

Environmental protection under the Commonwealth Biosecurity Act

Dr Sophie Riley UNIVERSITY OF TECHNOLOGY SYDNEY and *Dr Carol Booth* INVASIVE SPECIES COUNCIL

Introduction

For over 100 years, biosecurity in Australia was regulated in accordance with the Quarantine Act 1908 (Cth). During its lifetime, the Quarantine Act underwent numerous reviews, including the Nairn Review in 1996 and the Beale Review in 2008, both of which identified the need for more focus on preventing the entry, establishment and spread of pests and diseases of the natural environment.¹ For most of the Quarantine Act's history, environmental biosecurity was achieved largely as a by-product of efforts to protect the agricultural product sector and human health.² By the time of the Beale Review, along with higher environmental expectations, there had been a conceptual shift from "quarantine" to "biosecurity", a difference summed up this way:

Biosecurity is a more pro-active concept [than quarantine], aligned with the pre-, border and post-border continuum, a multilayered approach, a shift from zero risk to managed risk, from barrier prevention to border management, from "no, unless ..." to "yes, provided ...".³

Seven years after the Beale Review recommended a legislative overhaul the Quarantine Act was replaced by the Biosecurity Act 2015 (Cth).

This new legislation is vitally important for nature conservation. Invasive species are a major driver of species loss in Australia and a threat to more than three-quarters of nationally listed amphibians, birds and mammals and more than half the listed plants, fishes and reptiles (often in combination with habitat loss).⁴ With increasing globalisation and challenges such as climate change amplifying the risks, the biosecurity pressures on Australia's environment are growing. A steady stream of new arrivals — such as red imported fire ants (first discovered in 2001) and myrtle rust (2010) — represents future extinction drivers.⁵

With the Biosecurity Act, Australia's main biosecurity law references for the first time the country's obligations under the Convention on Biological Diversity 1992 (CBD) to "prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species".⁶ Does this signal that Australia's biosecurity regime has moved beyond its historical

dominant focus on agriculture and human health to embrace protecting Australia's environment from harm by invasive species?

The new Biosecurity Act comprises 645 sections and it is not possible to do justice to it in this short piece. Therefore, we focus on evaluating how well environmental criteria are integrated into the new regime by examining two topics: environmental risks as biosecurity risks and governance structures.

Biosecurity Act

The Biosecurity Act has 11 chapters dealing with a range of biosecurity risks, including to human health, plant and animal health and the environment, and risks from ballast water. Many important processes established in the Quarantine Act, such as border inspections, continue with the Biosecurity Act. However, biosecurity procedures and processes are more streamlined and focused on risk management, supplemented by more tools, such as biosecurity zones, and powers, such as emergency response powers, together with enhanced compliance and enforcement provisions.⁷ The Biosecurity Act creates the position of Director of Biosecurity, who is responsible for much of the decision-making under the Act,⁸ as well as the independent role of Inspector-General of Biosecurity, responsible for reviewing processes under the Act, including the performance of the Director of Biosecurity.⁹

The Biosecurity Act's purposes include maintaining Australia's freedom from many major agricultural pests and diseases, preventing the entry and establishment of new pests and diseases, and complying with Australia's international obligations.¹⁰ For these reasons, the framers of the Biosecurity Act sought to tread a fine line, neither running afoul of obligations under the World Trade Organization (WTO) and the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement), nor being so constrained as to prevent Australia from meeting responsibilities under the CBD.¹¹ These objectives, however, are tempered by prevailing tensions between WTO rules and the use of biosecurity for environmental protection. Of particular significance,

including for protection of the environment, are the Appropriate Level of Protection (ALOP) and Biosecurity Import Risk Analysis (BIRA).¹²

The ALOP is a determination of the level of biosecurity protection a country seeks to maintain.¹³ Australia's ALOP, set out in s 5 of the Biosecurity Act, is "a high level of sanitary and phytosanitary protection aimed at reducing biosecurity risks to a very low level, but not to zero". This represents a managed risk approach to biosecurity that was first introduced into legislation by the now repealed Quarantine Amendment Act 1999 (Cth).¹⁴ The ALOP — and how it is interpreted — is of critical importance to border control, because Australia can refuse entry to goods and conveyances only if their assessed risk cannot be reduced to the very low level mandated by the ALOP. Accordingly, the ALOP determines which goods can be brought into Australia and under what conditions, through assessments of biosecurity risk, including BIRAs.¹⁵ However, the ALOP cannot prohibit the importation of species that are already in Australia, unless those species are under official control.¹⁶ Clearly then, the effectiveness of the Biosecurity Act to prevent entry to species likely to cause environmental harm depends on the extent to which biosecurity risks can be equated with environmental risks.

