Biosecurity Strategic Review

Report prepared for the Forest Biosecurity Committee

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(Final Report)

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Contents

1 Executive Summary

The forestry sector has a long-serving and functional biosecurity committee with a long history and proactive focus, including particular strengths in relation to surveillance and research – this is a strength and significant asset.

The proposed purpose of FBC is to provide industry leadership and oversight for all aspects of forest biosecurity, and foster cohesion across industry, government and the science community to improve forest biosecurity outcomes. The proposed FBC scope includes all matters relating to biosecurity, including pre-border, border and post-border biosecurity, forest log exports and forest health.

Detailed responsibilities and role relationships are also proposed in a Draft FBC Terms of Reference (refer Appendix 3) for FBC and Executive Committee consideration.

FBC will not be able to do everything and will need to continue to prioritise where it focuses effort and invests resources to work collaboratively with others. Forest biosecurity involves multiple organisations, committees and groups that are all focusing on parts of the puzzle, which creates risk of fragmentation and confusion. A clear leadership and oversight role assigned to FBC will help to address this and ensure industry forest biosecurity is effective and coordinated.

FBC appears to have a disproportionate focus on technical and operational issues and greater focus on strategic and policy matters is needed, along with focus on implementation (e.g., areas such as raising biosecurity awareness, improving access to tools, knowledge transfer and training). The strategic role of FBC in relation to forest health has been carefully considered, but there appears to be significant concern around declining forest health awareness and capability in this area and some desire for strengthened national oversight (consistent with strategic decisions that primary responsibility for forest health resides with individual companies) and with opportunity for PineNet to play a greater role[1].

The right parties appear to be around the table overall, but with opportunity for MPI to strengthen its engagement through addition of a Te Uru Rākau (Forestry New Zealand) representative.

FBC membership overall has predominant strengths in technical and operational areas, and the committee will benefit by recruiting for additional strategy and policy skills and strengthening diversity (e.g., gender, junior leadership, Māori forest owners) as it evolves its membership.

Other matters raised in relation to FBC during interviews included:

- FBC member engagement is variable, and most signalled they are keen to be engaged more, not less.
- Well supported sub-committees are seen as an opportunity to enable more engagement on operational and technical matters.
- There is over-reliance on voluntary effort and on several key individuals and succession planning needs attention.
- Resourcing is an issue with a greater level of capability and capacity is needed.
- A clear strategy for forest biosecurity and tracking progress against a clear plan and KPIs will help FBC to deliver more value.

The MPI/industry relationship through FBC is seen as a strength and prized by both parties, with GIA overwhelmingly viewed as a positive development and important area of focus for FBC. A key opportunity is

[1] These roles for FBC being in addition to the Forest Grower Levy Trust's R&D Committee's and Scion's roles in forest health.

to develop a joint readiness work plan, which is important to help both parties plan ahead and resource readiness work.

Several areas where GIA is not working as well as it needs to were identified during interviews, with the key one being in relation to the notification and investigation phase. Perspectives raised during interviews and solutions to this are briefly explored within the report.

An opportunity for FBC and the Executive Council is to develop a clear view of how industry governance and leadership will operate during a biosecurity response, also extending this to the notification/investigation phase preceding response, and to then test and demonstrate this through a simulation or exercise.

There is an opportunity for FBC to take a broader view of GIA, including opportunity to achieve greater influence and outcomes for forestry by further extending engagement with other industry GIA partners.

There is a tension between the primary 'specific pest' focus of GIA at this time, and the forestry sectors need for greater proactive focus on managing risk associated with pathways (international and domestic) and generic preparedness ("preparing for the unexpected").

This report considers the wider relationship FBC needs to manage with other groups - with other forestry committees that interface with biosecurity, including STIMBR and FOA's 'Forest Research', 'Environment' and 'Training and Careers' Committees, and to a lesser degree the Dothistroma Control Committee and FOA's Fire Committee – to achieve its proposed purpose. The nature of each relationship is considered, and on the whole these relationships are working ok, no structural changes are needed, but there is opportunity to strengthen coordination and two-way communication. The key areas where additional clarity and shared understanding are needed are in relation to 'forest log exports' and 'pest management'. The primary purpose of assigning a broad 'leadership and oversight' role to FBC would be to address the associated 'fragmentation risk' that exists when there are many groups, committees and organisations that have key roles to play in forest biosecurity and health.

There does not appear to be a clear shared understanding of the linkage between STIMBR and FBC, and neither appears to be taking a comprehensive strategic view on export (forest log trade) matters, yet both have an interest in this and play important roles alongside others (e.g., MPI). A clearer relationship with STIMBR is needed, with opportunity to formalise two-way communication and consider overlapping representation and opportunity for some joint strategic planning.

Biosecurity risk assessment is a strength of the forestry industry. However, most risk assessment appears to happen outside of FBC, and FBC members appear to have variable visibility of this information. A potential opportunity for FBC is to maintain and monitor a clear view of risk, for example, through an active 'risk register' (including organism and pathway risks and both New Zealand and offshore experience).

A range of biosecurity research opportunities were raised during interviews, and the process for identifying new research priorities needs to be through the current Science Strategy process led by the FRC. Overall there was a view that there has been strong focus on research in relation to phytophthora and fungi and it will be timely to consider a broader focus. FBC should continue to commission limited short term and applied research to address near-term issues. However, it should take a more structured approach to this (strategic priority setting) and ensure FRC has appropriate visibility.

A general theme is the ongoing need to lift general awareness of biosecurity and forest health across the industry at all levels, as well as wider focus on public awareness and social license (including as part of Biosecurity 2025 Ko Tātou This Is Us). Also, that while biosecurity is seen as extremely important to forestry in reality it tends to get pushed down within organisations ("someone else's problem") and perhaps doesn't get the senior executive and board level attention it deserves. Several initiatives and ways to address this are highlighted in this report. Investment in communication is mission critical to achieve better forest

biosecurity outcomes. PineNet is seen as a positive development with a key role to play in growing biosecurity and forest health awareness and capability and requires further effort and investment to realise its full potential.

2 Key recommendations

Multiple recommendations are made for improved biosecurity in this strategic review document (Part 2 of the review) and should be read alongside recommendations from the Part 1 Operational Review. It is impractical to implement all of them at once, and an indication of the recommended timeframe for implementation is provided.

