could not be achieved and as a result the report of the BCG details a number of key areas where FOA did not support specific recommendations of the BCG.

DRAFT NPS IB APPROACH

38 FOA is funadamentally supportive of the intent of the NPS IB and the desire to improve biodiversity outcomes for indigenous species. All of the FSC and PEFC certified forest owners have undertaken a considerable amount of work to understand and manage the biodiversity values within their forests. As evidenced by the list within **Appendix 1**, forest owners are voluntarily undertaking a wide range of initiatives to improve biodiversity outcomes both within their forests and in some instances on adjacent land.

39 The FOA is supportive of the need to protect remaining remnants of original indigenous vegetation from clearance. As noted above, the forest industry signed up to this approach many years ago through the NZ Forest Accord. We understand that original remnants of the vegetation that once occurred in New Zealand are precious and deserving of protection from clearance. FOA is supportive of developing consistent criteria for identifying significant indigenous vegetation and for consistent mapping of areas that meet the criteria across the country. Arguably this should have been completed decades ago to avoid the duplication of effort that has already taken place.

40 FOA also supports consistent criteria for identification of significant habitats of indigenous fauna however as further outlined below we do not support this being managed through the same mechanisms as significant indigenous vegetation.

CONCERNS WITH THE DRAFT NPS IB APPROACH

41 NZFOA has the following key concerns with the Draft NPS IB:

1. Potential for planted production forests to be identified as SNA and therefore captured by an established regulatory process that is designed to protect indigenous forest remnants and therefore not fit for purpose for the regulation of planted productive vegetation.

42 SNAsis a term that has been developed by Regional and District Councils through their plan development, to describe areas that meet the definition of section 6(c) of the RMA (areas of significant indigenous vegetation and significant habitats of indigenous fauna). While many current SNA criteria lists in regional or district plans refer to ‘habitat’, to date SNA mapping has almost exclusively been applied to indigenous vegetation remnants.

43 As far as we are aware to date only one area of exotic plantation has been intentionally mapped as SNA (the Iwitahi Native Orchid Protection Area in Pinus Nigra stand within Kaingaroa Forest). In some instances exotic forest has been mistakenly included in SNA maps. When this has been raised with District Councils they have corrected their mapping boundaries to remove plantation forest and/or included rules in their district plan to specifically allow for the harvesting and replanting of plantation forest as a permitted activity (to account for mapping errors).

44 As a result the SNA rules in existing regional and district plans have been developed specifically for the protection of areas of remnant indigenous vegetation that can be identified and mapped. The rules generally specify protection from clearance, damage or disturbance, with limited exceptions for small scale activities.

45 The proposed SNA criteria in the NPS IB which expand the descriptions relating to habitat certainly opens the way for the majority of production forests to meet the definition of an SNA, due to the presence of one or more threatened or at risk species commonly found in plantation forests.

46 Applying SNA rules to planted productive vegetation becomes immediately problematic for obvious reasons. The regulatory approach of protecting such areas from clearance is clearly not suitable for an industry that is reliant on harvesting of that vegetation to make an economic return.

47 At a practical level implementation of the SNA approach to large areas of production forest will be difficult. Even the identification and mapping of indigenous vegetation remnants in our forests has been a time consuming and costly exercise for District Councils where it has been undertaken. Applying the same approach to habitat in production forests will be exponentially more difficult. Plantation forests cover large areas with difficulty of access during the growing phase. Numerous species are known to be potentially present, some relatively permanently in one location (eg hochstetters frogs), others move around age classes within the forest (eg long tailed bats and falcon) and others pass through at certain times of the year (eg kaka and longtailed cuckoos).

48 To confirm this habit as SNA will require ecologists to identify spatially where the SNA criteria are met on the ground. Even for stationary species such as frogs this will be difficult and time consuming. When applied to mobile species it becomes near impossible and the habitat mapping created one year would be incorrect the next.

49 For production forests there is the added issue that the NES PF rules were also developed with the assumption that any SNA areas would be indigenous forest remnants (based on current regional and district plans). The NES PF contains numerous references to SNA vegetation including:

- Regulation 6(2)(b) ability for Regional and District Councils to write more stringent rules for SNAs
- Regulation 20(2)(c) earthworks spoil cannot be disposed of within an SNA
- Regulation 43 stream crossings not be constructed within an SNA
- Regulation 55(1) overburden from quarries not to be disposed of within an SNA
- Regulation 78 replanting cannot be closer than the stumpline to an adjacent SNA
- Regulation 79 wilding conifers have to be eradicated from within any SNA at the time of replanting
- Regulation 93 indigenous vegetation clearance is entirely crafted based on the assumption that any SNA is indigenous vegetation
- Schedule 3 requirement for harvest plans to identify and map SNAs

50 If the plantation forest itself were to be identified as SNA then the NES PF becomes largely unworkable, with nearly all activities requiring resource consent due to them taking place 'within an SNA'. Many of the SNA regulations become non-sensical eg requiring removal of wilding conifers from within a productive stand of the same species.

51 Clause 3.10 of the Draft NPS IB creates a separate type of SNA being a Plantation Forest Biodiversity Area (PFBA) and states that clause 3.9 does not apply to plantation forestry. This is clearly a positive step given that clause 3.9, applied literally, would have prevented harvest.

52 The discussion document He Kura Koiora i Hokia section clearly identifies the issue on page 48 where it states… *If the SNA management approach of clause 3.9(1) were to apply, forestry harvest would likely not be possible in many parts of the country, as it would be impossible to avoid the four adverse effects to the SNA within plantation forests. This would have a significant impact on the economic viability of those forests, which can also provide important environmental benefits for emissions, erosion and water quality while they grow.*

53 The discussion document then goes on to say….. *PFBAs are not to be managed as SNAs under either the proposed NPS IB or the NES PF and the standard effects management regime in clause 3.9 of the proposed NPS IB would not apply.*

54 The Draft NPS IB text does not align with the discussion document interpretation. Clause 3.10 simply states that Clause 3.9 does not apply. The Draft NPS IB does not contain any provision that states that SNAs are not to be managed as SNA under the remainder of the NPS IB or the NES PF as asserted by the discussion document. Furthermore both the NPS IB and the discussion document are silent on whether PLBAs are intended to be managed as SNAs under existing SNA provisions in regional and district plans. In the absence of such provisions in the NPS IB, the description in the discussion document of how clause 3.10 applies is incorrect.

