Review of the Intergovernmental Agreement on Biosecurity

Submission of the Invasive Species Council

July 2016

Endorsed by:

VICTORIAN NATIONAL PARKS ASSOCIATION
Be part of nature

ISLAND CONSERVATION
Preventing Extinctions

Australian Wildlife Society

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CAIRNS AND FAR NORTH ENVIRONMENT CENTRE

kuranda envirocare inc.

HUMANE SOCIETY INTERNATIONAL

Nature Conservation Council
The voice for nature in NSW

About this submission

This submission was prepared by the Invasive Species Council as input to the review of the Intergovernmental Agreement on Biosecurity. The review panel sought public input between May and July 2016.

The submission was endorsed by:

- Humane Society International
- Australian Wildlife Society
- Nature Conservation Council of NSW
- Island Conservation
- Victorian National Parks Association
- Kuranda Envirocare
- Cairns and Far North Environment Centre

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Usage

Australia, July 2016

Introduction and summary of main points

The Invasive Species Council campaigns for better laws and policies to protect the Australian environment from weeds, feral animals and other invasive species. Our submission focuses on matters that may affect the environmental outcomes achievable under the Intergovernmental Agreement on Biosecurity (IGAB).

The Intergovernmental Agreement on Biosecurity is an important element of Australia's biosecurity system, facilitating improvements in coordination of biosecurity policy and practice. The agreement's effectiveness can be enhanced by measures to increase the attention paid to environmental biosecurity, to enable more timely and effective decision-making, to improve accountability and to guarantee adequate funding for timely environmental biosecurity interventions, especially those relating to prevention and early eradication. This submission outlines several such measures as summarised below:

Increasing the attention paid to environmental biosecurity

Australia's environment has suffered from an historic and on-going bias towards agricultural biosecurity as opposed to the biosecurity of the country's natural environment.

We therefore urge the addition of a further two national biosecurity priorities as follows:

- *Funding early intervention and eradication, and*
- *Environmental biosecurity*

We urge that specific provision must be made in the agreement to enable environment ministers to initiate pro-active input to decision-making, and requiring they (at least) provide a delegate to attend all meetings and receive all agendas, papers and minutes from IGAB and subsidiary bodies relating in any way to environmental biosecurity.

To further ensure adequate attention is paid to environmental biosecurity, we propose that IGAB commit each party to appoint an environmental biosecurity officer with appropriate expertise in ecology and environmental biosecurity to lead their jurisdiction's relevant input under the agreement.

To improve collaborative preparedness in the same way as achieved by Plant Health Australia and Animal Health Australia, we propose the establishment of Environment Health Australia (proposal **attached**). Without such a standalone institution the important work of readying Australia for new environmental threats will continue to be overlooked.

We also propose the establishment of a standing environment committee under the National Biosecurity Committee.

Informing science-based decision-making

We urge the establishment of a "national research centre for prevention of environmentally invasive species". This would focus on the cost-effective prevention end of the invasion curve, and on management of invasive species that have environmental impacts. It would increase Australia's foresighting capacity to anticipate new and emerging invasive species, and play a role in increasing understanding of and engagement in environmental biosecurity.

We urge that decision-making about which are the most important risks and priorities in biosecurity must arise from transparent science-based risk analysis including (where environmental biosecurity is concerned) application of the precautionary principle.

Enabling timely decision-making

We urge the establishment of a process whereby one delegated authority is acknowledged under the IGAB as having the remit to make decisions when time is of the essence. It is also crucial that that body contain adequate environmental expertise and cultural orientation towards addressing environmental biosecurity issues.

We also urge that the agreement be amended to reflect the Commonwealth's heads of power and responsibility to take decisive and unilateral action about urgent environmental biosecurity matters especially as regards prevention and early eradication.

We further urge that the agreement be amended to state that the Australian Government has the support of the parties to act rapidly, adequately and *unilaterally* in the case of a national biosecurity emergency.

Applying the precautionary principle and approach to environmental biosecurity

The IGAB helps to give effect to Australia's responsibilities under the Convention on Biological Diversity, whose preamble contains the precautionary principle: *"Where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize such a threat."*

We urge that the IGAB be revised to include the precautionary principle (as also reflected in the Environment Protection and Biodiversity Conservation Act (Cwlth)). We also urge that a consistent precautionary approach be taken to environmental biosecurity in the implementation of the agreement.

Similarly, we urge that the agreement includes 'prevention' as an explicit and very strong principle requiring that action be taken to prevent known risks of environmental harms from materialising.

Further implementing our Convention responsibilities, and to ensure that environmental biosecurity ensues from the agreement's administration we further propose that principles of inter-generational equity, and of the conservation of biodiversity and ecological integrity be included in the agreement.

Guaranteeing adequate funding for timely environmental biosecurity interventions

We urge the panel to recommend the establishment of a standing environmental biosecurity fund, of at least $100 million dollars, topped up each year, that can be drawn on to cover the costs of environmental biosecurity responses where time is of the essence.

In this submission we also reiterate our support for the full adoption and implementation of the recommendations of the 2015 Senate inquiry into environmental biosecurity, most of which directly advance the objectives of the IGAB. We also urge the panel to examine the institutional reform recommendations of the 2008 Beale review of Australia's biosecurity system.

To the extent that the suggestions in this submission may fall outside the remit of the panel we urge that the panel elevate these suggestions to the appropriate decision making authority so that the suggestions can be considered and Australia's biosecurity system can more fully secure the country's natural environment.

The submission is arranged as responses under the review panel's list of questions for submitters. References are made throughout to specific clauses in the agreement and its schedules.

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Responses to "questions for review submitters"

The IGAB

1) Is the IGAB a suitable mechanism to underpin Australia's national biosecurity system in the future (10 or 20 years from now)? Are the consolidated priority areas still appropriate?

Provided that the matters raised in this submission are attended to, we believe that the IGAB can be one suitable mechanism to underpin the biosecurity system. The agreement has helped to improve coordination and dialogue around biosecurity matters and this has been an important achievement.

There is a caveat here: Although we feel the IGAB can be an effective element in Australia's biosecurity system, its effectiveness is currently limited by a bias towards protecting the interests of agricultural industry. This bias echoes a long-standing imbalance in the biosecurity system as a whole. It is evidenced in the background of the discussion paper for this current review, which states that "Australia, **especially our agricultural sector**, will continue to benefit from a strong national biosecurity system..." (p. 1, our emphasis).

The stated purpose of the review is also revealing, as within the context of assessing and adjusting the capacity of the biosecurity system, the purpose specifically includes: "...to minimise primary production costs..." (p. 1).

To have the minimisation of primary production costs as a purpose of the review without reference to other goals, such as minimisation of the impact on the environment, is not appropriate. "Optimisation" of primary production costs might have been a more appropriate inclusion, but even so the interests of one sector should not be given particular weight. The purpose could similarly include "...to eliminate the importation of taxa which might benefit private primary producers but pose a risk to the natural environment and the public good...".

The bias in the biosecurity system can be seen in the outputs and outcomes of the system. To give one example, there is a much higher degree of preparedness in agricultural biosecurity than in environmental biosecurity, as shown in the diagram at **Appendix 1** comparing industry and environmental preparedness (compiled in 2015). This shows that there is poor systematic surveillance and few early detection and rapid response plans for environmental biosecurity threats.

With great respect, we urge the review panel to reflect on this historic, on-going and institutionalised bias towards agriculture and to pay great care in ensuring that the panel's advice to the (agriculture) Ministers is elevated above the traditional biases of the system, is frank and is aimed squarely at delivering public good.

The effectiveness of any institution will depend on its context- in this case the other institutions and circumstances of the broader biosecurity system. The IGAB's success could be greater if either its context or its own provisions were strengthened to: ensure well-informed, science-based decision-making; ensure *timely* decision-making; increase the attention paid to environmental biosecurity (and reduce the bias towards protecting the interests of agricultural industry); apply the precautionary principle in addressing environmental biosecurity, and; guarantee adequate and timely funding for environmental biosecurity interventions.

While some of these matters were and are intended to be covered by the current agreement (and the system in which it resides), they are not yet resolved in the agreement's implementation nor given adequate effect on the ground (at least where environmental biosecurity is concerned).

These issues were considered in depth during the Senate inquiry into environmental biosecurity in 2015 but there has been no Government response to the inquiry, and no significant reforms to strengthen environmental biosecurity have ensued. We support and urge the full adoption and implementation of all of the Senate inquiry's recommendations.

Given the above, while we feel that the "priority areas" are still appropriate, we propose the addition of a further two priorities as follows (italicised below):

- National decision making and investment
- National emergency preparedness and response
- Established pests and diseases of national significance
- Surveillance and diagnostics
- Information management
- Communications and engagement
- *Funding early intervention and eradication, and*
- *Environmental biosecurity*

While Australia boasts a relatively pest-free status for many agricultural commodities, the environment has not fared so well. Australia's environment has suffered centuries of catastrophic losses due to invasive species and biosecurity failings- from rabbits to cane toads to myrtle rust and invasive ants. **Appendix 2** records those new incursions detected since 2000 that may impact on the environment. Any set of national biosecurity priorities that does not now include specific measures to address environmental biosecurity would be obviously wrong and would be condemned by future generations for a glaring omission.

While many of the new invasive species that have caused major environmental damage have been accidentally introduced, many have been deliberately introduced, both legally and illegally. The focus of our biosecurity system for the environment must include accidental, legal and illegal pathways.

2) What are your views on the construct, effectiveness, and transparency of the IGAB? Please provide examples.

We feel that:

- The construct of the agreement is reasonable but can be improved by ensuring that all of its provisions drive biosecurity action rather than inaction;
- Its effectiveness has been quite limited especially in regards to environmental biosecurity, and that;
- There is little transparency around the IGAB particularly in terms of decision-making.

The following comments provide some examples and commentary around particular clauses of the agreement:

Clause 2.4 states that the IGAB is not intended to create legal relations between the parties.

The parties already have legal relations through Australia's constitution and the mass of law beneath it. Having said that, we feel that the agreement ought to spell out the relevant legal relations and responsibilities including especially the Commonwealth's overriding responsibilities as a signatory to the United Nations Convention on Biological Diversity (CBD) as reflected in the Environment Protection and Biodiversity Conservation Act (C'wlth).