Key Recommendations	*Indicative timeframe*
1. Agree a refreshed terms of reference for the Forest Biosecurity Committee (refer to draft TOR provided in Appendix 3 of this report)	Short-term
2. Liaise with other key forestry committees (e.g., STIMBR, Dothistroma, Forest Research, Fire, Skills and Training) to include their input and/or socialise the refreshed TOR, and to ensure there is shared understanding of how the committees can best communicate and work together in a coordinated way	Short-term
3. Refocus FBC to increase the committee's focus on strategic and policy issues matters, including use of sub-committees to deal with some of the more detailed matters on FBC's work programme	Evolve/On-going
4. Evolve FBC's membership to increase strategy and policy skills and strengthen diversity	Evolve/On-going
5. Invite more senior Biosecurity New Zealand representation on FBC, along with additional representation from Te Uru Rākau (Forestry New Zealand)	Short-term
6. Develop a long-term forest industry biosecurity strategy and associated work plan (ideally using a strategy sub-committee that draws together a mix of FBC members and additional senior leaders), then measure progress against this	Short-term
7. Develop a joint (MPI/FOA) readiness work plan under GIA	Medium-term
8. Review the industry capability and capacity needed to effectively lead and support FBC, to drive national implementation of FBC's biosecurity strategy and work programme, to meet any other commitments under GIA, and to address succession risks	Medium-term
9. Develop a clear approach to 'forest industry governance and leadership' following notification and during a response	Medium-term
10. Work with MPI and other sectors to address issues relating to the biosecurity investigation phase, including to improve timely notification and transparency	Short-term
11. Clarify with MPI what research is eligible for inclusion under GIA (readiness and response) cost-sharing	Short-term
12. Maintain and monitor a clear view of forest biosecurity risks (e.g., an active 'risk register'), including organism and pathway risks, and including both NZ and offshore experience	Long-term

13. Lift the profile of biosecurity in forestry board rooms and leadership teams, including input of senior leaders to forest biosecurity strategy development and considering wider GIA partner initiatives such as the 'Biosecurity Business Commitment' and 'Biosecurity in the Boardroom'.	Long-term/On-going
14. Continue to invest in development of "PineNet" to grow biosecurity and forest health awareness and capability (as well as to manage resource deployment) and strengthen its focus on supporting small forest owners and Māori forest owners to play their key part in forest biosecurity	Long-term/On-going

3 Review context, purpose and scope

The Forest Biosecurity Committee is undertaking a two-part review of its strategic direction and oversight of forest biosecurity, and biosecurity preparedness of the forestry industry, in order to identify opportunities to improve biosecurity outcomes for forestry.

The first part of this review – focused on operational biosecurity including industry preparedness – has been completed[2].

The second part of this review focuses on 'Strategic Alignment'. The purpose of this part is to determine:

- the role and responsibilities of FBC
- the scope of the FBC, core focus, and membership
- FBC linkages with key agencies and groups (e.g. MPI, STIMBR, Dothistroma committee)
- biosecurity risk assessment and identifying new research opportunities
- where STIMBR fits in the bigger biosecurity picture and if there gaps that FBC should fill (or other organisations)

The scope of this review excludes developing forest biosecurity strategic direction or associated priority setting or action/work planning, including for biosecurity research and readiness planning under GIA. It also excludes any detailed assessment of the biosecurity system or the performance of individual organisations. While this review considers potential connection and linkage to other FOA committees, it excludes assessing the role of these wider committees and determining boundaries (rather it provides advice to assist identifying where there are boundary issues and how these may be effectively addressed, for discussion with other committees and within the FOA board as appropriate). While this review considers overall resourcing needs, it excludes detailed assessment of capability and capacity requirements.

4 Methodology

Methodology included:

- An initial briefing with FOA biosecurity manager, Bill Dyck.
- A brief desktop review of key documents (listed in Appendix 1)
- An opening joint interview with Dave McCormack (FBC chair) and Bill Dyck.
- Observing FBC meeting and initial discussion on FBC purpose and what FBC members want to get out of the 'strategic alignment' review
- Interviews with key industry and government representatives (listed in Appendix 1)
- Distillation and report

[2] Froud (2018). *Forest Biosecurity Committee Review 2018. Stage one: Operational Biosecurity.* Report prepared for the Forest Biosecurity Committee by Biosecurity Research.

Interviews were for 30 to 40 minutes (in person or over the phone) and based on the interview guide and associated questions in Appendix 2.

Key themes from interviews are captured in this report and any comments/quotes are not ascribed to individuals.

5 Strategic context

Strategic context

It is important to acknowledge the **forestry sector has a long-serving and functional biosecurity committee** with a long history and proactive focus, including strengths in relation to surveillance and research – this is a strength and significant asset, and stands forestry apart from other industries.

However, as Government Industry Agreements for Biosecurity Readiness and Response (GIA) have developed other primary industries have more recently invested in biosecurity capability and grown collaboration with MPI and across industries, which has created both challenges and opportunities for forest biosecurity, which are explored in this review.

Forest biosecurity is dynamic and influenced by significant changes; these include internal changes within the industry (e.g., an increasing number of smaller operators and new entrants to the industry with lower levels of biosecurity awareness and expertise) and external changes that create both threats and opportunities (e.g., government policy, climate change and technology/innovation). Examples of such changes and drivers that influence future forest biosecurity identified during interviews are summarised in Table 1 below.

Table 1. Drivers for future forest biosecurity – examples of strengths, weaknesses, opportunities and threats identified during interviews

Strengths	Weaknesses
● Having a functional committee (FBC) that provides forest biosecurity oversight ● Strengthened engagement/cohesion across the big forestry corporates ● Industry, MPI and science collaboration ● FOA/NZFFA collaboration ● Membership of GIA with an initial operational agreement in place ● Depth of biosecurity expertise with some of this concentrated in key individuals ● New and improved Forest Biosecurity Surveillance programme ● PineNet ● Forest nurseries have come a long way/improved biosecurity ● Strengths in R&D, including Scion engagement in FBC/FRC, and strength in particular in relation to *Phytophthora* and fungi	● Industry-wide biosecurity awareness and practices are not at the level FBC desires ● Gap in relation to smaller operators, increasing in number/ownership, with many new entrants and not aligned with any industry body ● Reliance on a single species, *Pinus radiata* (92%) and associated vulnerability/importance of spreading risk. But also recognised that most other species tried to date are even higher risk than radiata pine. ● Timely notification and transparency during the biosecurity investigation stage ● Industry response and forest health capability (gap in training and specific skills cf. capability) ● Over-reliance on key individuals (MPI and industry) ● Greater reactive focus on more immediate issues cf. proactive and strategic (e.g., preparedness)
Opportunities	Threats
	● Continual increase in trade and tourism and associated pest-threats

• Political will is currently favourable toward forestry, including one billion trees policy (also a threat) • Biosecurity 2025 and broader movement to create a team of 4.7m and address social license issues • New drivers and values associated with forestry (e.g., ecosystem services), with opportunity to grow a bigger combination of species • New technologies (e.g., robotics, automation, big data, remote sensing, next generation diagnostic tools etc.) • Māori as an economic force and growing ownership in forestry • New Plant Production Biosecurity Accreditation Scheme for nurseries • MPI courses extended through GIA (e.g., response governance and CIMS training)	• New serious radiata pine diseases in Chile and Spain • Log exports may need to rely on greater pest-freedom assurances in the near future as methyl bromide use becomes restricted • Imported used forest machinery (e.g., haulers with ropes on; debarkers) • Climate change and associated changes in risk profile (new threats and existing ones/sleeper organisms) • Over next few years a lot of land being planted, with new entrants to the industry (likely lower biosecurity awareness & experience) and nursery stock going all over countryside • Constant threat from non-forestry nurseries as plants are moved around the country, possibly containing pests/pathogens • Shifting of forest vehicles, equipment and machinery around the country-side • Licence to operate challenges with use of response tools in an urban environment and even rural environments near houses • No contingency plan to replace radiata pine or Douglas-fir if the need arises

6 Key findings

Overall FBC is seen as valuable by its members, with a healthy culture and desire by members to be more engaged, not less. It is seen as assisting with critical industry cohesion and communication. FBC is not broken so doesn't need to be fixed. Rather it needs to continue to change within a dynamic forest biosecurity context, and areas for potential change are considered in the following sections.