Environmental risks as biosecurity risks

A BIRA, and non-regulated risk assessments such as weed risk assessments, are used to evaluate the likelihood of a disease or pest entering, establishing or spreading in Australia, and its potential to cause harm to human, animal or plant health, or cause economic damage or harm to the environment.¹⁷ The concept of risk in the BIRA provisions is consistent with the definition of risk assessment in Annex A(4) of the SPS Agreement, which refers to the "likelihood of entry, establishment or spread of a pest or disease" according to the SPS measures which might be applied.

Therefore, the country of import can only ban entry of goods or conveyances if it can demonstrate the potential for harm. This is intended to prevent biosecurity from being used as a disguised restriction on trade,¹⁸ and differs from processes in environmental regimes, which reverse the onus by requiring proponents to demonstrate that an action is unlikely to cause environmental harm. The guiding principles for Art 8(h) of the CBD,¹⁹ for example, recommend a precautionary approach, which the SPS Agreement, by contrast, eschews in favour of scientific certainty.²⁰ Following the lead from the SPS Agreement, the Biosecurity Act does not specify a precautionary approach, despite one of its purposes being to give effect to Australia's CBD obligations. Yet, there is a subset of import decisions that do require a precautionary approach — those made under the Envi-

ronment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC) for live animal imports.²¹ The uncertain status of the precautionary approach remains a regulatory gap that Australia needs to investigate and devise into a workable solution.

This suggests that the CBD obligations are under-rated and evinces tacit acceptance that uncertainties may be disregarded. Undoubtedly, there are precautionary elements in biosecurity decision-making, but failure to apply the precautionary approach comprehensively limits the extent to which environmental risks can be captured as biosecurity risks under the Biosecurity Act.

The omission is particularly significant for environmental biosecurity because of the paucity of information about alien species likely to harm the environment and their potential impacts. The uncertainties are typically much greater for the natural environment than for agriculture and human health, due to the vastly greater numbers of species at risk, their high rates of endemism in Australia, and the complexity of ecological interactions. Species in primary production tend to be used globally and the biosecurity risks are much better studied.

Live plant imports are also covered by the EPBC, but any imports approved under the Biosecurity Act are also taken to be approved under the EPBC. An issue considered while the Biosecurity Act was being developed was whether the EPBC live import responsibilities should be transferred to the new Act. The Hawke Review of the EPBC advised they should be integrated, provided several conditions were met to ensure the environment was "given equal consideration alongside human health and economic and social considerations".²² The integration did not proceed.

While there is considerable focus through BIRAs and other risk assessment on preventing new harmful species from being introduced to Australia, the ability to limit risky imports is hampered for alien species already in Australia, due to limitations of post-border biosecurity. As noted, further imports can only be banned if the species is not widespread and is under "official control". The biosecurity landscape is complex, and as with many other environmental issues, one of the challenges presented by Australia's federalist system is encouraging the commitment and cooperation of states and territories.

Post-border invasive species regulation

A strong argument for pre-border and border precaution are the enormous difficulties and costs of eradicating or managing alien species once they are established. One testament to this is that only a small proportion of invasive species, particularly weeds, are under official control at the state and territory level.²³