Clause 4 - Principles

The IGAB helps to give effect to Australia's responsibilities under the CBD, whose preamble contains the precautionary principle: *"Where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize such a threat."*

We urge that the IGAB be revised to include the precautionary principle (as also reflected in the EPBC Act (Cwlth)).

Similarly, while the importance and cost-effectiveness of prevention is well known in biosecurity policy circles, this is not adequately reflected in the principles of the agreement. Prevention is of primary importance in biosecurity. We urge that the agreement reflect this by including 'prevention' as an explicit and very strong principle requiring that action be taken to prevent known risks of environmental harm from materialising.

To ensure that environmental biosecurity ensues from the agreement's administration we further propose that principles of inter-generational equity, and of the conservation of biodiversity and ecological integrity be included in the agreement.

Clause 4.1 viii states that Australia's biosecurity arrangements comply with its international rights and obligations, but this is not yet the case. The omission of the precautionary principle from text and implementation of the IGAB is a case in point.

Another case in point is Aichi Target 9 under the CBD: "By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment". Australia does not presently meet since the pathways for environmentally invasive species have not been systematically identified and prioritized.

Both the IGAB's text and its implementation must be brought into line with Australia's international rights obligations.

Spelling out the various existing legal relations, responsibilities and accountabilities would allow more informed and purposeful stakeholder engagement to support more effective implementation of the agreement.

For example, the Australian Government is obliged to "Prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species" (CBD article 8 (h)). If this accountability was specified in the agreement the Commonwealth's clear head of power to undertake early intervention and eradication of environmentally invasive species would be transparently understood. This would in turn allow the Commonwealth to take a more robust and effective leadership role under the agreement in relevant circumstances. The Biosecurity Act 2015 gives legal effect to these powers.

Clearer lines of responsibility between federal, state and local governments are needed, along with appropriate accountability. The agreement's effectiveness has been held back by poor decision-making processes that may partly have arisen because of lack of clarity about these existing legal relations and responsibilities. A new clause is needed that clearly recognises the Commonwealth's power to make decisions in the national interest, at least in terms of environmental biosecurity.

A Commonwealth leadership role should also be reflected in clauses relating to decision-making. It will rarely appear, from the point of view of each and every state and territory, to be in each of their interests, simultaneously and to the same extent, to take firm and prompt action to fund and implement environmental biosecurity action where the immediate threat may *appear* to be to one or other state. Therefore decisions about funding and implementing rapid responses to environmental biosecurity issues such as invasive ant incursions and eradications should rest with

the party with primary responsibility for maintaining Australia's compliance under relevant multi-lateral agreements, and with the greatest capacity to apply adequate resources at short notice in the public interest- the Commonwealth.

The agreement should be amended to reflect the Commonwealth's heads of power and responsibility to take decisive and unilateral action about urgent environmental biosecurity matters especially as regards prevention and early eradication. (See also our comments about clauses 5.2 (vi) and 7.14, below).

Clause 5.2 (ii) commits the parties to ensuring that biosecurity measures on domestic movement of goods and vectors are scientifically justified and are the least trade restrictive to meet Australia's ALOP.

This clause must be replaced as it runs counter to the precautionary principle and potentially undermines the proper focus on prevention that is so important to effective biosecurity. Such a clause also runs counter to Australia's COB obligations.

We support the use of science as a basis for biosecurity decision-making. However a lack of full scientific certainty –either about the biosecurity threat, its impact or the efficacy of proposed biosecurity measures, should never be allowed to delay action where there is a risk of loss of biodiversity. Nor should protracted gathering of scientific justifications for biosecurity measures around domestic movement of goods and vectors, or arcane debates about their trade restrictiveness or otherwise, be allowed to delay, defer or prevent timely and forward-looking action.

Environmental biosecurity threats are usually characterised by limited information about the potential impacts and what information is available will often have a high degree of uncertainty. These characteristics underscore the need to apply the precautionary principle. This approach may result in restrictions on trade that may be difficult to justify with specific evidence but are needed to prevent potential known and unknowable threats.

Free trade between the states is enshrined in Australia's constitution. There is no need for the reiteration of that provision in this clause. The IGAB is about *biosecurity* and should describe the points of agreement needed to bring about better biosecurity in this country- not arguments that might be used to *prevent* improvements in biosecurity.

Should a state wish at some future point to contest a biosecurity measure on the basis that it may contravene the constitution they can revert to the courts, where no doubt the Commonwealth's own constitutional heads of power to protect the interests of Australians and of other states will be discussed.

On a more specific matter, we note that this clause, even in its current wrong-headed form, should by now have led to:

- Firmer regulation of the domestic trade and movement of ornamental fish;
- National regulatory restriction of the intra and inter-state movement of pest plants, and;
- Consistent, nation-wide regulation of domestic ballast water management and biofouling.

The failure to implement these measures places Australia's biodiversity at unacceptable risk (contrary to our ALOP) and underlines the need to replace this clause and to strengthen the IGABs provisions around domestic biosecurity.

Clause 5.2 (vi), regarding emergency preparedness and response, has not been given effect at least in regards to environmental biosecurity (see Appendix 1). The nub of this failure is the weakness of the IGAB's governance and funding provisions and of their implementation. This goes to the first two dot points under "priority areas" (see question 1, above) along with the two new national priorities we have proposed.

Cost sharing debates, parsimonious funding, veto powers, and a lack of Commonwealth leadership are stymieing efforts to contain and eradicate serious environmentally invasive species. Instead of the "pre-arranged" agreements required by this clause, environmental biosecurity suffers from fuzzy governance and impossibly slow and meagre funding. The National Environmental Biosecurity Response Agreement (NEBRA) under the IGAB is partly to blame here.

NEBRA sets the bar too high to trigger timely and adequate emergency responses and eradication actions. It requires that, for each proposed response to an environmental biosecurity outbreak, before a response is implemented a *committee* must decide:

- Whether it is **certain** that the pest or disease can be eradicated [our emphasis]
- Whether there is high confidence that the proposed intervention will have a high impact
- Whether an economic analysis has shown that the benefits of the proposed response outweigh its costs (despite there being no agreed way of costing environmental impacts and the liklihood that such a costing may have high levels of uncertainty)
- Whether the response should be funded (NB that decisions around cost-sharing must be made *unanimously* by all States and Territories and the Australian Government- posing an unreasonable further barrier to timely on-ground action).

The fact that this unworkable and poorly suited process arises from an agreement (NEBRA) that is not legally binding (unlike the deeds of agreement in place around non-environmental aspects of animal and plant biosecurity) and entails little if any community engagement or input adds further uncertainty and weakness to the whole apparatus of environmental biosecurity in Australia.

For further information about NEBRA, its weaknesses and potential solutions we refer the panel to the report of the 2015 Senate inquiry into environmental biosecurity, particularly its recommendations 2,3,4 and 5 and relevant discussion.

In upshot, the problem is not just that 5.2 (vi) is poorly crafted, but that the overall agreement lacks definitive and specific provisions around governance, decision-making and funding to suit the characteristics of environmental biosecurity risks, especially in regards to early intervention and eradication work.

Clause 5.3 (i) (b) requires that transparent and objective decision making procedures based on risk be established.

These procedures have not been established in regards to environmental biosecurity. The only shred of transparency lies in the chain of decision-making around cost-shared biosecurity responses after the decision has been made. In cases where cost-sharing is not at issue or where a cost-sharing response has been rejected, decision-making about environmental biosecurity remains a "black box". It is not possible to see or understand the processes and deliberations around environmental biosecurity risk assessments, decision-making on the National Biosecurity Committee, in the relevant AgSOC or AgMin meetings, NEBRA consultative committees and national management groups, or (to a lesser degree- the following bodies are somewhat more open) Plant Health Australia and Animal Health Australia.

The ISC has attempted to obtain minutes of consultative committees and the national management group for the response to the smooth newt detection but was been refused access. ISC has also had to use FOI to access information about the myrtle rust response after a full year of attempts to gain access through non legal channels.

Other repeated efforts to learn about decisions of NBC national management groups or even just to see the agendas of their meetings have been denied. We generally find out about decisions of national management groups and consultative committees a year or more later, except where governments agree to activate national eradication response measures. Even when we do learn of decisions, we are usually unable to see the justification for the decisions.

The publicly opaque initial development of the IGAB and NEBRA are further examples of the limited role that the public is given in the development of important elements of the biosecurity system. The work of the National Biosecurity Committee and its committees is general opaque to the public. Recently National Biosecurity Committee has started issuing communiques after their meetings, but the level of detail in the communiques does not allow any meaningful understanding of what was discussed.

The public nature of this current IGAB review is welcomed and perhaps signals a change in attitude to transparency on biosecurity.

The pervasive lack of transparency throughout the biosecurity system is unjustified, is contrary to the IGAB agreement, lowers public confidence in the biosecurity system and denies the public a legitimate role in the operation of the system. Publically transparent science- and risk-based decision-making procedures around environmental biosecurity are urgently needed, along with comprehensive reform of the biosecurity system's openness and accountability.

On another point, we urge that the word "efficient" be replaced by the word "effective" in clause 5.3 (i) (b) as the effectiveness of the biosecurity system is of *primary* concern, whereas its efficiency is of secondary importance. We are alert to the tendency of governments to use the word efficiency to shirk regulatory and financial responsibility and this change would reduce that possibility, while increasing the purposefulness of the clause.

Clause 7.7 states that Australia has one Appropriate Level of Protection (ALOP) established by the Commonwealth. We support this and support the maintenance of Australia's ALOP at a high level of sanitary and phytosanitary protection aimed at reducing biosecurity risks to a very low level.

We note however that this ALOP is not comprehensively evident in practice, especially when it comes to environmental risks, as our other observations above and below illustrate. The main exception is in the application of import risk assessments. Disappointingly, import risk assessments are not usually used to address serious shortcomings in environmental biosecurity.

Clause 7.14 declares that states and territories support the use of the Commonwealth's national emergency management powers in circumstances where the Parties agree that application of the emergency powers is necessary for a consistent national approach to control, reduce, or remove a threat associated with a biosecurity emergency.

This clause is problematic in that although Australia may be faced with a *national emergency*, a lack of unanimity between the many parties to the IGAB agreement may prevent a response. The discussion paper for this review would have benefitted from the inclusion of a description of the emergency powers at issue here. These powers should be specified in the agreement which should

also state that the Australian Government has the support of the parties to Act rapidly, adequately and *unilaterally* in the case of a national biosecurity emergency.