6.1 Roles and responsibilities of FBC

Overall there appears to be **general agreement around the purpose, role and responsibilities of FBC,** but some differing perspectives on the level at which FBC should be operating and its focus, and with some confusion about FBC's role relative to others.

Forest biosecurity involves multiple organisations, committees and groups that are all focusing on parts of the puzzle, which creates risk of fragmentation and confusion (who is responsible for which parts). The areas that will benefit from additional clarification are explored further in sections 4.2 and 4.3 respectively, and a leadership and oversight role for FBC is proposed to address fragmentation risk.

A refreshed and agreed **terms of reference is needed for the FBC**. High level elements of this are proposed below and a draft TOR is provided in Appendix 3 for FBC and Executive Council consideration.

Draft purpose:

To provide industry leadership and oversight for all aspects of forest biosecurity and foster cohesion across industry, government and the science community to improve forest biosecurity outcomes.

"Leadership and oversight" does not mean FBC is covering and doing everything. Rather, it does mean FBC would drive implementation of overall forest biosecurity strategy for the industry and communicate and coordinate with others to achieve better forest biosecurity outcomes.

Draft roles and responsibilities:

- Provide advice on forest biosecurity strategy and policy matters (to the Executive Council, which formally approves strategy/sets strategic direction)
- Develop and implement a work plan and initiatives to address forest biosecurity strategy/strategic priorities
- Monitor changes in forest biosecurity risk profile and learn from issues and experience offshore and in other sectors.
- Advocate on biosecurity and forest health issues, including input to Government policy and research direction and promoting policies to improve biosecurity
- Oversee the Forest Biosecurity Surveillance programme (FBS) and awareness and training for forest health surveillance
- Provide input to GIA readiness and response, including:
  - lead and oversee implementation of industry minimum commitments, including operation of 'PineNet' and associated industry biosecurity awareness, training and practices
  - recommending readiness planning priorities (for agreement between FOA/MPI)
  - oversight of specific GIA readiness projects (where agreed between FOA/MPI)
  - advice to industry leadership during response (e.g., to the Executive Council and industry member on Response Governance)
- Provide advice on biosecurity research direction and priorities (to the Forest Research Committee)
- Oversee short term operational research projects
- Lead knowledge transfer and uptake
- Promote and facilitate industry cohesion and information sharing on biosecurity matters
- Share information and coordinate policy and planning matters with other industry committees or groups, and with other organisations, that contribute to forest biosecurity outcomes

6.2 Scope of the FBC, core focus, and membership

In relation to scope of the FBC, across people interviewed there was general agreement the scope of FBC should include biosecurity readiness and response, surveillance, phytosanitary standards and forest health. However, there was less clarity in relation to other aspects of post-border biosecurity (in particular pest management issues) and exports. And there were some differing perspectives in relation to research. In terms of "core focus", there was commonality in terms of the areas where FBC needs to focus but differing views on the level at which FBC should be operating and, related to this, FBC's membership. These are explored further below.

Scope

It is proposed **the scope of FBC includes all matters relating to biosecurity, including pre-border, border and post-border biosecurity, exports (forest log trade) and forest health**.

This recognises and provides for the key roles that other committees, groups or organisations play in improving forest biosecurity outcomes (e.g., STIMBR, FRC), respects the autonomy of these, but proposes clear industry leadership and oversight for forest biosecurity sits with FBC. This means the FBC will need to work closely with such groups (e.g., sharing information, aligning strategy, policy and plans, and in some cases undertaking joint initiatives etc.) to achieve its purpose. This is already happening in part and further opportunities to strengthen this are explored in section 4.3).

FBC will need to identify the priority areas where it will focus and invest effort and resources (e.g., risk profiling, pathways, surveillance, readiness and response, biosecurity practice, research).

In its leadership and oversight role for the other areas FBC's role would be to ensure there are no critical gaps/important biosecurity matters falling between the cracks and to develop strategic direction and monitor forest biosecurity performance that encompasses the full scope of forest biosecurity, above.

The key areas where further clarity is needed appear to be:

- Pest management – this includes long term management of weed issues[3], biocontrol and both national and regional pest management plan operational compliance. It is recommended these be in scope, but they are unlikely to be a significant focus for FBC, may be considered in other committees (e.g., Environment Committee and Forest Research Committee), and are likely to be the primary focus of individual forest companies working with regional councils and other pest management agencies.
- Forest log exports – this is an area where STIMBR plays a substantive role (leading the charge on the toolbox for achieve export assurance), MPI plays a substantive role (facilitating export assurance), FBC plays a support role (surveillance to achieve official "freedom" status, and industry oversight), and the Forest Product Export Committee plays a role (government-industry coordination). It is recommended this be in scope and an area where FBC provides leadership and oversight (e.g., high level strategic review of log exports issues, risks and opportunities) and shares information and coordinates with others.

<u>Focus</u>

There were differing views on the focus of FBC in several respects. The first was in terms of the balance of FBC's focus on "strategy/policy" vs. "science/technical" vs. "operational/implementation" matters.

Perspectives differed from some members feeling *'the current balance is about right'*, to others who felt the committee has strengths in relation to technical/science matters and needs to improve balance by strengthening focus on strategy/policy matters. This included greater "outward" focus and opportunity to be even more proactive and build *'foresight about what potential problems and opportunities are coming up'*. The surveillance system was identified as '*a good example of strong foresight and a proactive approach'*, with desire to build on this in other areas). Earlier focus on forest biosecurity/health issues in Chile, and more recently Spain, was raised as an example of what FBC needs to do more of, noting that '*continuing to monitor the situation and keep up with work in these countries is critical'*.

There was also a perspective that greater focus is needed on "implementation", which referred to things like improving biosecurity awareness and improving access to tools, existing knowledge and capability (including training and otherwise upskilling people), and tactical planning (e.g., readiness planning). The latter also included setting, and driving adoption of, better biosecurity practices within the industry, which was a focus of the first part of this review (Operational Biosecurity) carried out by Karyn Froud.

A telling observation reflected by several members was that *'strategic direction and policy matters are typically done already and dealt with outside of FBC by a few key people'*. While at board level a telling observation was that *'we can't afford FBC to be a technical committee, we want feedback on key policy issues, and perhaps we can do more to expose FBC to strategic context – but the committee would have to engage and we would have to get value/quality advice back'*. Several FBC members independently echoed similar sentiment.