Further testament derives from failures to protect Australian biodiversity from invasive species. In addition to regulating live animal imports, the EPBC has post-border biosecurity functions through provisions to list “key threatening processes” (KTPs) and prepare “threat abatement plans”.²⁴ Invasive species dominate KTPs, being the focus of 14 of 21 listings,²⁵ and national plans have been developed for most of them. But the listing of KTPs is far from systematic and a listing does not guarantee the preparation of a threat abatement plan, let alone abatement of the threat itself. The Minister for the Environment and Energy need only prepare a threat abatement plan if he or she considers that such a plan is a “feasible, effective and efficient way to abate the process”.²⁶ Moreover, the effectiveness of these plans relies on the willingness of state and territory governments to implement them. The Minister decided not to prepare plans for two recent listings — “Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants” and “Novel biota and their impact on biodiversity”. The last is particularly concerning because for several years any nominations for KTP listings involving invasive species have been rejected on the basis that the novel biota listing is intended to be comprehensive and cover all other harmful invasive species.²⁷

The division of responsibilities federally, and in most states and territories, sees the majority of biosecurity laws and policies administered by agricultural departments while environment agencies strive to mitigate major invasive threats to biodiversity. This system will likely perpetuate the dominant historical focus on agricultural biosecurity, a problem that the Hawke Review described as one of “culture”, which subordinates environmental biosecurity.²⁸ This “culture” is evident in governance arrangements under the Biosecurity Act that limit the influence of environment departments on biosecurity policies and priorities.

Governance structures

One of the most forceful environmental critiques against the Biosecurity Act stems from its institutional arrangements and decision-making and review processes.

The Beale Review recommended establishing an independent statutory authority to administer biosecurity, instituting an expert National Biosecurity Commission to advise the authority and government and make independent decisions, and creating an independent role for the Director of Biosecurity.²⁹ The Australian Government rejected these recommendations and has retained biosecurity within the agricultural agency (the Department of Agriculture and Water Resources (DAWR)), which is likely to perpetuate a dominant focus on

agricultural biosecurity.³⁰ The Biosecurity Act is administered by, and most decisions are made by, the Director of Biosecurity, who is also the Secretary of Agriculture.³¹ This creates potential conflicts, given that DAWR and the Secretary have a significant role in promoting trade in the agricultural sector. It is a conflict further emphasised by the fact that the Minister of Agriculture and Water Resources may give general instructions to the Director of Biosecurity, although the Minister cannot instruct with respect to the conduct or outcome of a BIRA.³²

Other features potentially inimical to strong environmental biosecurity are that many aspects of decision-making under the Biosecurity Act are discretionary and not required to be systematically applied to the highest priority risks. For example, the Director of Biosecurity is able to decide whether a BIRA is conducted and the order of priority for conducting BIRAs, with no requirement for environmental risk, or any risk, to be the basis for determining these priorities. Given the potential for the Agriculture Minister to direct that a particular BIRA be conducted, and there being no equivalent role for the Environment Minister, there is a danger that the focus of BIRAs will be determined by trade, economic or political priorities. The only mandatory provision states that the Director must apply the ALOP. In addition, the exclusive right for legal appeal against import decisions rests with the applicant, further laying open the potential for trade-biased decisions.³³ This contrasts with the third-party appeal rights under the EPBC.³⁴

Although the Biosecurity Act itself does not show evident bias against environmental biosecurity, these governance arrangements are likely to perpetuate the priority accorded to agricultural biosecurity. The recent *Priorities for Australia's Biosecurity System: An Independent Review of the Capacity of the National Biosecurity System and its underpinning Intergovernmental Agreement*³⁵ (IGAB Review) noted that environmental biosecurity “has long been viewed as subordinate ... to agricultural biosecurity in the national biosecurity system” and identified many ways in which environmental biosecurity is underdeveloped, including in prioritisation of risks, preparedness, surveillance, response arrangements, partnerships and funding.³⁶ “While current arrangements can and do deal with environmental biosecurity matters”, the review found “this does not occur on a systematic or transparent basis”.³⁷

The fact that the Environment Minister does not have a defined role under the Biosecurity Act, although the Minister for Agriculture and the Minister for Health do, is one indication of environmental biosecurity being a lower priority.³⁸ This is exacerbated by a lack of environmental representation in consultative and advisory committees. The IGAB Review recognised the

need for stronger environmental leadership and participation. It recommended the establishment of a “Chief Community and Environmental Biosecurity Officer” to perform a national policy leadership role, the development of formal arrangements between agriculture and environment agencies, and the participation by environmental experts and stakeholders in biosecurity committees.³⁹ The recommendations were framed in part as ensuring the federal environment department does “not ‘outsource’ key environmental biosecurity activities to the agriculture department”.⁴⁰

Recognising that there will be resistance to spreading “limited biosecurity funding” more thinly to improve environmental biosecurity, the IGAB Review also recommended a new levy on imports to fund a greater effort on environmental biosecurity.⁴¹

Conclusion

The Biosecurity Act has many strengths. It continues to set Australia’s ALOP at a high level aimed at reducing biosecurity risks to a very low threshold and provides strong powers for the federal government to apply and enforce biosecurity measures.