55 A second issue is how councils are expected to give effect to clause 3.10 of the NPS IB, requiring that…. *within a PFBA that is a significant habitat for threatened or at-risk fauna, plantation forestry activities must be managed over the course of consecutive rotations to maintain long-term populations of indigenous fauna species present. Within a PFBA that contains at-risk flora, the adverse effects to these flora from plantation forestry activities must be managed.*

56 It is very unclear what the expectation would be to achieve such management outcomes. At a localised level, habitat will clearly be altered by harvesting and therefore fauna use will change. For larger forests the intent of clause 3.10 is potentially workable, provided the requirements of Clause 3.10 are applied pragmatically at a broad forest scale over a longer time

frame. With ongoing planting, growing and harvesting, overall values will remain fairly static over the full forest with species moving around within the forest over time.

57 However for small woodlots where the only practical and economic means of harvesting is to harvest the whole woodlot in one go, this requirement will be difficult to give effect to, particularly if the forest is isolated from other vegetation. Habitat values will change significantly depending on the time in the rotation, from when the forest was first planted when almost no biodiversity exists, to a fully mature forest to post harvest cutover to replanting with young trees, each of which provide different habitat. Clause 3.10 gives no guidance as to when the baseline applies for judging change. Logically a council planner processing a consent would apply the baseline at the time of consenting, which will clearly be impossible to maintain within a small woodlot at harvest time, at least in the short term.

58 The scenario on page 49 of the Discussion Document illustrates one potential outcome for a small forest with long-tailed bats. If the expectation is that a woodlot owner is expected to harvest 'consecutive rotations' in a very small woodlot (harvest a few trees at a time) this will make the woodlot completely uneconomic. If that approach is also the expectation for large forest owners with long-tailed bats, then large areas of existing long term plantation forestry will become uneconomic to harvest.

59 At a practical level the example in the discussion document states that the woodlot owner can 'see' the bat roosts. Based on my experience with the bat studies in Kinleith Forest it is impossible to locate a bat or their roost by eye. A bat detector will indicate if bats are feeding in the area but the only way to definitively locate the roosts is to capture the bats, fit them with tracking devices and then track them over a period of time to locate their multiple roosts. This obviously requires significant time and specialist knowledge and approvals. This would be completely impractical to apply at an operational level.

60 The issue of productive forest being mapped as SNA will be even more problematic for those planting indigenous species for production purposes, whether for forestry or alternative uses such as Manuka honey. Such areas

will almost certainly meet a range of SNA criteria as they grow and therefore be identified for protection.

61 In summary Clause 3.10 represents a step in the right direction, but this alone does not resolve the many concerns relating to how the NPS IB relates to plantation forest vegetation. Signficant further clarification is required in the NPS IB to make this work in practice.

2. Broadening of the SNA criteria

62 The criteria that apply to indigenous vegetation have been broadened from the existing regional and district plan criteria that generally aim to differentiate vegetation that has more significant biodiversity values, to applying to almost any indigenous vegetation regardless of age, condition or values. Criteria such as the vegetation being 'commonplace', or 'degraded indigenous vegetation, ecosystems or habitats' or 'seral (regenerating) indigenous vegetation' or 'supports the typical suite of indigenous animals that would occur in the present day environment' means that virtually any indigenous vegetation could be assessed as meeting one or more of the criteria.

63 For plantation forestry the protection of lower value regenerating indigenous vegetation becomes problematic due to the long time scale involved in growing a production forest. Typically plantation forests in NZ are managed on a 26-30 year rotation for radiata pine through to a 45 year rotation for Douglas Fir, and significantly longer for indigenous species. Provided the forest is protected from grazing, during the growing phase any gaps that are not planted (such as riparian setbacks) or where planted trees have failed for any reason, will regenerate during the growing phase in exotic or indigenous vegetation. By the time of harvest it is likely that much of this vegetation will meet one of more of the SNA criteria under the NES PF.

64 Requiring the protection of these regenerating patches of vegetation intertwined within the production estate from damage at harvest time is simply not practical. Where vegetation has grown over roads and landings, protection of such vegetation would render the forest inaccessible and therefore unharvestable. At present this is managed under both the NES

PF and regional and district plan criteria through exceptions for vegetation that has regenerated with the growing forest (understory, failed gaps, vegetation overgrowing roads etc) to enable this vegetation to be cleared at harvest time (as discussed above). However the NPS IB potentially elevates the status of regenerating patches of indigenous vegetation to SNA which then makes these provisions of the NES PF unworkable. It is critical to the financial viability and practical management of plantation forest that these exceptions be retained.

65 A secondary issue with the criteria is the potential for criteria to be applied to exotic vegetation where it was possibly not intended, simply due to the lack of clarity in the wording. This particularly applies to Criteria D (Ecological Context) with criteria such as 'moderate to large size and compact shape', 'well buffered' etc, could if interpreted literally could be applied to large exotic plantation forests. We assume this was not the intent.

66 The lack of clarity with the SNA criteria is compounded by the significance ratings in Appendix 2 of the NPS IB which could apply 'High' ratings to a very wide range of areas. For example the following criteria which would be met by many productive plantation forests, in some instances without the need for particularly significant ecological values:

- *One threatened or two or more at risk indigenous species present*
- *Indigenous vegetation or habitat of indigenous fauna occurring on sand dunes*
- *Provides a buffer to or link between other important habitats of indigenous species*
- *Large size and compact shape in the context of the ecological district*
- *Supports large numbers of indigenous fauna*

67 If applied literally potentially all plantation forests would meet one or more of the criteria for a high value SNA, implying the highest level of protection is warranted.

68 I acknowledge that clause 3.10 NPS IB provides that clause 3.9 does not apply to Plantation Forest Biodiversity Areas (PFBA). However the wording of clause 3.10(2) and (3) is vague and the classification of an SNA as 'high'

will almost certainly create further impediments to obtaining a resource consent for the clearance of such vegetation.

3. Highly Mobile Fauna

69 The concept of clause 3.15 to have a specific approach for highly mobile fauna that are difficult to locate and cross land boundaries is supported in principle as a pragmatic approach. FOA fully supports having a different approach for species making use of different habitats, rather than attempting to manage mobile species through SNA processes, which are clearly not suited. FOA notes that it is currently unclear in the NPS IB which species would qualifty as 'highly mobile' given the broad range of mobility of indigenous species, from very immobile species such as frogs, through to highly mobile species such as migrating birds. In between those two ends of the spectrum are species with varying mobility at different times of the year making it difficult to neatly place species into one of the other without guidance. As further outlined below FOA proposes that this could be overcome by a separate approach to manage all fauna that utilises vegetation that would otherwise not qualify as SNA.