Further provision should be made for state or territory parties and the public to refer potential national biosecurity emergencies to the Commonwealth for decision and/or action. Provision should be made to enable the equitable recovery of emergency response costs from the states by the Commonwealth.

Schedule 7 of the agreement further describes national emergency preparedness and response arrangements. We note that the priority reform areas listed include the action: "Establish and utilise emergency planning and preparedness activities to improve responses to environmental biosecurity emergencies". We urge that this priority reform area be implemented, as an actual *priority* and with vigour, to help overcome the current demonstrably poor preparedness for environmental threats. The lack of preparedness is also addressed by our proposal to establish Environment Health Australia referred to below.

Clause 7.19 effectively provides that the Commonwealth may legislate for harmonised biosecurity measures for interstate trade where the states can't agree around this. Please see our comments on clause 5.2 (ii), above, outlining some relevant biosecurity issues. We urge the panel to have regard to Australia's ALOP in relation to this clause 7.19. We feel that the last sentence of this clause that proscribes the Commonwealth initiating such legislation should be deleted from the agreement, as the Commonwealth, having a national view of biosecurity and significant biosecurity policy development capacity, ought to be blessed with the ability to take initiative in this area. If the states are unhappy about a given national legislative proposal initiated by the Commonwealth they can exercise their constitutional rights on a case-by-case basis without constraining Commonwealth initiative through such a clause.

Clauses 7.20 to 7.21 promote industry partnership arrangements including through the agricultural industry focussed bodies Plant Health Australia and Animal Health Australia.

Please see our **attached** proposal for the establishment of a concomitant body to create partnerships and engagement around environmental biosecurity, "Environment Health Australia" (EHA). Without such a body to champion the environment and coordinate engagement with the environment sector, nature will continue to receive short shrift in biosecurity practice.

We urge that the panel recommend adoption of the proposal to establish EHA.

Clauses 8.1 and 8.2 provide that implementation will be through relevant Ministers.

It is assumed here that the relevant Ministers are those responsible for agriculture/primary industries. This should not be assumed. A strong argument can be made for biosecurity responsibility to reside with environment ministers, or with an independent authority.

The IGAB should be revised to allow pro-active input to the biosecurity system from environment ministers. It is not sufficient to require agriculture/primary industries ministers to consult with environment ministers when they see fit, as the interests of the two ministries may at times be in direct counterpoint. From a governance perspective then, provision must be made in the agreement, specifically, to enable environment ministers to initiate pro-active input to decision-making, and to require that they (at least) provide a delegate to attend all meetings and to receive all agendas, papers and minutes from IGAB and subsidiary bodies relating in any way to environmental biosecurity.

To further ensure adequate attention is paid to environmental biosecurity, we propose that IGAB be amended to commit each party to appointing an environmental biosecurity officer with appropriate expertise in ecology and environmental biosecurity to lead their jurisdiction's relevant input under the agreement.

(We note here that the AgMin and AgSOC meetings that feed into IGAB proceedings are not accessible or transparent in any effective way. While we understand that Ministers and senior officials may need to workshop ideas without being constrained by the public gaze at times, and that there are security issues to be taken into account, the occasional communiqués issuing from these bodies provide far from adequate public information about their proceedings. Meeting minutes of the predecessor to AgMin, SCOPI, were published in full. Insofar as the proceedings of these bodies may have very significant ramifications for other sectors such as environment or health, their proceedings should be far more transparent and open to scrutiny. Perhaps the unnecessarily secretive agendas and minutes of these bodies could be shared in a timely fashion with concomitant bodies in environment ministries, as a small step towards policy coordination and accountability).

Clause 8.2 requires that in addressing implementation, management and administrative issues which have the potential to affect environmental and/or human health biosecurity, the ministers responsible for primary industries biosecurity for each Party will consult with other relevant ministers within their government to ensure a whole-of-government position is brought forward for consideration by the Commonwealth, state and territory ministers responsible for biosecurity matters.

Our comments above are relevant here. It is not sufficient to leave decisions about what may or may not affect environmental biosecurity to primary industries ministers. In making this point we ask whether environment ministers in other states were properly consulted about the initial response to the myrtle rust incursion? Environment ministers must be formally involved in IGAB and all of its operations as proposed above.

Schedule 1: 1.2: Structure and responsibility

The diagram in this schedule shows ministers and agencies responsible for biosecurity as having decision making and implementation responsibility for most aspects of the agreement. The National Biosecurity Committee is shown with responsibility for implementation of action plans, and for decision making around work plans. However the NBC is itself made up largely of delegates of the ministers and agencies, with two exceptions in its current membership- members from the Australian and NSW environment departments (noting that the Tasmanian representative represents one department with responsibilities spanning both environment and primary industries). Implementation of work plans is sheeted home to the lead jurisdiction.

While clause 1.2 of schedule one does not preclude a given jurisdiction from giving biosecurity responsibilities to an environment, rather than a primary industries or agriculture department, the structure described in the clause does not *specify* that environment departments must be involved in decision-making and implementation of the agreement. This perpetuates the poverty of environmental expertise and insight seen in Australia's biosecurity system to date.

This review of the agreement's effectiveness must address this shortcoming. Our proposals above that provision should be made for environment ministers to be a party to IGAB, at least insofar as the agreement pertains to environmental biosecurity, go some way to addressing this concern. Ideally, a fuller way of addressing the institutional bias in the system would be to adopt the

recommendations of the 2008 Beale review (see our response to question 9, below, for further discussion of the Beale review).

Schedule 1: 1.3. This clause also needs to reflect a broadening of the proprietary grip that agriculture and primary industries departments have on biosecurity policy and practice.

Schedule 1: 2.4 and 2.7 provides for relevant ministers to be consulted when clauses with environmental aspects are being inserted or amended in IGAB. Again we urge that the relationship described whereby primary industries ministers consult environment ministers needs to be changed to one where environment ministers are an equal party to the agreement at least where relevant matters are concerned- they need to be "in the room".

The committee structure beneath the IGAB does not adequately accommodate environmental biosecurity.

We propose the establishment of a standing environment committee under the National Biosecurity Committee, to provide ready intelligence and advice to the NBC and help make the agreement's references to the environment more real in practice. This would provide the focus needed to address the historic lack of attention to environmental biosecurity.

The relatively new Invasive Plants and Animals Committee was formed by combining the Vertebrate Pests Committee and National Weeds Committee. However, the historic lack of consistent emphasis on environmental biosecurity in the work of these committees is likely to be perpetuated in the new arrangement.

A separate specialist environment committee would add value by attending to gaps such as diseases predominantly affecting native animals, taxa whose impact on agriculture may not be significant, and invasive ants. Such a standing environmental committee would need to maintain strong linkages to the other NBC committees to share information, avoid duplication and where possible to combine initiatives. Resourcing of the committee would also be necessary to ensure that the committee had the capacity to undertake its work.

To enrich the environmental expertise within the biosecurity system, we also propose that the IGAB be amended to provide a prescription that a minimum proportion of members of any decision-making bodies or responsible committees dealing with environmental biosecurity under the IGAB must have expertise in ecology and/or the management of invasive species' impacts on the natural environment including management of parks and conservation reserves, and ecological management of marine biodiversity.

The agreement should retain and strengthen the checks and balances in its decision-making provisions to ensure that departments, agencies or interests that are involved in the importation, trade, breeding, promotion or development of taxa that may pose an environmental biosecurity risk do not have any role in risk assessment or decision making about relevant taxa.

Other thoughtful, off-the-shelf ideas are available for strengthening the biosecurity system. These can be found for example in the recommendations of the 2015 Senate inquiry into environmental biosecurity, all of which should be adopted by government and implemented, and the reforms suggested in the 2008 "Beale review" of Australia's biosecurity system, which for example suggests the establishment of an independent national biosecurity commission and authority- proposals we also support.

One major issue absent in the IGAB is consideration of the biosecurity risk posed by Australia to other countries. Many of our trading parties are recipients of invasive species originating from

Australia. Developing countries, particular those of our Pacific neighbours, are extremely vulnerable. Australia must make improved efforts to limit the spread of biosecurity risks to other countries, especially where the recipient country lacks their own biosecurity requirements.

3) What practical improvements to the IGAB and/or its structure would provide for an increased, but accountable, role for industry and the broader community?

At present there is no formal mechanism to receive input from and involve the environmental and community sector in the biosecurity system. This contrasts with the more than ten standing agricultural-related consultative groups. A standing forum is needed to provide advice to the new environment committee proposed above. Such an advisory committee should include representatives of Wildlife Health Australia, the Invasive Species Council, a leading university's ecological science faculty, Environment Health Australia (proposed in our response to question 2 above) and conservation land management organisations like Bush Heritage Australia.

Environment Health Australia should also be given observer status to attend the new environment committee under the NBC. This would provide the corollary of industry input around agricultural biosecurity where PHA and AHA play respective roles with the Plant Health Committee and Animal Health Committee of the NBC.

As mentioned below in question 10 under the section "Embedding shared responsibility", the paper in **Appendix 3** "Engaging the Environmental Community Sector on Biosecurity" explains benefits and costs of engagement with the environmental community sector and proposes recommendations to improve the situation.

Agreeing to risks, priorities and objectives

4) Is the goal, and are the objectives, of Australia's national biosecurity system still appropriate to address current and future biosecurity challenges?

Clause 3 of the IGAB describes national goals and objectives for biosecurity. The current goals and objectives place emphasis on process but give little indication of policy direction or desired outcomes. We urge that an explicit goal of *reducing the impact of invasive species on the natural environment and biodiversity* be included, to give the agreement clearer direction and purpose around environmental biosecurity.

We take issue with **sub-clause 3.1** where it places an onerous caveat on the primary goal of reducing the impacts of pests and diseases, by closing with the phrase "while facilitating trade and the movement of animals, plants, people and goods, vectors and vessels to, from and within Australia".

At worst, and bizarrely, this phrase could be taken to mean that the biosecurity system should facilitate the movement of vectors of exotic diseases. At best it encumbers those implementing the IGAB with the need to adhere to the often conflicting objectives of the departments of trade, transport and to agricultural interests.

Instead, the goal of the system should be clear and discrete, with a full-stop placed firmly after the word "continuum". If the parties then insist on adding objectives about promotion of trade or transport or agriculture (inappropriately for an agreement that is not about these things but is about biosecurity), then these should at best be included as sub-objectives.

The agreement must be about achieving strong biosecurity outcomes- not about describing all of the tensions and barriers that may be encountered in achieving that mission.