[3] Note this is as distinct from new to NZ weed issues, which are within scope of GIA and a core focus for FBC.

My observation is likewise that **FBC appears to have disproportionate focus on technical and operational issues and greater focus on strategic and policy matters is needed**. Some things FBC could consider to strengthen the latter include:

- Develop a simple forest biosecurity strategy (or equivalent long term planning document) – consider utilising a strategy sub-committee for this purpose that draws together a mix of FBC members and additional senior leaders with complementary, strong strategic skills (this is also intended to strengthen leadership commitment to biosecurity – considered further in this report).
- Routinely include a focused strategy session at least once a year on FBC's agenda, where progress against strategy goals and objectives along with any changes in strategic context and direction are considered.
- Increase FBC exposure to strategy and policy matters (e.g., by inviting senior industry and government leaders to speak to these)
- Strengthen strategic and policy skillsets on FBC (an evolution rather than revolution - also refer to "membership" below)
- Utilise sub-committees or project teams to engage at a more detailed level on operational and technical matters to free up FBC so it can give more focus to strategy and policy matters.

Another theme raised during interviews was the need for a **stronger focus on implementation** (akin to 'operational'), which included raising awareness, training, technical/knowledge transfer and other forms of capability development.

There were also **different perspectives in relation to forest health and associated condition monitoring**. This was clearly not a new conversation. Some spoke about the deliberate strategic shift in focus at a national level to biosecurity and away from forest health (including changes to the national forest surveillance programme), with forest health condition monitoring now more in the domain of individual companies. Others spoke about the loss of focus and erosion of skills and capability to monitor forest health within the industry. Several noted in the past forest health training had been a core part of training for new forestry personnel, but this had disappeared and corresponded with a major decline in capability. Universally, there was no objection in principle to forest owners taking ownership of and carrying out forest condition monitoring, and several companies indicated they are actively working with SPS Biosecurity to develop forest health training. Rather there was concern there was very limited national oversight and a significant gap developing (exacerbated as small forest ownership increases), with a risk of things falling between cracks in the absence of some national oversight. And an opportunity for PineNet to play a key role in relation to both biosecurity and forest health awareness and training, noting the two are linked and complementary.

<u>Membership</u>

In terms of membership **the right parties appear to be around the table overall, with potential for MPI to strengthen its engagement through addition of a Te Uru Rākau (Forestry New Zealand) representative.**

There was some difference in view on whether FBC has right numbers around the table; these ranged from *'it's about right'* to *'there's too many'*, with no-one suggesting there are not enough.

The current FBC membership appears to be a cohesive good group of very competent people that understand biosecurity, get on well and with a healthy level of respect and trust around the table. This is an important strength and underpins the committee's proposed role to promote and facilitate industry cohesion and information sharing on biosecurity matters.

However, **strengthening of "diversity" within FBC's membership is needed**. This was noted during several interviews including '*lack of gender diversity'*, *'need for inclusion of Māori forest owner representation'*, and

'*need to bring through junior leadership'* given greatest emphasis. The risk of "group think" associated with lack of diversity was noted. Strengthening diversity over time is likely to help FBC to realise the benefits of diversity; '*Diversity brings a broad range of opinions/knowledge/experience/talent to the table so can make organisations more effective and successful'* and may also assist with succession planning.

The FBC membership overall appears to have predominant strengths in technical and operational areas, and the committee may benefit by **recruiting for additional strategy and policy skills** as it evolves its membership.

Several members suggested that some additional CEO or senior management level representation within its membership is needed to lift focus on strategy/policy matters and to strengthen influence. This includes MPI representation and engagement. While existing MPI members are well respected and contributing value, it was acknowledged that senior levels of MPI have very limited (if any) visibility of, or engagement with, the FBC. There was a strong theme that *'more senior MPI representation is needed, with senior managers at the table who have ability to engage across the scope of FBC's mandate and ability to make decisions and either allocate resources or directly influence resource allocation'* (i.e. within different parts of MPI and peer to peer).

Several members identified **FBC needs to better connect with small forest owners and Māori/iwi or hapu forest owners.** Existing NZFFA representation on the FBC was seen as a strength in relation to small forest growers. MPI advised that iwi/hapu account for 25%+ of forestry ownership, and small forest owners account for approximately 30% (*c.*12,000 owners with up to 500,000 ha of plantation forest). Small and Māori forest ownership is growing, with some being new entrants to forestry and potentially less familiar and experienced with biosecurity.

For small forest owners specifically, it was acknowledged most understand they have a key role to play, want to play their part in biosecurity and forest health and want to be part of a better informed forestry community - '*They* (small forest owners) *look to groups such as the FBC and some of the bigger corporates for leadership and as a source of biosecurity experience and know-how. So, there's a hang of a lot of trust and it's important the bigger players realise in this partnership they are relied upon a lot (e.g., Poplar issue – no point just saying "these aren't of interest to us") and that we all collectively take an industry and long term view'.*

Additional representation on FBC is not the only solution to issues above and may not be the best one.

Expanding the scope of PineNet to embrace smaller growers and Māori forest owners was identified by numerous people interviewed as an opportunity, including greater investment through PineNet on biosecurity and forest health awareness and training. Utilising existing relationships between smaller forest owners and existing FBC and NZFFA members was also identified as an opportunity, the sentiment being that '*if our members are knowledgeable this will flow on to non-members through existing relationships'*.

Utilising a wider suite of communication channels was also a common theme including, for example, through Māori liaison capability that exists within Te Tira Whakamātaki (the Māori Biosecurity Network), Scion, some forestry companies, Te Uru Rākau and regional councils. And use of simple and smart tools, such as, the Find-a-pest APP was promoted as a way to make it easier for less experienced owners and operators to engage in biosecurity.

It appears clear that **effective engagement of small forest owners and Māori forest owners in biosecurity and forest health is an important issue for FBC, and it is recommended that FBC agree a course of action to improve this.**

Other matters raised in relation to FBC during interviews

These include:

- **FBC member engagement is variable, and most are keen to be engaged more, not less -** members noted it tends to be several key individuals (who they have high trust and confidence in) that drive things, while some others are feeling less engaged and that they're not close enough to know what's going on. The clear feedback from FBC members is they are prepared to increase their engagement.
- **Well supported sub-committees are seen as an opportunity** to enable more engagement on operational and technical matters – these are valued by many FBC members; however, it was noted their use tends to be ad hoc and more structure and drive would help to increase that value.
- **There is over-reliance on voluntary effort and on several key individuals.**
- **Succession planning needs urgent attention** as the forest industry in general is very fortunate to have access to highly skilled, experienced and trusted biosecurity professionals, but this is also a point of significant vulnerability as there is an immediate succession risk. Younger members of the industry are also generally under-represented on FBC, which also represents a longer-term succession risk.
- **Overall, a greater level of capability and capacity is needed** - FBC has an ambitious agenda and growing challenge, and it appears significantly under-resourced to deliver on this. This includes both secretariat resource and capability to deliver FBC's work programme. This needs to be carefully assessed against strategy and work plan priorities, which is beyond the scope of this review. This is discussed further in relation to 'MPI/GIA' below and a comparison to other plant-based sectors is provided below for reference (Table 1).
- **Actively tracking progress against a clear strategy/plan and performance measures** will help FBC to deliver more value.