70 A second concern is the proposal to delegate the fauna management function to both regional and district councils to create habitat maps, produce best practice techniques and objectives, policies and methods to protect such species seems an extraordinary duplication of effort, by organisations that lack the staff and expertise to carry this out. It will inevitably require engagement of specialist consultants and considerable expense to often cash strapped councils. The fact that many of these species routinely cross region and district boundaries, and many large forests span multiple districts, makes the approach even more illogical.

71 It is currently somewhat unclear how Clause 3.15 intersects with the many related clauses in the NPS IB that also appear to provide protection to habitat of such species.

72 It is also unclear how this intersects with the related provisions of the Wildlife Act that are in themselves not particularly clear or well administered by DOC. The FOA has for some time sought clarification from DOC as to how the

Wildlife Act should be applied to plantation forest harvesting, which to date has not been forthcoming.

73 The outcome is multiple organisations applying multiple different approaches to the protection of species that routinely cross region and district boundaries, under two different pieces of legislation that are difficult to interprete. It would seem far more sensible for DOC, who have the required expertise and information to produce distribution maps and best practice guidance at a national level in conjunction with landowners.

74 In the interests of streamlining effort and reducing wastage of time and resources, the Draft NPS IB and Wildlife Act should be aligned to avoid duplication and the provisions relating to forestry incorporated within the NES PF. This has already occurred in respect of some indigenous bird nesting species managed under the NES PF.

4. Overlapping and potentially conflicting requirements

75 Other than highly mobile fauna as noted above, further clauses of the NPS IB could potentially apply to plantation forests.

76 Clause 3.12 ‘existing use rights’ potentially applies to all existing plantation forests, on the basis that they were planted for a particular purpose of plantation forestry and the activity of ‘plantation forestry’ in most existing plans encompasses all aspects of the management of such a forest including silviculture, building roads and harvesting of the forest. Currently it is unclear how Clause 3.12 intersects with Clause 3.10 for existing forests, or if one over-rides the other.

77 In addition, at a practical level, it is difficult for forest owners to establish existing use rights given the long periods between harvest cycles and the nature of evidence required to support existing use right claims.

78 Similarly clause 3.13 General rules outside of SNAs is currently very unclear how this is to be applied in practice and its relationship to clause 3.10 regarding PFBA. It appears that the expectation is for councils to write additional rules to protect indigenous biodiversity in the remaining vegetation that does not meet the SNA criteria. Any plantation forestry that is not

mapped as SNA would potentially be captured by such rules. Given the breadth of the SNA criteria to include almost any vegetation, along with additional requirements for highly mobile fauna, the need for further general rules applying outside of SNAs seems questionable.

79 Clause 3.14 protection of identified taonga is very open and difficult to anticipate what it could be applied to until given effect to by councils. But regardless it will almost certainly place even further controls in the mix for some species.

80 In total the Draft NPS IB creates a complex and confusing muddle, which is almost certainly going to lead to time consuming and costly litigation to resolve regional and district plan rules, and cumbersome costly consenting processes to undertake any plantation forestry activities, in particular harvesting.

UNINTENDED CONSEQUENCES

81 As a regulatory approach the Draft NPS IB creates a number of perverse outcomes. The costs to landowners will be directly proportional to the level of biodiversity present, the higher the biodiversity a landuse provides the greater the regulation and cost. Conversely those land uses that create no biodiversity face no cost. The result is the direct opposite of the concept of payment for ecosystem services – in effect taxation of ecosystem services.

82 This will in turn deter investment in any productive land use that contributes to biodiversity. Planting an exotic forestry will become unattractive due to the increased risks of being unable harvest and make a financial return. Planting of longer rotation exotic species will be deterred, and native production forestry even more so.

83 The approach will unquestionably deter voluntary efforts to improve biodiversity values. Perversely a forest owner would be better off to graze the understory and undertake no predator control to prevent any indigenous biodiversity becoming established. Those undertaking predator control run the high risk that in doing so they are increasing fauna values and therefore jeopardising their ability to harvest and make a financial return.

84 Similarly the approach will deter reporting of threatened species sightings, voluntary monitoring and research to better understand biodiversity values in plantations. The more a forest owners finds, the higher the constraints and costs they face.

85 The approach also creates a potentially illogical outcome whereby exotic conifer species that spread and germinate naturally are simultaneous classified as alien invasive species to be cleared and an SNA that must be protected.

86 As a result of the perverse outcomes of the NPS IB deterring new planting of plantation forests it is in direct conflict with a number of other government policies including climate change policy and the Essential Freshwater Package. Should the approach lead to prevention of harvest of large areas of plantation forest it could come into further conflict with zero carbon goals by requiring the import of wood from other parts of the world to meet local demand, or substitution of wood with much higher carbon alternatives such as concrete and steel.

87 By creating a strong disincentive for private landowners to undertake voluntary predator control in plantation forests it is also in direct conflict with the goals of Predator Free 2050. The DOC Predator Free Strategy announced this week includes 'mobilising people and resources' as one of the three key planks to achieving the strategy. In our view the Draft NPS IB will achieve the exact opposite and stifle existing voluntary efforts by large private landowners.

RELIANCE ON REGULATION TO ACHIEVE BIODIVERSITY OUTCOMES

88 The philosophy that underpins the Draft NPS IB is that all productive land use is bad for biodiversity and biodiversity values can only be managed through a strict regulatory approach through rules and enforcement. Due to the restrictions of the Resource Management Act it is also focussed on protecting what exists now. The end result is an approach that places the greatest regulation and cost on those landuses that create the greatest biodiversity.

89 The discussion document provides no recognition of the biodiversity benefits of production forestry with a focus only on the negative. By way of example, even where it is acknowledged that long-tailed bats successfully utilise production forest habitat this is written in very negative language – *long tailed bats are 'forced' to use cavity-forming exotic trees, which tend to provide lower quality habitat for roosting*. This seems at odds with the science showing higher bats numbers in third rotation production forest despite an ample supply of DOC estate adjacent to the forest. Understandably the authors of the discussion document will prioritise indigenous over exotic species, but this inherently biased view that productive land use can only be negative for biodiversity, ignoring evidence to the contrary, is not necessarily helpful for achieving pragmatic outcomes.

90 FOA acknowledges the need for baseline rules and fully accepts the need for rules to protect the remaining remnants of original indigenous vegetation from clearance. Particularly in heavily depleted lowland areas, what little original vegetation remains is clearly deserving of protection. However extending this approach to protecting planted exotic vegetation in our view both devalues the meaning of an SNA and runs the risk of deterring the necessary efforts to achieve material biodiversity gains.