Clause 4.1 (vi)(b) holds that governments should contribute to the cost of biosecurity measures in proportion to the public good accruing from them.

There is no agreed means of quantifying the public good accruing from environmental biosecurity measures. Decisions about environmental biosecurity (and its funding) therefore must be made on a science-based risk assessment of environmental harm that applies the precautionary principle. Environmental outcomes are public good outcomes and so the default position must be that environmental biosecurity will be funded by governments. This should be reflected in the revised agreement. See also our answer to question 11 below.

5) In order of importance, what do you see as the most significant current and future biosecurity risks and priorities for Australia and why? Are Australia's biosecurity objectives appropriately tailored to meet these risk and priorities?

This question itself is revealing. After four years in operation we would hope that the IGAB would have driven a thorough analysis of risks and priorities, and established an on-going process giving confidence that the answer to this question was known at any given point in time.

While we do not have the capacity to provide such analysis of risks and priorities at short notice, we do know that no comprehensive analysis of environmental biosecurity risks and priorities exists. Such an analysis should be publically funded and produced as a high priority to enable the tailoring of Australia's biosecurity objectives and responses.

In 2015 and 2016 the Invasive Species Council was informed that the Department of Agriculture and Water Resources were preparing a "State of Biosecurity" report. Such a report would be a useful initiative to publicly report on the current state of our biosecurity system, identify gaps and predict future trends. We urge that this work proceeds as a priority as a joint exercise between the environmental and agricultural departments at state and federal level, and involving all biosecurity stakeholders in its development.

See also our comments about transparency and decision-making under question 2 above. In essence, decision-making about which are the most important risks and priorities in biosecurity must arise from transparent science-based risk analysis including (where environmental biosecurity is concerned) application of the precautionary principle.

Schedule 5 on the national management framework for established pests and diseases suggests the development of a national approach to managing established pests and diseases, including ''prioritisation of established pests and diseases based on risk and impact".

This prioritisation for the environment has not occurred, including the points mentioned in the "priority reform areas", viz: "develop a methodology to undertake impact analyses of pests and diseases"; "develop agreed lists of nationally significant established pests and diseases " and; "implement national consultative arrangements of relevant stakeholders and networks for the management of established pests and diseases".

We do not know why this has not been implemented, but the governance, decision-making and funding difficulties referred to in this submission have no doubt played their part.

While a stakeholder engagement consultation strategy has been prepared, we were disappointed about the process of its development, are yet to see the final strategy. We have seen little clear evidence of a subsequent change in stakeholder consultation except for the proposal for an environmental biosecurity forum that has been repeatedly delayed.

6) Are the components and functions of Australia's national biosecurity system consistently understood by all stakeholders? If not, what could be done to improve this?

No.

Understanding is lower amongst stakeholders in the environment sector and in industries whose practices may bring risks to bear on the environment, than in trade and agricultural circles.

The suggestions made in this submission will help to improve this situation. Establishment of Environment Health Australia would make a particularly major contribution in this regard by pro-actively engaging and informing the environment sector and relevant stakeholders about environmental biosecurity priorities and solutions.

There is also little publicly available information that explains Australia's biosecurity system. There would be benefits in developing a national biosecurity strategy and explaining more of the decision-making structure and the outcomes of decisions.

As mentioned earlier, preparation of a regular "State of Biosecurity" report would improve stakeholder understanding and confidence in Australia's biosecurity system. The Invasive Species Council has been informed that such a report is in preparation by the Department of Agriculture and Water Resources but is unaware of the timetable or level of detail.

7) What benefits (or impediments) are there in realising a more integrated national approach to biosecurity, agreed to by key partners in Australia's national biosecurity system?

Our responses to earlier questions answer this question: the benefits of greater integration are clarity of purpose, firmer commitment of financial and human resources and more timely and effective on-ground action. The measures to improve governance and decision-making outlined in this submission will promote integration by helping to avert procrastination and deferral of decisions due to funding squabbles and weak leadership.

We note that **clause 2.2(iii)** supposedly underlines clear roles, responsibilities and accountabilities. However as described above the IGAB currently does not pre-define arrangements sufficiently to avoid squabbles and delays and so "address Australia's broad range of biosecurity issues".

Clause **2.2 (iv)** ought also to underline consistent (and integrated) biosecurity implementation, but this is not occurring adequately as yet (for example in regulation of the aquarium trade, ballast water, biofouling, domestic movement of pest plants, and funding for eradication of invasive ants). Again, resolution of governance, decision-making and funding provisions (along with institutional reforms beyond IGAB) would go a long way towards facilitating these matters being addressed.

8) What form would this best take (for example, a national statement of intent or national strategy)? What are the key elements that must be included? What specific roles do you see industry and the broader community playing in such an initiative?

Changes to the IGAB should precede any development of a national statement of intent or strategy. The IGAB encompasses the government parties, includes national goals and objectives, and makes provision for development of action plans and work plans. The agreement should be strengthened along the lines we submit, with its governance and decision-making provisions given more power and clarity. The revised agreement should provide more direction and purpose and express a forthright determination by the parties to set aside federalist issues, rise above sectoral interests and tackle biosecurity in the national interest.

We support the development of a national strategy but urge that this not be done at the expense of resources that could be applied to strengthening the IGAB (as per this submission), and to developing particular thematic plans to tackle aspects of biosecurity where a lack of integration is a particular barrier to success (for example in regulation of the aquarium trade, ballast water, biofouling, domestic movement of pest plants, and funding for eradication of invasive ants).

Effort spent on implementing the recommendations of the 2015 Senate inquiry into environmental biosecurity would also be well worthwhile.

(See also our comments under questions 2 and 22)

Embedding shared responsibility

9) Are the roles and responsibilities of stakeholders in Australia's national biosecurity system clearly and consistently understood? How might this be improved?

Clause 7.1 states that "This agreement recognises that the Parties have roles and responsibilities that will rest with a single government, some will be implemented following inter-governmental consultation and others will be delivered in partnership". This clause exemplifies many of the problems with the IGAB in terms of governance and accountability. The agreement must avoid such statements which merely describe complexities or conundrums, and instead should simplify or resolve complexities and conundrums through purposeful and decisive agreement. See also our responses to questions 2 and 4.

The unresolved problems around responsibility and decision-making under the agreement are severely hampering Australia's ability to address biosecurity threats to the environment.

There is a pressing need for reform to the IGABs decision-making processes to ensure the ability to make prompt, transparent and effective decisions. While deliberation by parties, committees and sub-committees is important, there must also be a means of obtaining clear, timely and accountable decisions through the system, especially where prevention, early intervention and eradication may necessitate fast and decisive action.

The 2008 Beale review of Australia's biosecurity system discussed issues around independence, transparency and integrity of decision-making, and made recommendations aimed at delivering sound, defensible, timely and accountable decisions (summarised in Beale et al 2008, pp. XVII – XXII). Short of Beale's recommendations being adopted, at the very least we urge the panel to closely examine the timeliness, transparency and efficacy of decision-making under the IGAB. Recommendations should be made to overcome barriers to prompt and effective environmental biosecurity action arising from an overuse of consensus or unanimous decision-making, from failure to accommodate the precautionary principle in decision-making, or from inter-jurisdictional disagreements over money.

We feel that these recommendations must include the creation of a process whereby one delegated authority is acknowledged under the IGAB as having the remit to make decisions where time is of the essence. It is also crucial that that body contain adequate expertise and cultural orientation towards addressing environmental biosecurity issues.

See also our comments on funding under question 11 below: provision of a standing fund to enable prompt action on environmental biosecurity threats may help to reduce delays in decision-making.

Clause 7.3 commits the Commonwealth to establishing a "national biosecurity commission", whereas a national biosecurity *committee* has been established. The 2008 Beale review of Australia's biosecurity system recommended the creation of an independent commission and authority, but these recommendations were not adopted. We urge the panel to revisit the Beale recommendations in forging advice around IGAB governance and any institutional reforms that may help to strengthen IGAB's effectiveness.

Clause 7.8 proscribes the application of sanitary and phytosanitary measures that are non-compliant with the SPS agreement. We support this.

10) What practical actions do you think governments and industry organisations can undertake to strengthen the involvement of industry and community stakeholders in Australia's national biosecurity system? Would increased involvement in decision making on and implementation of biosecurity activities help the adoption of shared responsibility?

Schedule 6 of the agreement provides for the development of a national engagement and communication framework. This has in reality been a very poor process. The framework was apparently completed in late 2015, but the Invasive Species Council has not been provided with a copy despite having requested one early in 2016. Therefore one practical action that could be undertaken is to ensure that this framework is available to interested stakeholders.

Clause 4.1 (vii) suggests that Governments, industry, and other relevant parties are involved in decision-making, according to their roles, responsibilities and contributions.

Environmental departments, environmental scientists, environmental NGOs and stakeholders must be more involved in decision making. At the moment there is considerable involvement of agricultural industry players in biosecurity, but significantly less involvement of experts and stakeholders from the environment sector. The paper in **Appendix 3** "Engaging the Environmental Community Sector on Biosecurity" explains benefits and costs of engagement with the environmental community sector and makes a series of recommendations to improve the situation. This paper was presented to the now-abolished Biosecurity Advisory Council in 2012.

On another point, we support broad involvement in decision making within the bounds of proper accountability. However we are concerned at the inclusion of the term "contributions" in this sub-clause. This could be read to suggest that involvement in decision making should rest on a stakeholder's ability to pay, or on a stakeholder's sheer volume of verbal contributions to a decision-making body. The meaning of the term is unclear, so the clause should be rewritten to remove any potential suggestion that those with the capacity to supply resources should have privileged access to decision-making. This will also avert any potential real or perceived conflicts of interest.

Clause 5.3 (vi) promotes training and education. We urge that adequate training and education in the environmental aspects of biosecurity be provided throughout Australia's biosecurity system.

Clause 5.3 (vii) promotes engagement and communication between all stakeholders. Environmental stakeholders are currently poorly engaged.

The proposed new Environment Health Australia would play a key role in engagement of the environment sector and the community. Sectoral engagement is currently facilitated by PHA and AHA (focussed on agricultural stakeholders, not the broader community or the environment

sector). Without a concomitant environment sector body there remains a very big gap in engagement and communication around biosecurity in Australia. Another responsibility of EHA would be to promote partnerships with non-industry stakeholders, thus broadening the partnerships base in the biosecurity system and expanding the culture of shared responsibility.