These positives are offset, to some extent, by weaknesses that are likely to perpetuate the higher priority accorded to protecting economic assets and human health — including governance structures (particularly the administration of the Biosecurity Act by the Agriculture Department and the lack of a role for the Environment Minister), the discretionary nature of much decision-making under the Act, and the lack of requirement to apply the precautionary approach.

These deficiencies indicate that while the Biosecurity Act is an improvement of the Quarantine Act, regulation still has some way to go before biosecurity is an optimally effective tool for environmental protection. Adoption of the IGAB Review recommendations would substantially improve environmental biosecurity. However, it is questionable whether the proposed reforms can fully compensate for the institutional placement of biosecurity within agriculture, the lack of independence of biosecurity decision-makers and eschewal of environmental principles such as the precautionary approach.

Dr Sophie Riley

Senior Lecturer, Faculty of Law
University of Technology Sydney
Sophie.Riley@uts.edu.au
www.uts.edu.au

Dr Carol Booth

Policy Officer
Invasive Species Council

Footnotes

1. M E Nairn, P G Allen, A R Inglis and C Tanner *Australian Quarantine: A Shared Responsibility* (1996) Recommendation 2, pp 5, 32 (Nairn Review) www.agriculture.gov.au/SiteCollectionDocuments/aqis/about/corporate-docs/nairn/nairn_report.pdf; R Beale, J Fairbrother, A Inglis and D Trebeck *One Biosecurity: A Working Partnership* (2008) 138 (Beale Review) https://web.archive.org/web/20091024200423/http://daff.gov.au/_data/assets/pdf_file/0010/931609/report-single.pdf.
2. W Craik, D Palmer and R Sheldrake *Priorities for Australia’s Biosecurity System: An Independent Review of the Capacity of the National Biosecurity System and its Underpinning International Agreement* (2017) 108 www.agriculture.gov.au/SiteCollectionDocuments/biosecurity/partnerships/nbc/priorities-for-aus-bio-system.pdf.
3. Beale Review, above n 1, xvii.
4. As identified in conservation advices available in the Department of the Environment and Energy, Species Profile and Threats Database, accessed 30 October 2017, www.environment.gov.au/cgi-bin/sprat/public/sprat.pl; T Low *Invasive Species: A Leading Threat to Australia’s Wildlife* (2017) <https://invasives.org.au/wp-content/uploads/2017/04/Invasive-species-A-leading-threat-to-Australias-wildlife.pdf>.
5. A J Carnegie, A Kathuria, G S Pegg, P Entwistle, M Nagel and F R Giblin “Impact of the Invasive Rust *Puccinia psidii* (myrtle rust) on Native Myrtaceae in Natural Ecosystems in Australia” (2016) 18(1) *Biological Invasions* 127; Threatened Species Scientific Committee, The Reduction in the Biodiversity of Australian Native Fauna and Flora due to the red imported fire ant, *Solenopsis invicta* (fire ant), accessed 30 October 2017, available at www.environment.gov.au/biodiversity/threatened/key-threatening-processes/reduction-in-native-fauna-and-flora-due-to-red-imported-fire-ant.
6. Biosecurity Act, ss 4(b), 9, 26; Convention on Biological Diversity 1992, Art 8(h); The convention was adopted 5 June 1992, [1993] ATS no 32 (entered into force 29 December 1993). The convention has 196 parties.
7. Biosecurity Act, Chs 9 and 10.
8. Biosecurity Act, s 540.
9. Biosecurity Act, ss 566A, 567–568.
10. Explanatory Memorandum to the Biosecurity Bill 2014 (Cth) pp 8, 9, and 11; Biosecurity Act, ss 4, 9 (definition of biosecurity risk) and 310.
11. Marrakesh Agreement establishing the World Trade Organization, adopted 15 April 1994, [1995] ATS no 8, 1 (entered into force 1 January 1995); The Agreement on the Application of Sanitary and Phytosanitary Measures (SPSA) [1995] ATS no 8, Annex 1A (SPS Agreement). The World Trade Organization has 164 members.
12. Also important are non-regulated risk analyses such as reviews of policy and import conditions, and weed risk assessments.