91 To achieve meaningful biodiversity gains will require so much more than just rules. It will require significant private and public resources strategically targeted to those areas that will achieve the greatest benefits, along with voluntary efforts, cooperation and collaboration to share learnings and achieve synergies.

92 As evidenced by the examples in Attachments 1, *2* and 3, many forestry companies are already involved in a range of voluntary biodiversity initiatives, often in collaboration with neighbours and community groups.

93 Similarly the industry has taken the lead on funding research into biodiversity and the development of best practice guides. With the right support this approach will continue and develop over time.

94 A key concern with the proposed Draft NPS IB is that it will potentially divert scarce resources and staff time away from biodiversity restoration, to

bureaucracy and costly consenting processes that of themselves will create no actual biodiversity benefits on the ground. It will simply keep council planners and consultant ecologists in work. At best the Draft NPS IB will protect what is there and in all likelihood would have remained there, with or without consents. Perversely the Draft NPS IB will create a disincentive for voluntary efforts that actually improve biodiversity.

COSTS TO LANDOWNERS

95 The Cost Benefit Analysis the accompanies the NPS IB notes that uncertainties in how the NPS IB will be implemented by Councils make it very difficult to accurately determine the potential costs to landowners. For this reason the CBA has specifically excluded the costs to landowners from consideration, noting that this will be included after public consultation, effectively relying on submitters to provide the information that the ministry has been unable to calculate due to the considerable uncertainty. Stating the obvious, but private submitters have equal challenges in quantifying exact costs of such an instrument given the considerable uncertainty as to how it will be implemented.

96 From a plantation forestry perspective the CBA has followed a somewhat contradictory path of both recognising that much plantation forest provides habitat for threatened and at risk species (and therefore meets the SNA criteria), but then takes indigenous land cover (from the Landcover Database) as the proxy for SNA. We must assume that the provisions of the NPS IB will be applied literally as intended. That being the case the CBA greatly understates the potential areas of SNA (including High Value SNA) on private land. This is compounded by the Land Cover Database failing to pick up indigenous vegetation remnants embedded within plantation forests.

97 The FOA strongly disagrees with the conclusion of the CBA that the majority of the costs generated by the NPS IB fall on councils and to a lesser extent general government and tangata whenua to implement the proposed policies. 4Sight Consulting appear to have reached this conclusion simply because these are the costs they have chosen to

focus on, while specifically excluding costs to landowners from consideration.

98 From a forestry point of view, we reject the reasoning for excluding landowner costs from consideration on the basis that 'it is difficult to predict landowner intentions'. It is a reasonable assumption that all owners of plantation forest will wish to harvest their forest. And while it is difficult to predict how the NPS IB will be implemented by Councils it is a distinct possibility that the clearfall harvest of a PFBAs (particularly ones that meets the criteria of a High Value SNA) will require resource consent.

99 Just for a simple consent to harvest a small forest that meets SNA criteria it is reasonable to assume that ecological advice and detailed habitat and mitigation information will be required. When consent processing costs are included, the costs per forest could run from around $15,000-$20,000 per forest for a small forest with a simple consent. For larger forests with multiple species and the potential for hearings the costs could easily escalate to many hundreds of thousands of dollars.

100 A high risk is that councils will overcome the difficulty and cost of ecological assessments in plantation forests by writing rules to account for the possibility of plantation forests meeting SNA criteria, but require that forest owners to undertake the ecological assessments and mapping as part of their assessment processes, passing all of the costs of implementation to the forest owner.

101 In terms of benefits associated with this approach, the costs incurred in assessment and consenting processes will in themselves have no corresponding ecological benefit to the biodiversity present. The only benefit will be the achievement of a resource consent for the forest owner to be able to harvest.

102 Worst case scenario large areas of harvest could be significantly delayed or harvesting prevented on the basis of ecological values. On this basis the costs to forest owners are open ended but could be many

orders of magnitude higher than the costs to councils estimated by 4Sight Consulting.

103 To undertake a meaningful assessment of the costs and benefits of the NPS IB, the costs to landowners must be considered and the assumption must be taken that the provisions will be applied literally as proposed, not fudged to apply only to indigenous vegetation.

104 The evidence by Kit Richards for PF Olsens provides further detailed analysis of the CBA shortcomings.

PROPOSED ALTERNATIVE

General Approach

105 To achieve biodiversity outcomes requires a fundamental shift in thinking to recognise the scientifically established fact that plantation forests provide biodiversity benefits. Similarly there needs to be recognition of the voluntary initiatives undertaken, in the forest industry's case supported by independent third party auditing.

106 A fundamental requirement of any effective regulation must be that it creates the correct signals and drivers to achieve the desired outcome. To do so it must support landuses and private landowner efforts that provide for biodiversity gains and deters those that do not. An absolute bottom line requirement must be that regulation does not in itself create a strong deterrent to those landuses and actions that provide for biodiversity, otherwise it runs a high risk of driving the exact opposite outcome than intended.

Separation of approach for indigenous remnants and indigenous fauna habitat

107 Section 6(c) of the RMA refers to 'significant indigenous vegetation' and 'significant habitats of indigenous fauna'. There is no legal requirement for both to be dealt with using the same terminology or regulatory mechanisms and to the contrary the regulation developed to date has almost exclusively focussed on vegetation. Given the very different attributes and management requirements between indigenous vegetation remnants and indigenous

species becoming established within exotic vegetation (in particular planted productive vegetation) as discussed in Mr Willie Shaw's evidence, attempting to deal with them both using the same terminology and regulatory approach does not in our view make logical sense.

108 The result is a very muddled and confusing regulatory approach, the bulk of which is designed for managing indigenous vegetation remnants.

109 In our view a better approach would be to separate the two:

(a) Manage 'significant indigenous vegetation' that meets the significance criteria as SNA, reflecting the status quo under most existing regional and district plans.

(b) Create a separate and fit for purpose approach for the management of 'significant habitats of indigenous fauna' that occur in vegetation that does not otherwise meet the criteria of being significant indigenous vegetation.

110 Where significant habitat of indigenous fauna occurs within natural indigenous vegetation that is SNA, the SNA rules would take precedence, protecting such an area from clearance.

111 For the management of other significant habitats of indigenous fauna develop a purpose designed approach recognising the particular characteristics and attributes of the habitat, and the purpose of the vegetation that provides such habitat. It would make sense for any regulation and guidance to be developed at a national level, rather than leaving it to multiple regional and district councils to reinvent the wheel and come up with multiple different approaches for the same species.