Funding biosecurity

11) Are the IGAB investment principles still workable? Do they still meet the needs of Australia's national biosecurity system now and in the future?

One of the barriers to prompt and effective actions around environmental biosecurity is the lack of adequate pre-arranged funding sources. This often leads to procrastination and lengthy arguments about who should pay and how much they should pay to cover the costs of action around a given incident, incursion or eradication. This is a particular problem in environmental biosecurity as there are not industry funds that can contribute to public good environmental protection.

More Commonwealth leadership in making decisive environmental biosecurity investments is appropriate as the Commonwealth has responsibility for fulfilling the nation's multi-lateral commitments relevant to environmental biosecurity, and also must lead the collective and various interests of the states toward protecting the national environmental interest.

We urge the panel to recommend the establishment of a standing environmental biosecurity fund, of at least $100 million dollars, that can be drawn on to cover the costs of urgent and critical environmental biosecurity responses where time is of the essence. This fund would be topped up at the end of each year.

This fund can be supplemented through cost-sharing arrangements with polluters, beneficiaries, etcetera, but must provide sufficient core funds to enable timely application of resources to avert environmental harm. See also our comment on decision-making under question 9 above.

Clause4.1 (v) holds that activity is undertaken and investment is allocated according to a cost-effective, science-based and risk-management approach, prioritising the allocation of resources to the areas of greatest return.

See our response to question 4, above. "Greatest return" is problematic language. Although it is appropriate for private sector investment decisions, "greatest public good" is more appropriate for a public sector agreement. We reiterate also that where investment in environmental biosecurity is concerned decisions must be based on science-based risk assessment, the need to protect biodiversity, and the precautionary principle, not on specious monetisation of environmental values and impacts.

4.1 (vi) (a) holds that risk creators and beneficiaries contribute to the cost of risk management measures in proportion to the risks created and/or benefits gained (subject to the efficiency of doing so).

Our comments above apply here. We also note again that environmental health is a public good, and the default position should be that the costs of environmental protection should be borne by government, so that debates about cost-sharing do not delay or prevent delivery of public good environmental outcomes.

Efforts to recoup costs from risk creators have largely been ineffective. A new resolve is needed to put this intention into practice. Efforts to recoup costs from beneficiaries have been more effective but are often slow, and for small industries are often not worth the effort.

The lack of preparedness for environmental biosecurity also means that these costing arrangements have not been negotiated in advance of the needed response.

12) Are governments and industry investing appropriately in the right areas? Are there areas where key funders should be redirecting investment? Can investment in biosecurity activities be better targeted? If so, how? Please provide examples.

We make no comment here other than that funding of environmental biosecurity work is an investment that secures public goods in a healthy natural environment.

13) How do we ensure investments and investment frameworks align with priorities, while being flexible enough to address changing risks and priorities?

See our proposal under question 11 above. A standing fund for environmental biosecurity would add flexibility to funding that aspect of biosecurity.

14) Are current biosecurity funding arrangements still appropriate to meet the needs of Australia's national biosecurity system, now and in the future? What might an alternative or novel funding model encompass?

Funding arrangements for environmental biosecurity are deeply vexed, riddled with bickering and delays and are not adequate to allow timely and sufficient biosecurity measures.

We again urge establishment of a sufficient, standing fund of public monies for use in early eradication and containment relating to environmental biosecurity. This fund can be supplemented through cost-sharing arrangements with polluters, beneficiaries etcetera (negotiated or prosecuted after timely interventions are undertaken), but must provide sufficient core funds to enable timely application of resources to avert environmental harm.

Risk creators are benefiting from moving goods long distances but mostly are not paying for the biosecurity risk that they are creating. Most of the costs being recouped aim simply to cover the cost of the administration associated with the direct quarantine system. Novel approaches to ensure that risk creators better fund the full costs of the increased biosecurity risk include a levy on freight and passenger movements. Such levies could target areas of greatest risk or areas where collection is easiest.

15) What can be done to ensure an equitable level of investment from all stakeholders across Australia's national biosecurity system, including from risk creators and risk beneficiaries?

The following principles could be applied to public investment in biosecurity:

- prioritise public funding for public good (environmental) biosecurity measures.
- where industry is the polluter or risk-creator, the industry pays.
- where industry is the beneficiary, the industry pays.

For biosecurity measures that benefit industries, government presently provides matching or often a majority of funds in return for an industry contribution. Meanwhile similar work for purely environmental or public-good is poorly funded. One example is the base-funding provided for Plant Health Australia and Animal Health Australia. Government provides two-thirds of the funding, while industry provides the remaining third. There is no equivalent public investment in the same type of work for the environment. With a few exceptions, the work simple does not take place.

Similarly, there are significant public investments in the research and development corporations that supporting agricultural industries, with a much lower level of public investment in public-interest biosecurity research and development. The majority of the public investment in the Plant Health CRC and the Invasive Animals CRC is targeted towards agricultural interests.

Market access

16) Are market access considerations given appropriate weight in Australia's national biosecurity system? What other considerations also need to be taken into account?

Our biosecurity system is more than a system to guarantee market access to exported agricultural commodities. It is a system to safeguard the environment from pests and diseases that threaten native species and ecosystems with extinction.

See also our comments on Clause 3.1 under question 4 above: rather than facilitating the movement of certain plants within Australia, the biosecurity system should appropriately regulate their movement.

17) Are there ways governments could better partner with industry and/or the broader community to reduce costs (without increasing risk), such as industry certification schemes?

Such schemes tend to have long gestation periods and to deliver sometimes hazy outcomes, whereas meeting the costs of adequate environmental biosecurity is an *urgent* priority.

We have prepared a detailed paper that explains the benefits of environmental community involvement in biosecurity. Proposals in this paper would deliver improvements to environmental biosecurity by better drawing on community resources. This paper is contained in **Appendix 3**.

18) How can the capacity and capability of surveillance systems (including diagnostic systems) underpinning Australia's national biosecurity system be improved?

See our comments on foresighting under question 20, below.

The 2015 Senate inquiry into environmental biosecurity identified a serious decline in the number of taxonomists in Australia. There is a particular lack of taxonomy expertise for invertebrates and fungi. This decline must be reversed and efforts made to better coordinate state-based taxonomy services to support a truly national service. Such a model has been implemented in New Zealand. This proposal was supported in Senate inquiry recommendation 14.

The role of research and innovation

19) Which specific areas of Australia's national biosecurity system could benefit from research and innovation in the next five, 10 and 20 years and why? Please provide examples.

The following would benefit from research and innovation: environmental biosecurity risks, pathways, extension and interventions. See our proposal for a national research centre under question 20 below. This national research centre could undertake, as one of its first tasks, the production of an answer to the questions posed here.

20) How can coordination of biosecurity-related research and innovation activities be improved?

Clause 5.3 (i)(v) relates to a national biosecurity research, development and extension framework to align resources and activities to address biosecurity priorities; to build and maintain scientific and technical capacity; and contribute to the collaborative management of biosecurity risks.

We note that there is currently no framework for research into environmental biosecurity. A draft was developed by the CSIRO in 2014 (the draft National Environment and Community Biosecurity Research, Development and Extension Strategy 2014-17) but has not been finalised nor resources identified to implement it. This contrasts starkly with similar plant health and animal health research strategies focussed on agricultural biosecurity that have been finalised and are being implemented with full time coordinators, supported by a research budget.

Clause 5.3(v) relates to research, development and extension.

We urge the establishment of a "national research centre for prevention of environmentally invasive species". This would focus on the cost-effective prevention end of the invasion curve, and on management of invasive species that have environmental impacts. It would increase Australia's foresighting capacity to anticipate new and emerging invasive species, and play an important role in increasing understanding of and engagement in environmental biosecurity.

21) How can innovation (including technology) help build a more cost-effective and sustainable national biosecurity system?

Technology has the potential to improve surveillance, compliance and community involvement. For example, gene sampling of soil and water is as a cost-effective way of assessing the presence of invasive species. Citizen science is increasingly being used to reliably survey for plants and animals and can be used to report priority biosecurity threats.

Making information publicly available and developing new low-cost tools will stimulate community innovation and allow the community to assist with detection, early responses and containment of biosecurity risks.

Measuring the performance of the national biosecurity system

22) What does success of Australia's national biosecurity system look like? How could success be defined, and appropriately measured (that is, qualitatively or quantitatively)? What, if any, measures of success are in use?

Australia's latest state of the environment report gave a measure of environmental biosecurity performance (Australia State of the Environment Report 2011, p. 641), showing invasive species and pathogens to be one of the greatest pressures on the nation's biodiversity, ranked as having a very high impact (the worst ranking- with a high degree of confidence) and trending in the wrong direction (though with limited evidence or consensus in the actual trend).

One simple measure of success then would be to see the trend, and the degree of impact of invasive species on Australia's biodiversity, improve in successive national state of the environment reports (noting that the next one is due in 2016).

Clauses 8.10-8.12 provide for five-yearly reviews of IGAB. The effectiveness of the agreement should be monitored in an on-going way through an integrated evaluation program built into the implementation of the agreement by the parties. The evaluation must entail collection of sufficient, relevant, verifiable data to determine progress towards c*lear time-bound targets- including biophysical targets- linked to the agreement*. The evaluation, the information on which it is based, and the analysis of that information should be publically available at least on an annual basis. The evaluation should focus principally on biophysical outcomes (change in biosecurity and invasive species impacts), while some evaluation of process and administration is also appropriate.

Producing a major five-yearly report on the IGAB's effectiveness is fine, but evaluation and analysis to inform adaptive biosecurity practice must be integral to the agreement's implementation on a day-to-day basis.

Schedule 1: 3 provides for preparation of action plans under the agreement, but does not require that objectives in these plans be SMART (Strategic, Measurable, Achievable, Relevant to goals and strategy, and Time-bound). It should be stipulated that any objectives described must be SMART.

Schedule 1: 4 Similar stipulations about SMART objectives should apply to the work plans provided for in this Schedule.

As mentioned earlier, in 2015 and 2016 the Department of Agriculture and Water Resources agreed to prepare a regular State of Biosecurity Report. Such a report would be a useful tool to measure performance of Australia's biosecurity system and would usefully inform future IGAB reviews.

Clause 4.2 of this schedule does specify identification of outputs, deliverables, resources, risk management strategies etcetera. This is good. We are not aware of how many work plans have been written yet relating to environmental biosecurity. There is no evidence of any work plans on the Federal Department of Agriculture and Water Resources or the Federal Department of the Environment website that we can find.