Table 1. Current levels of biosecurity capability in industry peak bodies across the plant-based sectors – comparison of dedicated specialist biosecurity capability relative to industry export value* [Note: This date is indicative, but represents a simplified picture of dedicated and specialist biosecurity capability within the peak industry bodies only - across these industries additional biosecurity capability exists within other industry organisations, commercial entities, research and service providers etc]

Industry		*Approximate industry export value**	*Dedicated biosecurity capability (excluding CEO and support staff)*
Forestry		$6.38 billion	**0.35 FTE** (Part-time Biosecurity Manager)
NZ Wine		$1.69 billion	**2 FTEs** (Biosecurity Manager, Senior analyst)
Horticulture	– Horticulture New Zealand (all of Horticulture)	$5.5 billion	**2 FTEs** (Biosecurity Manager, Assistant Biosecurity Manager)
	– Kiwifruit/KVH	$1.860 billion	**6 FTEs** (Dedicated CEO, Biosecurity Manager, Biosecurity advisors and Technical staff)

	– Pipfruit New Zealand	$730 million	**1.5 FTEs** (Biosecurity Manager, 0.5 of Technical Manager)
	– NZ Avocado	$98 million	**1 FTE** (Biosecurity Manager)
	– Summerfruit NZ	$70 million	**1 FTE** (Biosecurity Manager)
NZPPI (Nursery)		$600 million	**1 FTE** (Biosecurity Manager)

**export values sourced from FOA 'Facts and Figures 2017/18' and from 'Fresh Facts 2018')*

6.3 FBC linkages with key agencies and groups (e.g. MPI, STIMBR, Dothistroma committee)

MPI/GIA

The **MPI/industry relationship through FBC is seen as a strength and prized by both parties**.

GIA is viewed as a positive development and important focus for FBC, and a work in progress.

An interesting observation was that *'it has become more difficult to separate "what is us"* [industry only] *and "what is GIA?"' – industry and MPI have become more joined at the hip and collaborative'.*

A caution expressed by industry members was that while GIA is an important area of focus for FBC it should not usurp FBC's focus, with one observation being 'GIA is important and should probably take up to 50% of our attention'.

There's a big **opportunity to develop an annual readiness work plan under GIA**, so MPI and FBC have a shared view of, and can proactively plan for, priority readiness work. MPI would like to see FBC with its own (industry) long term strategy/plan for forest biosecurity, then a joint readiness plan under GIA which sits alongside/complements this. This is particularly important for MPI to plan ahead and commit the resources needed to improve forest biosecurity outcomes. It is also widely seen as important by FBC members.

Specific suggestions to further strengthen MPI/forest industry engagement included:

- A suggestion from MPI that FOA engage a full time biosecurity manager akin to roles employed in some other sectors (e.g., kiwifruit, avocadoes, pipfruit, wine), which has worked well to boost capability and streamline and strengthen engagement.
- A suggestion from industry that MPI engage a client relationship manager role, with focus including readiness, investigation and notification.

There were several areas under GIA that are not working as well as they need to:

- **Arrangements under GIA for investigation and notification are not working to the satisfaction of both MPI and industry** – both appear to recognise the issues, have some understanding of the challenges for both parties, and recognised the importance of building further trust and confidence (more on this below).
- **It is still not clear to industry what qualifies as 'research' under GIA?**
- **Working through indemnity and non-signatory issues** – acknowledging these are being addressed at GIA Deed Governance level and are a work in progress.

In relation to investigation and notification my observation is as follows:

- Industry personnel are generally frustrated at late notification and delays in action (urgent measures) that may compromise response options; in particular losing the window of opportunity to eradicate.
- MPI personnel are generally frustrated that when MPI notifies industry it is not left to get on with the job it is responsible for, and investigator resources (already under pressure) are diverted to respond to what it perceives as a barrage of industry questions and concerns that increase the demand on MPI investigation resources (one person interviewed suggested this is by up to five times), which is not sustainable for MPI.
- MPI is acutely conscious of reputational risk if it notifies industry and confidence is not held, and this is also generally appreciated by industry (this doesn't appear to be the primary concern for MPI)
- Both parties have some appreciation the forest industry has both technical and operational capability that could be deployed and add value during the investigation phase (including in relation to "urgent measures"), and that this is currently a lost opportunity [Note: My sense is MPI may underestimate this and what industry is prepared to contribute in good faith given what it has at stake. And MPI may have residual concerns around the time-cost of harnessing industry capability/risk of placing further demands on its investigators, and whether the added value outweighs this].
- Both parties recognise that strong 'trust and confidence', along with a conducive organisational culture and clearly documented procedures, are critical to achieve more effective investigation and notification arrangements.
- Both parties recognise this issue is wider than just the forest industry, and even GIA.

The above issues/perspectives seem to be reasonably well understood by most people interviewed. Finding a way through these - to improve engagement during the notification/investigation phase - has been a 'work in progress' for some years now and needs to be urgently improved. My understanding is FOA and MPI representatives are already working with MPI representatives to agree what an effective notification process looks like and how any barriers to achieving this are best addressed.

An additional opportunity FBC may wish to consider is to **document how the forest industry will manage the notification process**, including to hold confidence and to contribute value to lead investigators, and including the sorts of technical and operational resources/support industry can provide and how these would be efficiently coordinated by industry. This could then be the focus of a future industry-led 'simulation' or 'exercise', inclusive of MPI, so all parties better understand how this will work in practice.

Another area that may assist FBC (and others) with role clarity in relation to GIA is to **develop a clear approach to industry governance and leadership during a response** (including decision making, funding, communication, capability deployment etc.). This may assist clarity and shared understanding of the relative roles of the Executive Council, the industry's representative on Response Governance, FBC and PineNet, and individual companies. A model for this has developed by the kiwifruit industry, which has been shared with FOA. Notably the kiwifruit example does not cover the notification/investigation stage, however the model/approach could usefully be extended to cover how the forestry industry will manage notification arrangements and support investigation (along lines above).

Any such model will need to be carefully tailored to forest industry governance arrangements (including decision making and funding), communication channels, unique elements such as PineNet, and to align with broader industry crisis management models (e.g., fire). **A "first 72 hr plan for industry" and associated call templates and role cards** are additional elements/practical tools that may be worth exploring (examples are available at: www.kvh.org.nz/kiwinet) and adapting/improving on to better align with forest industry crisis management.