Alternative PFBA Approach

112 A less preferred alternative is for the NPS IB to contain a bespoke framework for production forest that builds on the concept of PFBAs, as proposed in the Draft NPS IB. For this to achieve MfE's intended outcome (as detailied in the NPS IB discussion document) it will be necessary to:

(a) Amend the provisions in the NPS IB to make it explicity clear that the intention is that PFBAs are to be managed under the NES PF alone, and that all other NPS IB provisions relating to SNAs in the NPS IB and existing regional and district plans, do not apply to PFBAs.

(b) Amend the provision in the NPS IB to make it clear that the intention is that plantation forest is to be managed under the NES PF and that other provisions relating to indigenous vegetation outside SNAs and highly mobile fauna do not apply.

(c) Rewrite all of the SNA provisions in the current NES PF to differentiate between the two types of SNA - indigenous forest remnant and significant areas of indigenous habitat within plantation forest (PFBAs).

(d) Amend regulation 6(2)(b) of the NES PF to remove the ability to be more stringent in respect of areas of indigenous habitat within plantation forest or, alternatively, remove this regulation altogether so that all indigenous biodiversity within plantation forest (including s6(c) RMA matters) is regulated under the NES PF.

113 This is a more complex and confusing approach to implement. It will also introduce practical difficulties applying the same terminology to indigenous forest remnants and production forest areas. This will require foresters to come up with mapping systems and educate workers to understand the difference between the two types of SNA, given the terminology SNA is already well understood to mean full protection. Calling both by the same title will diminish the value of SNA and is a recipe for confusion and mistakes.

Other approaches

114 For the plantation forest industry, the logical place for any regulation is the NES PF. However the FOA is strongly of the view that much has been achieved outside of regulatory processes through research, collaboration with species experts and production of industry best practice guides as has occurred to date. It is critical that government recognises and encourages the many voluntary efforts already underway.

115 The industry recognises the need to continue to develop knowledge and guidance for further species, and would welcome ministry input and assistance with developing priorities, and with funding further research.

116 With regard to indigenous forest remnants it is essential that the NPS IB achieves policy coherence with the NES PF and supports existing NES PF provisions that specifically exclude vegetation that regenerates within production forests during the growing phase (in the understory, regenerating in gaps in the productrive area due to failed plantings and growing over existing roads and landings). Similarly, it is also essential that existing exceptions to allow for temporary damage at the margins between plantation forest and indigenous remnants remain and are supported by the NPS IB.

Review of SNA criteria

117 The FOA believes the proposed SNA criteria require review taking into account the concerns raised by land owners and other submitters to iron out clarity issues. In particular:

(a) Amend the criteria to apply to significant indigenous vegetation only, as proposed in the approach above.

(b) Review the criteria to delete ambiguous and all encompassing descriptions such as ‘degraded’, ‘commonplace’ etc, to clearly describe vegetation that would meet the definition of ‘significant’ and therefore ensure these significant areas achieve the protection required.

Highly mobile fauna

118 Following a separate approach for significant habitats of indigenous fauna that occur outside of SNAs as proposed above would remove the need for a specific approach for Highly Mobile Fauna. This clause should be amended to be more fit for purpose as part of a wider approach for all fauna habitat.

119 As much as possible any species distribution mapping and best practice approaches should be developed nationally, by the appropriate species

experts at DOC, to avoid excessive duplication of effort by councils without the required resources and expertise.

120 The approach to management of significant habitats of indigenous fauna should ideally be aligned with Wildlife Act (potentially incorporating a review of the relevant provisions of the Wildlife Act provisions) to ensure the two intersect coherently, rather than having two duplicating approaches by two different agencies to manage effectively the same issue.

Regulation outside of SNAs

121 In our view the above approach should adequately manage broader biodiversity values without the need for even further regulation outside of SNA's and significant habitats, and clause 3.13 should be deleted.

CONCLUSION

122 In conclusion the FOA supports the intent of the NPS IB. As evidenced by the many biodiversity initiatives of the FOA and our members, the forest industry understands and values the biodiversity values that occur within their forests, and the need to protect them.

123 The FOA has significant concerns about the NPS IB and the implications for the forest industry. While it is unclear how it will be implemented in practice, we believe there is a high likelihood it will introduce significant additional administrative costs to the industry jeopardising the economic viability of forestry, particularly small forests. That will in turn deter planting, and deter voluntary biodiversity initiatives that improve biodiversity values.

124 The FOA acknowledges the attempt to address this issue through the creation of PFBAs, but the intent of the provision as it relates to other provisions of the NPS IB and existing regional and district plan rules is unclear. It is also makes much of the current version of the NES PF unworkable.

125 The FOA proposes an alternative approach that clearly differentiates between indigenous vegetation remnants and adventive use of exotic

productive vegetation by indigenous fauna, and also makes it clear as to how biodiversity values within plantation forests are to be managed.

126 We believe a correctly framed NPS will be both less costly and more effective. Critically such an approach will not deter voluntary biodiversity initiatives, and to the contrary should encourage and support both land uses that provide biodiversity and the voluntary efforts of landowners.

127 The FOA appreciates the opportunity to provide input to this important regulatory instrument.

Sally Strang

Chair, Forest Owners Association Resources and Environment Comittee

Dated this 13th day of March 2020

Attachment 1: Examples of biodiversity initiatives undertaken by a selection of NZFOA members surveyed by NZFOA

Timberlands Ltd

- $500,000 support for Wingspan Trust centre, plus $15,000 per year to support nest checks and banding, and now include drone pilot training course. Also, contributing to falcon research on various projects. Active operational management around nesting in accordance with falcon guidelines - move harvesting or land preparation with potential to affect the nest activities.
- Management of 7,000 ha Tarawera Forest reserves with agreement from iwi owned Tarawera Land Company, with focus on wilding control on Mount Tarawera, invasive weed control on significant wetlands, and associated pest (mostly possum) control.
- Partnership with Ngati Whaoa/Ngati Tahu and DoC to manage Waiotapu geothermal vegetation and reserve areas.
- Funding of items for Rotoehu Ecological Society work on kokako, including track cutting and traps for pest control.
- Assistance with Ngati Whare to re-establish ex-plantation into natural forest, including land preparation and weed control.
- Significant program of wilding control on Rangitaiki wetlands and riparians in excess of $200,000 per annum.
- Assisting Orchid Society with managing Iwitahi Orchid reserve, including cutting maintenance access tracks, growing and planting replacement canopy species.
- Commenced a pilot on bird assessments when undertaking mid-rotation inventory.