Australia's National Biodiversity Conservation Strategy 2010-2030[1] included a target to reduce the impact of invasive species by 10%. There was no systematic baseline information and no program to deliver this target.

Work plans and action plans should be publicly available on departmental websites.

23) What would be required to ensure data collection and analysis meets the needs of a future national biosecurity system? Who are the key data and expert knowledge holders in the national biosecurity system?

Clause 5.2 (ix) relates to reporting and assurance systems. Public reporting on environmental biosecurity must be greatly strengthened, and must be aligned with progress towards formal SMART targets for reducing invasive species' environmental impacts to a minimum.

We note here the very significant amount of information held by BirdLife Australia about exotic bird taxa in the country. This information and the expertise of BirdLife in compiling and curating it should be kept in mind by the panel.

[1] NRM Ministerial Council (2010)

24) How can existing or new data sets be better used? How might data be collected from a wider range of sources than government?

The 2008 Beale review of biosecurity found that "Australia has a relatively poor knowledge of the biosecurity threats to its natural environment", largely due to "the absence of commercial incentives" and low priority for government funding[2] Much more is known about cultivated species and the invasive threats to them than about invasive species and the threats they pose to biodiversity.[3] Examination of the Beale reviews discussion of these issues may benefit the panel.

Conclusion

The comments in this submission are offered in the spirit of strengthening Australia's biosecurity system. The IGAB plays a central role in that system, but is hampered in its implementation by the institutional and cultural barriers of the broader system. We are therefore pleased that this review's purpose includes examination of the capacity and adjustments that may be needed to improve the system as a whole.

In particular, we urge that institutional reforms as well as measures to increase the focus on environmental biosecurity, along the lines of those proposed in the 2008 Beale review and the 2015 Senate inquiry, be given careful consideration.

We look forward to the draft report's publication and wish the panel well in its deliberations. Thank you for the opportunity to make this submission.

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[2] Beale et al. (2008)
[3] Burgman et al. (2009)

Appendix 1: Comparison of industry and environmental preparedness for biosecurity events.

The table below was tabled by the Invasive Species Council at the hearings of the 2015 Senate Inquiry into environmental biosecurity. It highlights poor environmental biosecurity preparedness.

Comparing industry and environmental preparedness

Measure	Agricultural biosecurity	Environmental biosecurity
Contingency planning		
Institutions	Plant Health Australia Animal Health Australia Wildlife Health Australia	Government implements NEBRA obligations Few tangible outputs
Funds	$20M over five years to PHA, AHA	Minimal
Contingency plans	90 industry plans	2 tramp ant plans, 1 myrtle rust plan
Risks identified		
Vertebrate pests	159 mammal, bird, reptile and amphibian species rated extreme threat	
Animal pests and diseases	65 animal diseases	None identified
Plant pests and diseases	348 priority plant pests	None identified
Marine pests	23 priority species, 35 on trigger list	
Invasive plants	None	None (apart from inadequate 2000 weed alert list)
Strategies		
Biosecurity strategy	National plant biosecurity strategy Animal Health Australia strategic plan	No equivalent
Diagnostic strategy	National plant biosecurity diagnostic strategy National animal health data standards	No equivalent
Surveillance strategy	National plant biosecurity surveillance strategy National animal health information standards National sentinel hive program National significant disease investigation program	No equivalent
RD&E Strategy	National plant biosecurity RD&E strategy National Animal Biosecurity RD&E Strategy	Draft national environment and community RD&E strategy
Plans and protocols		
Biosecurity plans	17 plant industry biosecurity plans 30 animal disease strategies	No equivalent
Diagnostic protocols	127 national diagnostic protocols	No equivalent (1 for myrtle rust relevant)
Biosecurity manuals	17 industry-specific biosecurity manuals 15 livestock industry manuals	No equivalent
Emergency response agreement	80 plant diseases 65 animal diseases	Response decided on national significance and other criteria
Stakeholder involvement		
Consultative committees	14 industry-specific committees	No formal structure
Incursion responses	Industry stakeholder participation	No community involvement
Contingency planning	Industry membership of Plant Health Australia, Animal Health Australia	No community involvement

INCURSIONS detected since 2000

Organisms with potential for environmental harm that established in the wild (including those since eradicated)

Those highlighted in grey are illegal to import or keep in Australia. Those in blue are legal to import and keep in Australia (in some or all states/territories) but have been illegally released into the environment or escaped. There are case studies for each of the organisms in bold.

Sources: (1) ISC submission (original sources can be provided), (2) Departments of agriculture and environment submission, (3) Wet Tropics Management Authority submission, (4) Queensland government submission, (5) SA government submission, (6) Australian Museum submission, (7) Other. Note: the submission by the departments of agriculture and environment include many additional incursions not included here that they consider may have environmental impacts.

Organism	Years detected	Location	Likely pathway	Potential environmental impacts	Actions taken
Red imported fire ant[1,2 4]	2013 2006 2001 2001	Qld	Accidental introduction with cargo	Dominates areas, displaces native ants & kills small animals.	Eradication program (national cost-sharing) in progress.
Browsing ant (*Lepisiota frauenfeldi*)[2]	2013	WA	Presumed accidental via sea cargo?	Unknown	Eradication underway (Australian govt)
Smooth newt[1]	2013	Vic	Illegal introduction – likely release by pet keeper	Predation of and competition with native frogs, fish and other species, could be toxic to predators.	No action apart from some surveys – national eradication proposal rejected.
Erythrina gall wasp (*Quadrastichus erythrinae*)[2,3]	2013	Qld	Natural or human movement from PNG	Likely to infect native plants	Under containment.
Dolphin morbillivirus[5]	2013	SA	Unknown	Killed >60 bottlenose & common dolphins	Investigation by SA govt & other institutions
Yellow crazy ant[1,3,4]	2013 - 2001 (multiple years)	Qld, NSW	Accidental introduction with cargo (most likely timber)	Displaces native ants & kills small animals. (Ecosystem meltdown on Christmas Island.)	Eradicated in NSW. Eradication abandoned in Qld but proceeding in Wet Tropics (federal funding).
Tomato red spider mite (*Tetranychus evansi*)[7]	2013	NSW	Unknown	Damage to native plants.	Unknown

Banana freckle (*Phyllosticta cavendishii*)[2]	2013	NT	Unknown	May infect native bananas	National eradication (EPPRD)
Didemnum pelucidum (ascidian)[2]	2012	WA	Vessel biofouling	Unknown	No action – eradication assessed not feasible
Pythium Camurandrum[2]	2012	Vic	Unknown	Oomyctes related to *Phytophthora*. May infect native plants.	No action – eradication assessed not feasible
Pythium Rostratifingens[2]	2012	Vic	Unknown	Oomyctes related to *Phytophthora*. May infect native plants.	No action – eradication assessed not feasible
Pigeon paramyxovirus[1]	2011	Vic	Suspected introduction via a smuggled bird	Potentially infects a wide range of native bird species with a high rate of mortality.	Containment actions only
Fig mosaic virus[2]	2011	SA	Unknown	Unknown potential to infect native figs	No action – eradication assessed not feasible
Myrtle rust[1,2]	2010	NSW	Accidental introduction - unknown pathway	Infects hundreds of Myrtaceae species, including threatened species.	Eradication attempted (national cost sharing), then abandoned.
Hemileia wrightiae (fungal pathogen)[1]	2010	NT, Qld	Presumably accidental	Infects *Wrightia* plants (2 known to be infected).	No action.
Ostreid herpes virus 1 (oyster pathogen)[2]	2010	NSW	Unknown	Infects Pacific oysters (exotic species), unknown whether infects native oysters	Containment program
Chestnut blight (*Cryphonectria parasitica*)[2]	2010	Vic	Unknown	Unknown potential to infect Eucalyptus.	Under eradication
Impatiens Necrotic Spot Virus[2]	2010	NSW	Unknown	Potential to infect native plants.	Containment & eradication program (industry)
Black slug (*Arion ater*)[1]	2009 2001	Vic, Tas	Accidental introduction	Omnivorous & large, could threaten native snails.	No action.
Pearl eartheater[1]	2009	NSW	Released from aquarium	Unknown	Unknown
Mexican feather grass (*Nassella tenuissima*)[1,5]	2008 2004	NSW, ACT	Illegal introductions – mistakenly sold (wrongly labelled), can be bought on Ebay.	Potential to dominate woodlands and grasslands.	Removal from sale, tracing of sold plants, some populations eradicated.
Unconfirmed pox virus[5]	2008	SA	Not known if introduced from	Caused mass mortality of pups	Unknown

			overseas	of endangered southern bentwing bats	
Green shrimp plant (*Ruellia blechum*)[1]	2008	Torres Strait islands	Unknown	Competition with native plants.	Unknown.
Hairy Croton (*Croton hirtus*)[1]	2008?	Qld	Accidental – found at RAAF base at Weipa.	Competition with native plants	Unknown.
Pearl cichlid[1]	2008	NSW	Released from aquarium	Aggression & displacement of native fish	None
Asian green mussel[3]	2007 2002	Qld	Biofouling	Threat to GBR. Smothering or excluding native species	Eradication
Asian honey bee[1]	2007	Qld	Accidental introduction on ship from New Guinea	Competition with native species for pollen & nectar & nesting cavities.	Eradication attempted (national cost sharing), then abandoned.
Candyleaf (*Stevia ovate*)[1]	2007	Qld	Unknown	Competition with native plants.	Unknown.
Red-eared slider turtle[1]	2007 2006 2005 2004	Qld, Vic, ACT, NSW	Illegal introductions – often smuggled into Australia, released by pet-keepers	Competition with native turtles and predation of native species.	Possibly eradicated in Qld, not attempted in NSW.
Indian ringneck parrot[1]	2007-2005	WA	Escapes or releases by pet keepers	Competition with native parrots	Removed from the wild in WA. Many free-living in eastern Australia.
Electric ant[1]	2006	Qld	Accidental introduction with cargo	Dominates areas, displaces native ants & kills small animals.	Eradication program (national cost-sharing) in progress.
Argentine ant (Norfolk Island) [1]	2005	Norfolk Island	Accidental introduction – presumably with cargo	Could threaten several rare birds.	Control undertaken, eradication commenced 2014.
Climbing perch[1,3]	2005	Torres Strait	Uncertain – may be natural spread from PNG or illegal or accidental introduction.	Potentially major impacts on native fish if fish arrives on the mainland.	No action?
Miconia nervosa[1,3]	2004	Qld	Unknown	Rainforest shrub that could compete with native plants.	Eradication program (national cost-sharing) in progress ('Four Tropical Weeds' program).
Emerald furrow bee[1]	2004	NSW	Presumed accidental – unknown	Competition for resources, disease spread, weed pollination, disruption of	Surveys in 2008 (funded by philanthropy).