Related to this, a very practical suggestion raised during interviews was that *'most forestry vehicles have, under their sun visor, simple awareness material and instructions to follow for rural fire response (who to call, first steps, how to upscale etc.), and equivalent materials for forest health and biosecurity response may usefully be added to this'*.

At a strategic level there was common concern that GIA, and the biosecurity system in general, appear to be overly reactive and pest-focused, with parties getting deeply camped in individual issues of the day (e.g., Myrtle rust, Fruit Fly, *Mycoplasma bovis*), and with imbalance between 'readiness' and 'response'. Myrtle rust was frequently cited as an example where the system had put its effort into reacting rather than preparing, even though an incursion and need to respond to this were widely viewed by parties as imminent and inevitable. The need to pre-register tools was a strong theme (the example of new formulations of Foray 48B not registered for use in NZ was cited along with the need for registered helicopters to work in urban environments etc).

In a forestry context, **greater focus on managing risk associated with pathways (international and domestic) and generic preparedness (preparing for the unexpected) are important**, with a view that more emphasis was needed in these areas to improve forest biosecurity outcomes. Generic preparedness might include, for example, preparing for response to a serious soil pathogen incursion (with several target organisms in mind to test this), rather than preparedness planning for an individual species.

There is opportunity to take a broader view of GIA, with most FBC members expressing views on GIA as a bilateral relationship with MPI, rather than as a multilateral relationship with a wider suite of government and industry GIA partners. **There is further opportunity to achieve greater influence and outcomes for forestry by working together with industry GIA partners.** Other plant-based industries have recently invested significantly in growing their biosecurity capability and working collaboratively with each other and with MPI as GIA partners to strengthen biosecurity and progress joint outcomes. While FOA is engaged with this at board and senior levels to the extent it can within current capacity, it is likely key opportunities are being missed and some FBC members appear to have limited visibility of this.

<u>STIMBR</u>

This is considered under section 4.5 below.

<u>Dothistroma Control Committee</u>

The general tenor of interview feedback was that the Dothistroma Control Committee is generally operating ok. It has a strong biosecurity purpose, coordinating the spray programme for Dothistroma on behalf of all forest owners. This committee sits outside the FOA committee structure. It is a very operational committee essentially forecasting the need for, facilitating the purchase of, administering the distribution of, and reporting on the use of, copper for treatment of Dothistroma needle blight. In the past it has also commissioned some research. FBC currently liaises with this committee, and most committee members felt the flow of information was generally ok. Recently the Executive Council has requested that the Dothistroma Control Committee update the Executive Council through the FBC Chair. This seems pragmatic and to be working ok.

<u>Environment Committee</u>

There appears to be modest overlap with this committee, which from time to time considers biosecurity issues impacting the environment (e.g., established weeds and associated biocontrol, animal pests, pathogens), including compliance with national and regional pest management plans under the Biosecurity Act.

It is recommended such pest management matters fall under proposed leadership and oversight role of the FBC, with lines of communication formalised such that FBC has early visibility of pest management areas

where the Environment Committee is engaged, with FBC maintaining an overview of pest management matters impacting the forest industry and sharing this with the Environment Committee, and FBC ensuring committee work plans are coordinated in this specific area.

Fire Committee

There appears to be limited overlap and weak linkage only with this committee. There is a relationship between fire and vulnerability to forest health issues, but this does not appear to require FBC oversight.

The key opportunity that exists for FBC is to **further strengthen alignment of emergency management systems and associated communication with fire response/this committee.** This has already happened to an extent in the way that PineNet has been modelled on fire regions and given both operate CIMS-based systems. But more opportunity was identified during interviews to align with fire emergency management systems and tools. A very practical example was that most forestry vehicles have, under their sun visor, simple awareness material and instructions to follow for rural fire response (who to call, first steps, how to upscale etc.), and equivalent materials for forest health and biosecurity response may usefully be added to this.

Forest Research Committee

The Forest Research Committee clearly has the lead role in relation to biosecurity research. This includes developing the strategy, setting priorities and funding this. It appears to have a sound process for seeking FBC input to this, strengthened by technical committees (including for biosecurity) that assist it with technical direction and subject matter expertise. Overlapping membership between some of these and FBC also strengthens this alignment, and there appears to be good communication between committee chairs.

Oversight of information and knowledge transfer, including transferring the results of research to those with a role to play in forest biosecurity, then resides with FBC. FBC will therefore have a strong interest in ensuring that research procurement provides for investment by research providers in knowledge transfer.

The current linkage between FBC and FRC seems to be working well overall, with most interviewed reflecting that information is flowing and senior Scion representation on FBC also adds strength.

An area where additional clarity may be useful is clarifying what qualifies as 'research' within the scope of GIA, and whether there is any linkage that needs to be managed in relation to this with FRC.

From time to time FBC still directly commissions very short term and applied research to assist it with near-term challenges, and all parties appear to be comfortable with this arrangement. If anything, it will be useful for FBC to ensure FRC has visibility of this so it can monitor and assist with alignment.

Other suggestions made during interviews to further strengthen alignment between FBC and FRC were to hold joint meetings from time to time (seen as a good idea but logistically challenging in practice) and including Russel as a member of FBC. These are reasonable suggestions for consideration and likely to add some value, but they have resource implications that will need to be carefully considered by FOA management. There doesn't appear to be a material problem to solve at this time.

Training and Careers Committee

There is opportunity to engage with this committee to **ensure biosecurity and forest health are captured in the Training and Careers Committee's view of forest industry training needs and promoted by this committee with funders and training providers**.

6.4 Biosecurity risk assessment and identifying new research opportunities

Risk assessment

Biosecurity risk assessment is a strength of the forestry industry. This includes assessment of high risk organisms undertaken by industry/Scion, and FOA's more recent work with CEBRA to assess a wider range of pest and pathway risks. And it includes engaging with the emerging risk system operated by MPI. A strong theme was that risk is dynamic and that more can always be done.

Most risk assessment appears to happen outside of FBC in practice, and FBC members appear to have variable visibility of this information. For example, several questioned whether MPI still operates an emerging risk system as they could not recall seeing any reports for some time[4].

A potential opportunity for FBC is to maintain and monitor a clear view of risk, for example, through an active 'risk register' that gives FBC visibility of current, new and emerging risks, how these are being addressed, and what is changing over time. This would include greater focus on understanding and monitoring risk offshore and learning from forestry experience in other countries (covered earlier in this report), and on understanding and monitoring pathway risks in addition to that associated with target organisms. This area may be well suited to a technical sub-committee of the FBC (and/or the biosecurity technical committee already established by the FRC and needs to be fully integrated with MPIs emerging risks system.

New research opportunities

In terms of new research opportunities considered directly by FBC (short term and applied to address near-term issues), these tend to be raised and considered one idea at a time. **A more structured approach (strategic priorities) considering short term applied research investments by FBC is desirable.**

Several people interviewed suggested that greater connection between researchers and industry practitioners is needed, including out in some of the regions, and would add value to assist well targeted advice/technical transfer and uptake. Also identified during interviews was the need to achieve better integration and alignment across research providers and teams to avoid 'reinventing wheels'. These are important and perennial challenges across the science system and for all sectors and addressing these is not a core role for FBC (nor this review).