Hancock Forest Management (NZ) Ltd

- Kiwi recovery projects (predator control) in Gammons, Whatoro, Waipu, Whanui, Ngunguru and Rakautao Forests in Northland, in some instances managed by HFM NZ and in other instances undertaken by adjacent landcare groups with financial support from HFM NZ.
- Funding predator control in Tuararangai Forest adjoining the Omataroa Kiwi Project in the Bay of Plenty ($5k per annum)
- Annual kiwi call count monitoring to assess kiwi population levels, inform operations staff and monitor effect of predator control initiatives.
- Providing training to all harvesting contractor staff following the Kiwi's for Kiwi guidelines. Dog aversion training mandatory for all dogs accessing HFM NZ Northland forests with the aversion training funded by HFM NZ.

- Waituhi Forest Whio recovery project near Taumarunui. Predator control on 5km of the Pungapunga stream home to a resident population of whio.
- Management of hochstetter frog populations through harvest in Bay and Plenty and Northland forests with known frog populations. Ground surveys carried out prior to harvest to determine habitat footprint and harvesting managed to avoid disturbance, with follow up surveys.
- Protocols in place for reporting of falcon nesting in the CNI and Eastern Bay of Plenty in accordance with the falcon guidelines. Operations moved if affecting falcon nesting areas.
- Wetland restoration projects in a number of wetland areas in HFM NZ's Central North Island forests focussing on plant pest control to return the wetlands to indigenous vegetation. To date nine wetlands have been treated totalling 130ha.
- Financial support for the Mokaihaha kokako recovery project managed by the Mokaihaha Kokako Trust on DOC land adjacent to Kinleith Forest ($5k pa). Currently in discussions regarding creating a predator control buffer in the pine forest around the Mokaihaha reserve to support the kokako population.
- Supported long tailed bat studies in Kinleith Forest. Progressively undertaking bat surveys through other forests. Implement bat guidelines.
- Indigenous reserves in all forests have been surveyed and assessed by ecologists. The outcome of this work by Wildland Consultants has been passed on to district councils undertaking SNA mapping in a number of districts, significantly reducing the cost of SNA mapping to those districts.

Port Blakely

- Jewelled Gecko Survey - Herbert (new discovery in a native area of Port Blakely's forest that already had permanent pest control, Wildlands Survey completed at $10k cost)
- Long-tailed Bat Canterbury- major project- 2 habitats managed, one in old exotic, one in native. Pest control underway in both, ongoing surveying, monitoring and mapping work annual project budget of approx. $10k plus large amount of in-kind resourcing
- Kokako Project BoP- Habitat extension and pest control, ongoing monitoring, support and habitat protection with the Kaharoa Kokako Trust
- Wallaby control
- Spanish Heath Control - joint project with ECAN
- Wilding Conifer Control
- Falcon Surveys

- Wainakaroa Indigenous Planting – Riparian restoration project, from Herbert forest to the coastline.

Ernslaw One Ltd

Whangapoua (Coromandel)

- Partnership with Project Kiwi commenced 2007. 1432ha predator control area, exotic/indigenous mix. Funded by Ernslaw approx. $60k pa using trapping only (122 traps)
- Kiwi aversion training required for all dogs accessing the forest
- Includes captive rearing through ONE, 10-15 chicks released/year back into the area.
- Biennial call surveys to monitor the population. Averaged call rate increase from 1.61/hr to 1.71/hr (2012-2016).

Waimarino (Raetihi)

- Kiwi recovery project in partnership with Ngaporo Trust and Horizons. Started in 2014, 1200ha predator control area, exotic/indigenous mix under cost share with Horizons. Cost to Ernslaw $25k/year utilising trapping (350 traps) and toxin (1080 on 3 year cycle). Hunting is prohibited in the area. No captive rearing. 3 yearly predator control call surveys and 5 yearly forest wide. Healthy population at 0.046 birds/ha with a 3.8% increase over last 3 years.
- Waingaro Wetland restoration (Coromandel) 34ha wetland, Predator control network and willow control. $6k/year.
- Wilding control in wetlands (Ruapehu), ongoing wilding management throughout multiple wetlands. $20k/year.
- Long-tailed bat survey (Gisborne), forest wide survey to improve Ernslaw bat management plan ($15k).
- Powelliphanta Snail research project (Shannon) to develop Ernslaw management plan ($15k)

City Forests

- NZ Falcon (Karearea) Project led by Parker Conservation and in partnership with Rayonier Southland and Wenita is now into its fourth year. The project aims to investigating falcon numbers and nesting success in Plantation Forests, and the interaction with forestry activities. The project outcome may add to the national guidelines for foresters on working around falcons living and breeding in their forests.

- Continuing development of a large network of protected and predator (trout) free waterways in our high country forest for the protection and enhancement of the threatened Eldon's galaxias/native fish population.
- Continuing active management of over 2,000 hectares of permanent native reserves, including fine-level professional ecological investigation, regular monitoring activity, weed and pest control where required, and careful protection during adjacent forestry activities such as spraying and harvesting. Reserves include populations of several endangered native bird species such as fernbirds and South Island Robin, and also protect a number of rare tree, grass and reed species, and threatened ecosystems including a QE2 Reserve wetland, and other high conservation value wetlands.
- Large annual sponsorship of the Orokonui Ecosanctuary located on the boundary of Dunedin City.
- Substantial annual sponsorship of the Predator Free Dunedin project directly contributing towards the conservation of RT&E species on and around the company's estate.
- Substantial sponsorship in total of the Yellow Eyed Penguin Trust, the Otago Peninsular Biodiversity Group, and the Otago Wildlife Hospital Trust.

Tasman Pine Forests Ltd

- Predator control Riwaka forest in liaison with Takaka hill biodiversity group.
- Registering important SNA's as DOC covenant areas
- Pest control and wilding conifer management in HCV areas within our forests
- Assisting DOC with legacy wilding conifer control on DOC land adjoining our estate.
- Green gecko survey and protection project
- Kea Conservation Trust sponsorship.
- Indigenous restoration project with council, DOC and conservation groups for areas burnt in the Pigeon Valley Fire.
- Pest weed assessment and control in SNA areas
- Wetland creation project within our estate

Rayonier NZ Ltd

- Glenburview Community Pest Control Area kiwi recovery project ($105,000 over 6 years)
- Omataroa Kiwi Recovery Project in the Eastern Bay of Plenty
- Athenree Restoration Project, Bay of Plenty
- Kirikiri bird corridor in the Eastern Bay of Plenty

- Whio recovery project in the Eastern Bay of Plenty
- Kakabeak propagation in the Hawkes Bay
- Ohurakura wetland Restoration in the Hawkes Bay
- Mudfish protection project in Canterbury
- Gecko relocation in Canterbury