13. SPS Agreement, Art 2.2, Annex A, Art 5.
14. Explanatory Memorandum to the Quarantine Amendment Bill 1998 (Cth) p 2.
15. Biosecurity Act, ss 173, 179 and 182; Biosecurity Act, ss 166, 167; Department of Agriculture and Water Resources *Biosecurity Import Risk Analysis Guidelines: Managing Biosecurity Risks for Imports into Australia* (2016) <http://agriculture.gov.au/SiteCollectionDocuments/bira-guidelines-2016.pdf>.
16. This requirement stems from the definition of a “quarantine pest” in the International Standards for Phytosanitary Measures settled under the auspices of the International Plant Protection Convention.
17. Biosecurity Act, ss 9, 166.
18. WTO, Understanding the WTO Agreement on Sanitary and Phytosanitary Measures, May 1998, www.wto.org/english/tratop_e/sps_e/spsund_e.htm.
19. Guiding Principles for the Prevention, Introduction and Mitigation of Impacts of Alien Species that Threaten Ecosystems, Habitats or Species, Guiding Principles 2, 7 and 10, adopted April 2002 as part of Decision VI/23 of the Conference of the Parties, Report of the Sixth Meeting of the Conference of the Parties to the Convention on Biological Diversity, UNEP/CBD/COP/6/20 (23 September 2002).
20. Above n 19, Guiding Principle 1; SPS Agreement, Art 5.7; WTO *European Communities — Measures Concerning Meat and Meat Products (Hormones)* WTO Doc WT/DS/26/AB/R Report of the Appellate Body (1998), para 123.
21. EPBC Act, s 303EA.
22. A Hawke *Report of the Independent Review of the Environment Protection and Biodiversity Conservation Act 1999* (2009), Appendix 6, p 369 www.environment.gov.au/system/files/resources/5f3fdad6-30ba-48f7-ab17-c99e8bcc8d78/files/final-report.pdf.
23. For example, see World Wildlife Fund, National List of Naturalised Invasive and Potentially Invasive Garden Plants, 5 April 2006, http://awsassets.wwf.org.au/downloads/sp092_list_invasive_garden_plant_4apr06.pdf.
24. EPBC, Ch 5, Pt 13.
25. Department of the Environment and Energy, Listed Key Threatening Processes, accessed 30 October 2017, www.environment.gov.au/cgi-bin/sprat/public/public_getkeythreats.pl.
26. EPBC, s 270A(2).
27. Threatened Species Scientific Committee, Novel biota and their Impact on Biodiversity, accessed 30 October 2017, available at www.environment.gov.au/biodiversity/threatened/key-threatening-processes/novel-biota-impact-on-biodiversity.
28. Above n 22, p 369.
29. Beale Review, above n 1, xxxiii, 40–43, 45, 46–47, 112.
30. DAWR, Biosecurity in Australia, 28 August 2017, www.agriculture.gov.au/biosecurity/australia.
31. Biosecurity Act, ss 154, 167, 179, 182, 280, 289, 353, 365, 384, 395, 540, 541 and particularly 541(1).
32. Biosecurity Act, ss 168, 543.
33. Biosecurity Act, s 9 (definitions of “relevant person” and “reviewable decision”), ss 574, 578.
34. EPBC, s 473.
35. Above n 2.
36. Above n 2, p 46.
37. Above n 2, p 52.
38. Biosecurity Act, ss 168, 445, 452, 453, 474, 477, 478, 543.
39. Above n 2, ss 4.3 and 4.4.
40. Above n 2, p 56.
41. Above n 2, pp 108, 117–18.