				pollination of native plants.	
Jack Dempsey cichlid[1]	2004	NSW	Released from aquarium	Aggression & displacement, disease	Unsuccessful eradication 2004-05.
African big-headed ant (Lord Howe Island) [1]	2003	Lord Howe Island	Accidental introduction – probably on building materials	Predation of many invertebrates, monopoly of food and displacement of native ants.	Under eradication. Control started in 2008.
Miconia racemosa[1]	2002	Qld	Unknown	Rainforest shrub that could compete with native plants.	Eradication program in progress
Speckled mosquito fish[1]	2002	NSW	Released from aquarium	Predation, competition, aggression, disease	Eradicated by NSW government.
White cloud minnow[1]	2002	NSW, Qld	Released from aquaria	Competition, disease	Biological control didn't work. A 2007 eradication proposal was not funded.
Hybrid cichlid (*Labeotropheus/Pseudotropheus*) [1]	2001	Vic	Released from aquarium	Competition with native species, disease	Unknown
Koster's curse (*Clidemia hirta*)[1]	2001	Qld	Accidental introduction, possibly as a contaminant of packaging material	Forms dense thickets that smother native vegetation.	Eradication program (national cost-sharing) in progress ('Four Tropical Weeds' program).
Limnocharis (*Limnocharis flava* [1]	2001	Qld	Unknown?	Serious weed of shallow water. Displaces native plants and animals. Restricts water flow and traps silt.	Eradication program (national cost-sharing) in progress ('Four Tropical Weeds' program).
Carder bee[1]	2000	Qld, NSW	Presumed accidental	Pollination of weeds, promoting their spread.	No action.
Jewel cichlid[1]	2000	NT, Qld	Released from aquaria	Competition with native species, disease	Eradicated from creek near Darwin. Otherwise unknown.
Blue acara[1]	2000	Vic	Released from aquarium	Competition with native species, disease	Unknown
Three spot gourami[1]	2000	Qld	Released from aquarium	Competition with native species, disease	Unknown
Ferret[1]	Multiple unconfirmed	Tas, Vic, WA	Escapes from pet-keepers	Predation of native animals	Attempts to confirm reports.

invasive species council

Engaging the Environmental Community Sector on Biosecurity

15 NOVEMBER 2012

In this paper, we outline the benefits and costs of community engagement in decision-making and policy-setting in environmental biosecurity, assess the current state of engagement at the national level and make recommendations for improvement.

Engagement of the community in decision-making and policy-setting is essential for transparent, participatory and accountable governance. Potential benefits include higher quality policies and decisions, improved biosecurity practices and stronger community and political support for biosecurity. Current engagement of the environmental community sector in biosecurity policy setting and decision-making by federal, state and territory governments is limited and often ineffectual. It contrasts poorly with the much more extensive engagement with industry sectors and in other areas of environmental policy.

We have made six recommendations for engagement reform: (1) establish Environment Health Australia, (2) establish a consultative committee for environmental biosecurity, (3) include greater representation of the environmental sector on advisory and consultative committees, (4) establish an environmental engagement position within the biosecurity agency, (5) develop a memorandum of understanding between DAFF and representative bodies and best practice guidelines as a joint government-community sector project, and (6) publish more extensive information about biosecurity on the internet to facilitate community understanding and evaluation of biosecurity decisions and performance.

CONTENTS

1. INTRODUCTION

Community 'engagement' and 'partnership' are prominent buzzwords in biosecurity. As recognised by the Nairn and Beale reviews of biosecurity, they are also essential for transparent, participatory and accountable biosecurity governance. Engagement is challenging, and if done poorly – eg. consultation for the sake of process box-ticking rather than improved outcomes – it is a waste of government (public) and community resources, both of which are anathema to the community sector.

The Invasive Species Council is an environmental NGO, more formally engaged in current federal biosecurity processes than any other community (non-industry) group. The environmental NGO sector has a major stake in biosecurity and warrants a strong role in policy-setting and decision-making by virtue of at least the following:

- a healthy natural environment is both a community right and responsibility,
- the community bears the costs of ineffective biosecurity in suffering the effects of and paying for and conducting control of invasive species,
- many biosecurity services are provided voluntarily by the community sector,
- there are many types of biosecurity expertise within the sector, and
- environmental biosecurity lags behind industry biosecurity in part because there is limited community involvement within biosecurity policy-setting and decision-making.

More than most issues in modern Australia, environmental biosecurity needs effective community engagement. Invasive species are currently the second most severe threat to biodiversity (in terms of threatened species and ecological communities) and the threat is worsening as existing invaders spread and new ones arrive. The importance of biosecurity to conservation is at least as great as it is to agriculture but environmental threats are much harder to quantify in dollar terms. Invasive species are an immensely difficult and escalating problem that can't be solved so much as managed for harm minimisation. They are a quintessential wicked problem, arising from complex interactions across environmental, social, economic and political systems, with high levels of uncertainty and non-linear effects. Biosecurity is far from just technical decision-making. It requires prioritising, balancing, planning, innovating and foresighting, all of which require or benefit from the advocated community engagement and partnerships. That is why ISC has proposed the establishment of Environment Health Australia as the 'relationship and brains infrastructure' for grappling with priority environmental biosecurity challenges.

ISC has been heartened by the recently growing inclusion of the environmental sector in biosecurity processes. However, there is still far to go to achieve effective engagement of the environmental community sector.

NAIRN REVIEW (1996):

[Q]uarantine is a partnership. The formulation of quarantine policies and programs must be a consultative process involving the Australian community.

BEALE REVIEW (2008):

The imperative of One Biosecurity: a working partnership and shared responsibility

Engagement with business and the general community on biosecurity must occur consistently and continually at several levels, from policy setting through co-regulatory alternatives to actions by individuals and companies, before, at and after the border.

A new approach is needed which provides a common understanding between the Commonwealth, the states, business and the community at large of their respective roles and responsibilities and how these will be met…

1.1 Focus and definitions

Engagement and partnership

Effective engagement requires ensuring community access to information, participation, and justice to empower groups and individuals to have a meaningful voice in decisions relevant to their health, wellbeing, communities and environment. Our focus here is on:

- comprehensive access to information, and
- meaningful participation in policy-setting and decision-making.

'Partnership' is a more demanding concept than 'engagement', implying a more equal relationship and shared decision-making power. A relevant definition is 'a relationship characterised by mutual cooperation and responsibility for the achievement of a specified goal.' A partnership is not appropriate for all biosecurity processes. Governments are entrusted with biosecurity responsibilities, such as import decisions, on behalf of the community and should engage the community without divesting responsibility. We advocate a partnership approach for functions proposed for Environment Health Australia. A partnership approach may also be appropriate for the development of biosecurity strategies and plans and the implementation of eradication and control programs on public and private conservation land.

Community sector

The community encompasses all Australians. Our focus is the diverse array of groups and individuals who have a particular interest and stake in environmental biosecurity – the 'environmental community sector' – which includes:

- NGOs focused on environmental advocacy – national, state, regional and local;
- professional bodies – eg. weed societies, representative bodies for conservation practitioners;
- research groups and individuals, including universities, CSIRO, consultancies;
- natural resource management, catchment management and Landcare groups;
- Indigenous land managers and representative bodies;
- bush rehabilitation groups and individuals;
- non-government protected area managers – groups and individuals; and
- biosecurity and conservation experts – practitioners and researchers in ecology, invasive species management.

Environment NGOs are a distinct and recognised category of community stakeholder with a clear stake in biosecurity, including:

- as advocates for and contributors to more effective environmental policies and programs (the majority of environmental gains in Australia have been catalysed by advocacy by environmental NGOs),
- as active participants in biosecurity, particularly in eradication and control programs for biodiversity conservation, on public and private lands, and
- as educators and information providers to a much wider range of stakeholders than government agencies can hope to reach.

2. RATIONALE, BENEFITS AND COSTS

Effective biosecurity is just as vital to conservation as it is to primary industries. The lack of direct financial benefit (apart from some avoidance of additional costs in community control programs) does not make its stakeholders any less legitimate or important than those from industry sectors. The advocated access to information and participation in decision-making and policy-setting should be community entitlements but, more importantly, are practical vehicles for achieving effective biosecurity. There are many characteristics of environmental biosecurity that render engagement more essential and more challenging than for industry biosecurity.

DISTINCTIVE ASPECTS OF ENVIRONMENTAL BIOSECURITY

Environment NGOs support the 'one biosecurity' approach recommended by the 2008 Beale review that envisions a seamless cross-sectoral, cross-jurisdictional approach to biosecurity. 'One biosecurity' requires, however, recognition of the distinctive requirements of environmental biosecurity. Protecting the natural environment differs in many ways from protecting industry assets and requires a distinctive ecologically based approach to biosecurity. Environmental biosecurity cannot just be a bolt-on to existing industry approaches. Following is a brief outline of some of the differences that underpin distinctive requirements.

The values at stake – biodiversity and environmental health: Conservation requires a biosecurity focus on hundreds of thousands of species and their interactions that constitute ecosystems and ecosystem processes in terrestrial, freshwater and marine systems. In contrast, industry biosecurity is mostly focused on protecting individual economically valuable species that are far less numerous. The values at stake for industry are quantifiable in economic terms and are often replaceable (by new breeds, species or enterprises) whereas those for conservation are not replaceable and usually cannot be quantified in economic terms. This means they are often undervalued when biosecurity priorities are decided.

Scale and complexity of threats: Invasive species threatening the environment outnumber those threatening industry assets and the impacts are more complex and costly.

State of knowledge: Much less is known about biodiversity than about cultivated species at biosecurity risk. The lack of knowledge about native biota means that most invasive species impacts are not documented or monitored. The impacts of even high-profile invasive species are often poorly known – development of the NSW threat abatement plan for biotou bush increased the number of known species at risk from six to 158.