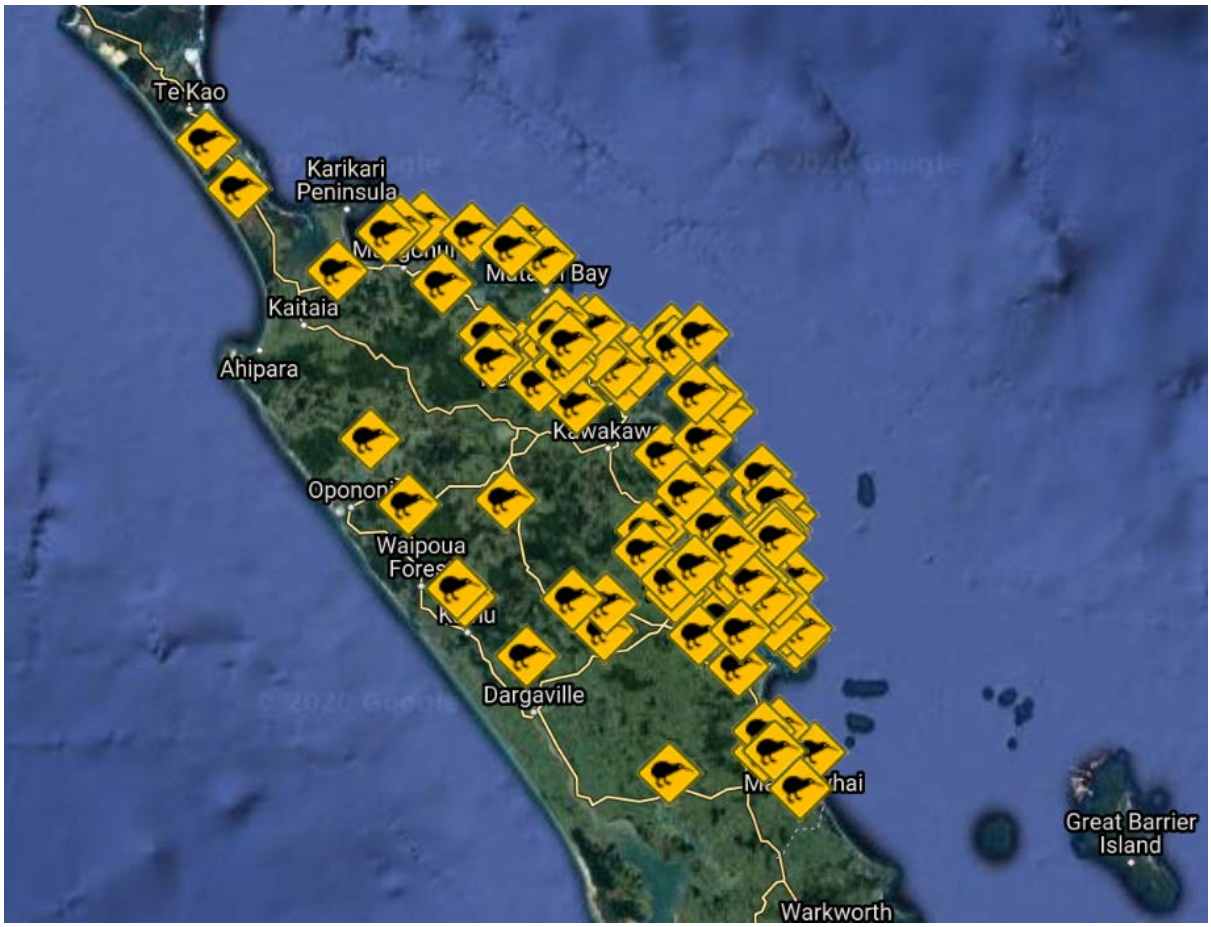
Attachment 2: Overview of North Island Brown Kiwi Recovery Efforts in Plantation Forests in Northland (*summary prepared for FOA by Hancock Forest Management staff with input from Kiwi's for Kiwi Northland)*

The North Island Brown Kiwi is classified by the Department of Conservation, DOC, as 'nationally vulnerable', (Robertson et al 2012). Studies in sites with no active management show brown kiwi are declining at a rate of between 2 and 4% per annum. For many years organisations in Northland have been working together to reverse this trend. Northland has an estimated population of between 6,000 and 8,000 North Island brown kiwi located throughout the region.

Kiwi recovery initiatives in Northland have been a collaborative effort involving a range of organisations including a range of agencies and local organisations working alongside community groups and private landowners. Key organisations involved in kiwi recovery efforts include:

- Kiwis for Kiwi as the national organisation have provided a link through to local and national level initiatives and advice. They also fund many of the kiwi recovery efforts in Northland and elsewhere and arrange hui and training on aspects of kiwi recovery. For plantation forestry Kiwis for Kiwi took the lead in producing the Forestry Management Guidelines for North Island Brown Kiwi in Exotic Plantation Forests, with input from forest owners. The guidelines provide useful guidance regarding best management practice for managing kiwi in production forests, along with relevant contact detail and a training resource for delivery to operational staff. The guidelines have been included as a key resource on the NZFOA threatened species website.
- Kiwi Coast: A local organisation who have taken a role in helping to encourage and facilitate kiwi recovery groups on the ground. As new groups get underway they provide support and practical advice to help get them up including recommended trapping methodologies. They also maintain an informative website providing information on all the Northland kiwi recovery groups underway and help to coordinate between the groups to encourage ongoing efforts. For forest owners they have been a source of advice and guidance on priority areas for undertaking kiwi recovery efforts, and on occasions have approached forest owners where they have identified a particular forest as a priority area to complement surrounding efforts.
- Northland kiwi forum: This is a committee of key agencies and people carrying out kiwi recovery in Northland. It was established, and is facilitated by, Kiwis for kiwi in order to ensure knowledge and project aspirations are heard and considered in strategic planning situations. It includes representation from community projects, Kiwis for kiwi, Kiwi Coast, the forest industry, the Northland Regional Council, the three district councils, the dairy and beef sector, DOC, iwi Maori, Reconnecting Northland and the Northland Conservation Board. The committee arranges hui and also meets quarterly to coordinate and share any relevant developments in kiwi recovery such as predator control innovations or regulatory changes.
- Northland Regional Council play a key role in funding through their Community Pest Control Area (CPCA) programme. Landowners can apply for funding to get a predator control project up and running with assistance from the council. In turn landowners are required to commit to ongoing maintenance of the CPCA area.
- Department of Conservation provide expert advice on kiwi recovery and are contacted by forest companies for specialist advice and assistance if kiwi or nests are encountered during operations.
- Matakohe-Limestone Island Crèche operating a predator free crèche for rearing kiwi chicks on Matakohe-Limestone Island in Whangarei harbour. On occasions eggs have been recovered from nests located during harvesting and the eggs have been sent to Whangarei Bird Recovery Centre for incubation, when hatched chicks are placed on Matakohe-Limestone Island to be reared in a predator free environment until they reach a suitable size to be released into an area where predator control is undertaken..