Overall there was a view that **there has been strong focus on research in relation to phytophthora and fungi, and it will be timely to consider a broader focus**. In relation to 'timing' it was also noted that several forest health research programmes were coming to an end and new bids being considered or in process (e.g., new 'resilient forests programme', 'healthy trees healthy forests').

Potential priorities for new research raised during interviews included:

- Enhanced diagnostics for new pests (e.g. nematodes, viruses, bacteria) that will attack trees in future (to be better prepared)
- Tools for detecting infected trees before they are able to transmit disease (e.g. hyperspectral aerial)
- Tools and social science to support ability to respond in urban situations, including ability to communicate effectively with communities impacted.
- Social science to support efforts to help the general population understand importance of primary sectors, the need to respond and relevance.
- How to make forest systems more resilient to biosecurity and forest health threats, including genetics
- Practical uses of remote sensing – identifying stands that aren't performing well.

[4] Note Christine Reed presented to FBC on the emerging risks system on 24 October 2018

- Improved pathway research, for example, identifying contamination on imports and sampling for pathogen identification.

Questions were also asked around:

- Where does non-biosecurity traditional forest health research (abiotic issues and climatic events - drought, fire, wind - events) get done now? Noting that nutritional issues probably have more impact on the value of our estate than biotic impacts.
- Where do wilding pines, other established weeds, animal pests and wasps lie in the research programme? Are they a biosecurity issue?
- Do we include streams in forest biosecurity? Should we be sampling streams for incursions (e.g. rock snot)?

The process for identifying new research priorities needs to be through the current Science Strategy process led by the FRC.

Finally, the application of research and knowledge transfer was identified as a key area where more attention is needed and FBC has a key role to play.

6.5 Where STIMBR fits in the bigger biosecurity picture and if there are gaps that FBC should fill (or other organisations)

STIMBR stands alone from FOA with broader membership beyond forestry and operating to its own board, which seems to make good sense.

There is some existing sharing of information (and good relationships help with this), although this tends to be more *ad hoc* as opposed to regular and routine.

There does not appear to be a clear shared understanding of the linkage between STIMBR and FBC, and neither appears to be taking an overall strategic view on export matters (forest log trade), yet both have an interest in this and play important roles (e.g., STIMBR in finding alternate tools and way to reduce methyl bromide use, FBC in relation to surveillance and area freedom and alternate strategies), as do MPI and the Forest Products Export Committee.

A clearer relationship with STIMBR is needed so there is shared understanding and greater alignment in the forestry sectors approach to export matters. Formalising two-way communication and information sharing, some overlapping representation, and some joint planning in relation to export issues are options to explore across committees.

6.6 Other findings

There was a general theme that while biosecurity is seen as extremely important to forestry, there is still an element of 'it is someone else's problem to sort out'; that is, **biosecurity tends to get pushed down within forest organisations and doesn't always get the senior executive and board level attention it deserves.** This is likely to hinder desired improvements to forest biosecurity outcomes.

Development of a forest biosecurity strategy and strengthening FBC focus on strategy and policy matters is one step that may help to address this.

Several relevant initiatives that may also be of interest to FBC and assist with this are:

- **Biosecurity Business Commitment** – this is an initiative driven by some GIA signatories (e.g., Dairy, Horticulture and Wine, working with MPI) to sign their major industry corporates up to a biosecurity business commitment (a one-page public commitment, with detail as to what this means for each

industry that sits behind this), as well as working together to sign up key non-primary industry players (e.g., Air New Zealand, Ports etc.).

- **Biosecurity in the boardroom** – this is an initiative piloted by the Institute of Directors in its Bay of Plenty branch in association with 'Tauranga Moana Biosecurity Capital', to help directors understand the role of boards in relation to managing biosecurity risk and crisis events (www.thisisus.nz/latest-news/news/57/how-boards-respond-to-a-biosecurity-crisis).

A general theme from interviews was the **ongoing need to lift general awareness of biosecurity and forest health across the industry at all levels, and to strengthen training and other initiatives that will lift biosecurity capability and capacity.**

The **critical importance of strengthening biosecurity communication** across the industry, and externally, was a universal theme across interviews. The importance of 'social license to operate' was a strong related theme (particularly in relation to ability to respond within urban environments and ability to access critical tools), and one where the forestry industry needs to partner with others. 'Biosecurity 2025' was seen as a strong vehicle to achieve this and something the forest industry should be fully engaged with. Several noted that a number of forest owners feel they don't know enough about the new forest surveillance system and addressing this is important given the level of investment through levy contributions.

PineNet is seen as a strong development with further potential to develop and add value. Themes included that PineNet has a key role to play in lifting biosecurity and forest health awareness and grow capability, with more effort and investment (including face to face) needed to achieve its full potential. Communication tends to be out to PineNet at this stage (newsletters look useful), and there needs to be a feedback loop to give FBC visibility as to how the industry is responding to its initiatives. FBC may wish to consider widening the scope of PineNet to include small forest owners and Māori forest owners (refer above).

7 Conclusion

Overall FBC is a functional committee valued by its members and plays a key role in assisting industry cohesion and communication, as well as wider cohesion with MPI and Scion. It is not broken so does not need to be fixed/require any radical change but can be improved.

This needs to start with shared understanding of the committee's purpose, roles and responsibilities, then a clear strategy and plan. A strong industry leadership and oversight role for FBC is needed, recognising there are many organisations, committees and groups that have key roles to play to achieve better forest biosecurity outcomes.

The key area of change needed is to strengthen FBC's focus on strategic and policy matters, and to increase outward focus on what the forest industry can learn from, and achieve by working with, others (in particular with industry GIA partners and forestry counterparts offshore). 'Evolution rather than revolution' will best serve FBC, with gains to be made by strengthening strategy and policy skillsets on FBC, as well as improving member diversity and actively addressing succession risks.

A key challenge for FBC is to lift biosecurity and forest health awareness, engagement and practices across the wider industry. This requires both 'top down' and 'bottom up' commitment and drive. The latter seems to be on track. The former – achieving a higher level of senior executive and board level attention and commitment to biosecurity – is essential if FBC is to achieve better forest biosecurity outcomes and improvements needed.

About the author

Andrew is director of Andrew Harrison Consulting (AHC Ltd), providing specialist biosecurity consulting services. He has a wide range of experience in relation to governance, leading development of strategy, leading law reform, developing strategic and operational policy, managing operations, serving as a national regulator, and providing specialist advice (including as an expert witness). Andrew has previously worked in governance, senior management and specialist biosecurity roles within several industry bodies (Kiwifruit Vine Health, New Zealand Plant Producers Inc.), the Ministry for Primary Industries and the Department of Conservation over two decades years. His academic qualifications include a Master of Science in Resource Management (Lincoln University), and a Bachelor of Science in Ecology and Environmental Science (Massey University).