Predictability and timeframes: There are high levels of uncertainty about impacts in the natural environment due to complex interactions, long timeframes (centuries) and lack of knowledge. Many are facilitated by or synergistic with other threats, eg. fragmentation and climate change. Impacts in the natural environment may not be observed for decades due to lag effects, lack of monitoring or their insidious nature. A cow or crop killed by a new pathogen is more easily detected than a dead bird in a forest.

Management approaches and options: There are many more management options in agricultural systems than there are in complex natural environments. For example, in response to myrtle rust, plant industries can use fungicides, breed resistant varieties or use tolerant species, none of which are options in the natural environment. In many natural situations, weeds cannot be controlled with broadacre mechanical or chemical methods.

Stakeholders and resources: There are commercial incentives for industry to manage invasive species but environmental biosecurity relies on government and community investment for the public good. Commercial incentives and greater government spending also mean that industry biosecurity is better resourced than environmental biosecurity. A multitude of stakeholders, often with conflicting agendas, make environmental biosecurity a more socially and politically challenging policy area than industry biosecurity. Some of the most damaging environmental invaders have been ignored because of economic or social reasons that are rarely subject to cost-benefit analysis – many aquarium fish, pasture grasses and garden plants for example.

2.1 Benefits

The Government's greatest ally in achieving stronger environmental biosecurity will be the environmental community sector. The potential benefits from greater engagement include the following.

Higher quality policies and decisions

- Ensuring community access to information and participation in decision-making increases the transparency and integrity of decision-making and the legitimacy of decisions.
- Involving the community sector avails decision-makers of information vital for sound decision-making. The sector includes experts and practitioners in many fields.
- The meaningful participation of the community sector delivers different perspectives, expertise and ideas to increase innovation in biosecurity policy.

Improved biosecurity practices

- Ensuring that community sectors have a strong stake in effective biosecurity will motivate influential groups and individuals to work to improve biosecurity awareness and practices in the community.
- Involving environmental practitioners in policy and planning will increase the prospects of implementation.

Stronger community and political support for biosecurity

- Engaging the environmental community sector will result in stronger biosecurity advocacy for public and private support for and investment in biosecurity.

2.2 Challenges and costs

Effective engagement requires much more than including an environmental representative on relevant committees and inviting community submissions on some decisions. It requires commitment, resources and effort by both government and the community sector. Challenges of engagement for environmental biosecurity include the following:

- There are a multitude of legitimate stakeholders, with multiple and sometimes conflicting agendas.
- There are capacity deficiencies in the community sector, particularly lack of resources and time. The previous lack of involvement in biosecurity policy also means there is lack of intimate knowledge of processes. Biosecurity is an information-dense issue, demanding much of community representatives.
- Within the environmental community sector, biosecurity does not receive the attention and priority it warrants (for reasons of complexity, culture, history). The focus has traditionally been on controlling the most damaging invaders rather than on the continuum.
- Engagement is essential but not a panacea for resolving contentious policy issues. There will inevitably be tensions between different parties, including where economic and environmental interests are in conflict. There are cultural differences and lack of mutual understanding between many in the biosecurity sector and the environmental community sector.
- There is a lack of integration of environmental and biosecurity functions in government. At federal and state/territory levels, there is limited involvement of environment departments and environment stakeholders in biosecurity policy setting and decision-making. There is a dominant primary industries focus in biosecurity agencies, and a lack of ecologists in management positions. Despite the importance of biosecurity to conservation, biosecurity agencies have not participated in developing and have not adopted the relevant goals of biodiversity conservation strategies – such as the 2015 target of the national strategy 'to reduce by at least 10% the impacts of invasive species on threatened species and ecological communities in terrestrial, aquatic and marine environments.' There are difficulties in quantifying the costs and impacts of environmental invaders and thus of ensuring they are granted equivalent priority to industry threats of similar magnitude.

3. THE CURRENT STATE OF BIOSECURITY ENGAGEMENT

Recently, there has been some progress in engagement of the environmental community sector – for example, the appointment of a representative to the National Biosecurity Committee Stakeholder Engagement Consultative Group. But it has involved adding the occasional environmental representative to existing processes rather than being derived from analysis of what is required for effective engagement of the sector. Overall engagement is very limited and much less than that for industry sectors. It is not reflective of the importance of biosecurity to the environment sector and is insufficient for biosecurity benefits to manifest. There has been no engagement on very important environmental issues such as the National Environmental Biosecurity Response Agreement (NEBRA).

It appears that community 'partners' are regarded as more biosecurity brawn than brain, to comply with policies and decisions that are largely shielded from their views and expertise.

3.1 ENVIRONMENTAL COMPARED TO INDUSTRY ENGAGEMENT

There has been only a limited role for environment NGOs in most biosecurity institutions, in contrast to the active role they play in other environmental policy areas. Of about 20 federal biosecurity consultative forums noted by the Beale review – 14 AQIS Industry Consultative Committees, Animal Health Australia, Plant Health Australia, Aquatic Animal Health Committee, Australian Wildlife Health Network and Quarantine and Exports Advisory Council (replaced by the Biosecurity Advisory Council), only the latter two have an environmental representative or expert (as far as we are aware). The lack of involvement of the environmental community sector is in stark contrast to the close involvement of industry bodies in biosecurity processes – in advisory and consultative committees, contingency planning, policy setting and decisions on incursions. Industry biosecurity benefits in particular from the work of Plant Health Australia and Animal Health Australia on contingency planning and other projects, for which there is no environmental equivalent.

A similar lack of engagement of the environmental community sector exists at a state level. Typically, advisory committees have one environmental representative and several industry representatives.

DAFF funded a three-year 'Engaging in Biosecurity' project to develop a biosecurity engagement framework. Most of the resulting reports discuss community engagement in general terms but focus almost entirely on agriculture. The reference group for the project did not have any environment NGO representation. Biosecurity Engagement Guidelines list 12 'key stakeholders in biosecurity' that do not include environment NGOs. Community groups are listed but are described as groups like Lions and Neighbourhood Watch. Numerous industry-based groups are acknowledged.

COMPARISON OF PARTICIPATION BY ENGO AND INDUSTRY REPRESENTATIVES IN FEDERAL BIOSECURITY PROCESSES

BIOSECURITY PROCESS	INDUSTRY INVOLVEMENT	ENGO INVOLVEMENT
Biosecurity Advisory Council	5 members with agricultural expertise or industry involvement.	0 members from the ENGO sector, 1 member with primary ecological expertise.
Contingency planning for incursions	Industry membership in Plant Health Australia and Animal Health Australia.	No responsible body for environmental pests, no ENGO involvement.
Responding to incursions	Represented in National Management Group for relevant incursions and through the involvement of Plant Health Australia and Animal Health Australia.	No involvement in decisions. No proposed role under NEBRA. Limited or no role through the National Management Group to date.
Consultative committees	14 industry-specific consultative committees; industry representation on animal health, plant health and national biosecurity committees.	Generally no representation, 1 ENGO representative recently appointed to National Biosecurity Committee Stakeholder Engagement Consultative Group.

3.2 Biosecurity engagement compared to other environmental engagement

In general, biosecurity decision-making provides far fewer opportunities for community engagement in other environmental decision-making, as exemplified in the decision-making for live animal imports under the EPBC Act and the process proposed for similar decisions under the Biosecurity Act.

COMPARISON OF DECISION-MAKING PROCESSES FOR IMPORTS ASSESSED UNDER THE EPBC ACT AND THE BIOSECURITY BILL

FEATURES OF DECISION-MAKING	EPBC ACT	BIOSECURITY BILL
Public notification of import applications and publication of assessments	Publication of applications for imports of non-approved specimens and assessments.	No notification or publication of applications or assessments, except for biosecurity import risk analyses (BIRAs).
Rights to make representations	Formal consultation process with invitation for public submissions.	Formal consultation process on BIRAs but not on other import decisions.
Assessment	Undertaken by proponent with advice by SEWPaC staff to Minister	Undertaken by DAFF staff
Decision-maker	Minister for Environment	DAFF Secretary
Obtaining reasons	Community right to obtain reasons for decision.	No community right, only the applicant can obtain reasons.
Appeal rights	Third party rights for judicial review.	No third party rights. Appeal rights only for the import applicant.

3.3 The need for Environment Health Australia

The complexity and scale of environmental challenges warrants a comprehensive biosecurity focus facilitated by a new national body to engender a genuine partnership approach. It will not be sufficient to bolt on environmental responsibilities to existing structures and cultures.

Environment NGOs propose the establishment of Environment Health Australia to bring together major participants in environmental biosecurity, effectively involve the community sector, and facilitate a cross-jurisdictional, cross-sector collaboration to achieve much stronger environmental biosecurity. It would be the environmental equivalent of, and collaborate with, Animal Health Australia and Plant Health Australia. For more details, see *Keeping Nature Safe: A proposal for the establishment of Environment Health Australia* at www.invasives.org.au%2Fdocuments%2Ffile%2Frpt_keepingnaturesafe.pdf.

Environment NGOs think AHA and PHA are an excellent model for engendering partnerships on biosecurity. Federal and state/territory governments have been contributing public funding to AHA and PHA for over a decade and much has been achieved. We support their continuation. However, it is now time for a similar effort and level of public funding to be focused on environmental biosecurity priorities, with comprehensive involvement of the community sector.

4. RECOMMENDATIONS

1. Establish Environment Health Australia, as the most practicable way to engender partnerships with community to address priority environmental biosecurity issues.
2. Establish a consultative committee for environmental biosecurity, involving representatives from the range of environmental community stakeholders, to engage with DSEWPaC and DAFF on priority environmental biosecurity issues.
3. On all consultative and advisory committees relevant to environmental biosecurity, ensure there is representation from the environmental community sector adequate to represent the diversity of views and expertise of the sector and proportionate to the environmental relevance of the committee. Where the issues are equally relevant to industry and the environment, ensure there is equivalent representation from both sectors. The membership of the Biosecurity Advisory Council should have equal representation of expertise in agriculture and the environment.
4. Establish an 'environmental engagement' position within the biosecurity agency to work with the sector to facilitate access to information and participation within biosecurity processes.
5. Develop a memorandum of understanding between DAFF and representative organisations within the environmental community sector and best practice engagement guidelines for the sector as a project undertaken in partnership with the sector. This project would include assessment of the capacity needs of the sector to fully engage in biosecurity processes at all levels.
6. Publish extensive information about biosecurity on the internet, providing open access to information to allow the community sector to better understand and evaluate biosecurity decisions and performance.