Kiwi Coast coordinates a network of kiwi recovery initiatives now linking in to 140 individual kiwi recovery projects covering an area of approximately 160,000ha. The map on the Kiwi Coast web page provides a spatial overview of the various projects underway, with links to the project organisers. A copy of that map below shows the increasing number of initiatives underway, all of which are contributing to a progressively larger area under management and linkages between the various groups.



Kiwi Coast community led kiwi recovery projects. Source: Kiwi Coast website https://kiwicoast.org.nz/kiwi-coast-map

Over the last six years Kiwi Coast estimates that community-led groups have collectively removed 297,753 animal pests from kiwi recovery project areas. In some instances where deemed necessary due to lack of protection or adults death due to dogs. Eggs are taken to Whangarei Bird Recovery Centre for incubation, and young chicks are raised on Matakohe-Limestone Island to ensure their survival. Through the various groups predator control programmes chick survival is now occurring on the mainland with call count monitoring in Northland kiwi recovery areas remaining steady or increasing as compared to uncontrolled areas where populations continue to decline. The results of call count monitoring for the Whangarei Heads area (which includes a number of plantation forests) show that the population has increased from 80 birds to approximately 880 since 2001, as a result of community predator control efforts.

In 2016, the Department of Conservation updated their Northland Brown Kiwi distribution map to reflect the kiwi populations increase in existing areas and their presence in new areas largely due to Northland community-led predator control programmes.

Kiwi recovery in plantation forests in Northland

It is well known that Kiwi can survive and flourish in managed plantation forests. Adult kiwi will successfully breed and rear chicks within an exotic forest and have even been found nesting in pampas bushes within the plantation forest cutover. In some cases, kiwi will use both the exotic and native forest habitats as part of their territories. Kiwi often live in damp gullies containing native plants within the pine stands, particularly when conditions are dry, but move around extensively looking for food and a mate.

The main threats kiwi face in plantation forests are the same as in native forests where introduced mammals predate on juvenile kiwi. Uncontrolled dogs are a particular threat. Plantation forests also bring additional hazards and risks associated with forestry operations, in particular harvesting.

As owners and managers of larger areas of land with kiwi present, Northland forest owners and managers have become involved in the kiwi recovery efforts. The six larger companies all actively participate in kiwi recovery initiatives. Annual call count surveys are used to better understand kiwi populations within our forests. Staff and contractors working in our forests are provided on the ground training on the kiwi forestry guidelines, to help them to understand how to spot kiwi sign and what to do if they encounter kiwi during operations. As a result of this training, staff have on occasions spotted nesting kiwi in harvest areas, resulting in operations being stopped and recovery of eggs to be raised in a kiwi crèche. Dog access to forests is controlled, with compulsory kiwi aversion training for any dog being brought into forests.

All six of the larger forest companies in Northland have active predator control underway in forests with kiwi populations. This is a combination of stand-alone projects managed by forestry companies and forestry companies participating in wider community led projects. On top of this a large number of smaller private forests are included within community pest control projects. Collectively it is estimated that 26,000ha of plantation forest in Northland are under active predator control for kiwi, with call count monitoring showing steadily increasing populations. Encouragingly call count monitoring by Hancock Forest Management of the kiwi recovery project in Whatoro Forest (a CPCA area) has indicated kiwi numbers have increased by 85% through a period that much of the forest has been harvested, confirming that it is possible to achieve kiwi recovery in working forests, even with periodic harvest.

Summary

Kiwi recovery in Northland is in our view a great example of agencies, landowners and community organisations working together and sharing resources, information and expertise to achieve a common goal of kiwi recovery. Monitoring of kiwi populations shows that the project is achieving successes and will no doubt be benefitting other biodiversity. A key factor in the success has been the focus on support, information sharing and collectively celebrating successes to encourage others to get involved. It is difficult to see that such success could be replicated through rules and enforcement alone.

Attachment 3

5 March 2020

To whom it may concern

Re: Endorsement for current method of protection for kiwi in exotic forests

Kiwis for kiwi has been working alongside the production forest sector for more than 20 years in order to guide informed, effective and practical outcomes for kiwi. This work has included presentations and talks to industry sectors, meetings, field guidance, development of management guidelines written through a collaborative process between foresters, *Kiwis for kiwi*, the Northland Kiwi Forum, kiwi practitioners and The Kiwi Recovery Group.

There is now a significant contribution from some of the larger forestry companies and individual farm foresters to enhance kiwi survival in key areas through the retention of indigenous enclaves, pest and predator control, exclusion of dogs, consideration of kiwi during harvest, kiwi monitoring and staff (and contractors) kiwi awareness training.

We have worked with the forestry industry in this manner because we feel that protection of significant habitat within non-indigenous vegetation is sufficiently different from significant indigenous vegetation that they warrant a separate management approach.

Placing them both under the umbrella of current SNA and using the same rules sets would be counterproductive to the voluntary management being carried out.

We agree that exotic forest containing threatened or at-risk species should be mapped and identified as SNA, but we feel they should be classed separately and apart from indigenous forests.

If production forests were identified as SNA alongside indigenous forest, and harvest was proposed, then there would very likely be an inefficient and costly administration burden on Councils and foresters processing consents. There would

also be inconsistent application of management requirements between individual councils around NZ.

The current approach by the forest industry, to undertake predator control and crew training on kiwi management, is the most effective way to achieve sustainable populations of kiwi in or on the boundary of plantation forests.

This is what has been stated in the Forestry Management Guidelines for North Island Brown Kiwi in Exotic Forests (created in consultation with the forestry industry) and is what is currently practiced by forest owners and managers in Northland.

The proposed move to include exotic forest in the same classification as indigenous, and the bureaucracy that will come with it, will only serve to undermine and undo current activity to protect kiwi.

Regards

Clea

Clea Gardiner,

Coordinator, Northland Kiwi Forum Working Group

The Northland Kiwi Forum represents individuals and organisations concerned with, and actively involved in the protection of kiwi in Northland. Its members include:

- Whangarei District Council
- Northland Regional Council
- Auckland Council
- Far North District Council
- Department of Conservation
- Farmers
- Foresters
- Community conservation groups
- Kiwis for kiwi
- Kiwi Coast