Appendix 1: List of key documents reviewed, and people interviewed

Key documents:

- Forest Biosecurity Committee Review: 2018 Stage One - Operational Biosecurity
- Forestry Roadmap (draft 8 February 2019)
- Revised Biosecurity Profile Plantation Forestry (January 2019)
- Draft Terms of Reference for the Forest Biosecurity Committee March 2011
- Previous FBC minutes
- PineNet website and newsletters
- Commercial Plantation Forestry Operational Agreement for Readiness (July 2018)
- Terms of Reference for the Forest Research Committee
- Draft Commercial forest-growing in New Zealand: A science and innovation plan for the New Zealand commercial forest-growing sector (2018 – 2035)

People interviewed

- Barry O'Neil (Scion board, NZBH governance group, Hort NZ President, Tomatoes NZ Chair)
- Bill Dyck (FOA)
- Bill Wheeler (Ernslaw One)
- Brendan Gould (MPI)
- Bryce Wright (PanPac)
- David Rhodes (FOA)
- Dave Cormack (FBC chair, CEO of Wenita Forestry)
- Don Hammond (Operations for Dothistroma and STIMBR chair)
- Fiona Roberts (GIA)
- Ian Hinton (KT)
- Lindsay Bulman (Scion)
- Mark Forward (Nelson Management Limited)
- Mike Baker (Hancock)
- Paul Stevens (MPI)
- Peter Berg (NZFFA)
- Russel Dale (FOA/FGR)
- Venise Comfort (FOA)
- Wei-Young Wang (PF Olsen)

Appendix 2: Interview guide

Forest Biosecurity Committee Review. Stage two: 'Strategic Alignment'

Interviews and questions to consider

Background

The Forest Biosecurity Committee is undertaking a two-part review of its strategic direction and oversight of forest biosecurity, and biosecurity preparedness of the forestry industry, in order to identify opportunities to improve biosecurity outcomes for forestry.

The first part of this review – focused on operational biosecurity including industry preparedness – has been completed[5].

The second part of this review focuses on 'Strategic Alignment'; specifically, to determine:

- the role and responsibilities of FBC
- the scope of the FBC, core focus, and membership
- FBC linkages with key agencies and groups (e.g. MPI, STIMBR, Dothistroma committee)
- biosecurity risk assessment and identifying new research opportunities
- where STIMBR fits in the bigger biosecurity picture and if there gaps that FBC should fill (or another organisation)

I would appreciate interviewing you as part of the 'strategic alignment' review – you have been identified (by FOA leadership and myself) as a key person that brings an important perspective to strategic biosecurity direction for forestry.

This involves an approximately 30-40 minute interview (in person where possible, or via skype), and to prepare for this I ask you to consider the following questions below. In addition to our conversation any written response is also very welcome. I will be recording key themes (cf. details of individual interviews), and any comments will not be ascribed to individuals. You will receive a copy of the final report accepted by the FBC.

Interview Questions

1. What are the big things you see driving future forest biosecurity and shaping strategic direction? (you may wish to consider the top two strengths, weaknesses, opportunities and threats of/to forest biosecurity)
2. What are the key issues you want to see addressed in the 'strategic alignment' review, and why?
3. What will be different if forest biosecurity is working the way you think it should? – what does this look like, and what are the critical shifts needed to achieve this difference?
4. Who do you see having key roles to play in future forest biosecurity, and what is the nature of those roles?
5. What is working well and where do you see any gaps in forest biosecurity oversight? Including:
    - Where are changes needed in the way the Forest Biosecurity Committee provides that oversight and works with other agencies or groups?

How can the benefits of effective biosecurity risk assessment and research be fully realised and better inform Forest Biosecurity Committee decisions? And where do you see new research

[5] Froud (2018). *Forest Biosecurity Committee Review 2018. Stage one: Operational Biosecurity.* Report prepared for the Forest Biosecurity Committee by Biosecurity Research.

Appendix 3: Draft TOR for the Forest Biosecurity Committee

Purpose:

To provide industry leadership and oversight for all aspects of forest biosecurity, and foster cohesion across industry, government and the science community to improve forest biosecurity outcomes.

Roles and responsibilities:

1. Provide advice on forest biosecurity strategy and policy matters (to the Executive Council, which formally approves strategy/sets strategic direction)
2. Develop and implement a work plan and initiatives to address forest biosecurity strategy/strategic priorities
3. Monitor changes in forest biosecurity risk profile and learn from issues and experience offshore and in other sectors and work with MPI
4. Advocate on biosecurity and forest health issues, including input to Government policy and research direction and promoting policies to improve biosecurity
5. Oversee the Forest Biosecurity Surveillance programme (FBS) and awareness and training for forest health surveillance
6. Provide input to GIA readiness and response, including:
    - lead and oversee implementation of industry minimum commitments, including operation of 'PineNet' and associated industry biosecurity awareness, training and practices
    - recommending readiness planning priorities (for agreement between FOA/MPI)
    - oversight of specific GIA readiness projects (where agreed between FOA/MPI)
    - advice to industry leadership during response (e.g., to the Executive Council and industry member on Response Governance)
7. Provide advice on biosecurity research direction and priorities (to the Forest Research Committee)
8. Oversee short term operational research projects
9. Lead knowledge transfer and uptake
10. Promote and facilitate industry cohesion and information sharing on biosecurity matters
11. Share information and coordinate policy and planning matters with other industry committees or groups, and with other organisations, that contribute to forest biosecurity outcomes (including Forest Research Committee, Environment Committee, Training and Careers Committee, Fire Committee, STIMBR, Dothistroma Control Committee)

Scope and working to role:

The scope of FBC includes all matters relating to forest biosecurity, including pre-border, border and post-border biosecurity, and forest health.

This recognises and provides for the key roles that other committees or groups play in improving forest biosecurity outcomes (e.g., STIMBR, FRC), respects the autonomy of such groups, but proposes clear leadership and oversight for forest biosecurity sits with FBC.

FBC will identify the priority areas where it will focus and invest effort and resources (e.g., risk profiling, pathways, surveillance, readiness and response, biosecurity practice, research).

In its leadership and oversight role for the other areas FBC's role will be to ensure there are no critical gaps/important biosecurity matters falling between the cracks and to develop strategic direction and monitor forest biosecurity performance that encompasses the full scope of forest biosecurity.

Membership:

- Representatives from industry (FOA members) (includes potentially at least one CE or Tier Two Manager)
- NZFFA
- Forest Nursery Association
- Biosecurity New Zealand
- Te Uru Rākau (Forestry New Zealand)
- Scion

Forum

- Four meetings per year, one of which may be a workshop
- Meeting in three parts; strategy/policy, operations/implementation, research
- Annual strategy session (review progress, refresh)
- Annual FOA/MPI/industry GIA partner 'Forest Biosecurity Forum' in June each year
- Subcommittees to deal with specialist issues (forest heath assessments and training and careers as a starter)