



Plant Health Australia's submission on

Environmental Biosecurity



Improving national biosecurity
outcomes through partnerships

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ENVIRONMENTAL BIOSECURITY SUBMISSION

As the coordinator of the plant biosecurity partnership between government and industry in Australia, [Plant Health Australia](#) (PHA) welcomes the opportunity to provide a submission on the Inspector-General of Biosecurity Review of environmental risk management in Australia.

The review is examining how effectively the Department of Agriculture and Water Resources manages environmental biosecurity concerns.

The scope of this review includes examining:

- how the department participates in the broader biosecurity system to address environmental biosecurity concerns, and
- processes to identify gaps in pathway and risk analyses and to improve information gathering and sharing between jurisdictions, in relation to environmental biosecurity.

Comments on the review

PHA is a member-based company, funded by the Australian Government, state and territory governments, 40 plant industry peak bodies and 11 associate members.

Our responsibility regarding environmental issues is prescribed in four out of six objects of our Constitution, which are to:

- a) coordinate a cooperative whole of industry and whole of government approach to the development and implementation of plant health policies and management programs including incursion management
- b) provide strategic leadership in the development and implementation of national plant health policies and management programs
- c) maintain and improve international and domestic confidence in Australia's plant health status
- d) contribute to the sustainability of Australia's plant industries and native flora.

PHA's view is that environmental biosecurity is not entirely distinct from agricultural biosecurity, as there is a significant overlap in pests that affect plants grown for agricultural purposes and those found in the natural environment or have social amenity in urban spaces.

An example of a disease and a pest that have significant overlap across these sectors is Australia's top biosecurity threat [*Xylella fastidiosa*](#) and its vector the glassy winged sharpshooter. They attack production crops such as grapevines and olives, along with acacia, grevillea and myrtaceae species that are significant in the environment, urban and rural settings, and also garden plants such as lavender and oleander.

PHA's role in environmental biosecurity entails aspects such as:

1. Collaboration with governments and other organisations in plant biosecurity

PHA collaborates with the Department of Agriculture and Water Resources, contributing to many aspects of plant biosecurity. This includes being an observer on the [National Biosecurity Committee](#) (NBC) and the [Environment and Invasives Committee](#) (EIC).

The NBC's terms of reference encompass environmental biosecurity. This is supported by a broad membership which is inclusive of the [Australian Government Department of the Environment and Energy](#). This is also the case with the EIC, which has a strong representation of national and state agriculture and environment departments, to ensure cross agency awareness and action on environmental biosecurity issues.

PHA highlights that beyond the government agencies there are several key organisations that have the focus, drive and capacity to work on environmental biosecurity. PHA, CSIRO, research and development corporations, universities and local governments are some examples.

PHA acknowledges recent advancements in the management of environmental biosecurity, in part brought about following the [Intergovernmental Agreement on Biosecurity Review](#), including:

- the appointment of the inaugural Chief Environmental Biosecurity Officer, Ian Thompson within the Department of Agriculture and Water Resources, with a strong policy link to Environment Department, and who PHA looks forward to working closely with
- the formation of stakeholder groups by NBC and EIC made up of industry and community representatives, which PHA applauds
- the establishment of environmental round tables, in which PHA has participated, that provide an opportunity for stakeholders such as industries and local communities to come together to discuss environmental biosecurity matters and share ideas.

2. Emergency responses to plant pests impacting the environment

PHA plays a central role in post-border emergency responses as custodian of the [Emergency Plant Pest Response Deed](#) (EPPRD). The EPPRD is a formal agreement between PHA, the Australian Government, all state and territory governments and plant industry [signatories](#) that covers the decision making, management and investment arrangements of responses to emergency plant pests.

As highlighted earlier, there is significant overlap of pests and diseases of production areas, the environment and areas of social amenity. It is therefore likely that responses to plant pests that primarily impact of the environment would be captured under the application of the EPPRD as Category 1 pests. These are pests which, if not eradicated, may result in major environmental damage to natural ecosystems, or potentially affect human health or cause a nuisance to humans, or cause significant damage to amenity flora.

For example, when myrtle rust was detected in NSW in 2010, the [response was managed through the EPPRD](#), until it was decided that it was not technically feasible to eradicate the pest, at which point PHA assumed oversight of the Transition to Management program.

3. Supporting preparedness for incursions and management of plant pests

PHA supports Australia's preparedness for biosecurity incidents through biosecurity training, running simulation exercises and biosecurity planning. This is a mechanism for stakeholders to actively determine pests of highest priority, analyse the risks they pose and to put in place practices and procedures that would rapidly detect and respond to an incursion. This work minimises the impact if a pest incursion occurs and/or reduces the chance of pests becoming established.

- Xylella simulation: planning is underway for a simulation exercise in November 2018 of the response to a detection of *Xylella fastidiosa*. The exercise will centre on the decision making and strategy implemented in response to the presence of both bacterium and its vector.
- Biosecurity Implementation Plan for the Acacia species: in 2018 as an Agriculture-funded project, PHA produced the first environmental biosecurity plan for Australian Acacia species which is currently going through the approval process.

Acacia is the largest genus of flowering plants in Australia and is vulnerable to exotic pests that could have significant environmental impact on the keystone species. The plan describes various activities that can be undertaken to improve Australia's ability to respond to the introduction of new Acacia pests. Through this pre-emptive planning process, stakeholders will be better placed to reduce the social and economic costs of pest incursions on Acacia growers (e.g. nurseries, plantation forests, cut flowers and bushfoods), the environment and the wider community.

4. Supporting surveillance for detection of exotic plant pests

Nationally coordinated surveillance programs, supported by an effective diagnostic network, are needed to maximise the effectiveness and efficiency of detection of exotic pests.

- The International Plant Sentinel Network (IPSN) exists to facilitate collaboration around the world, linking botanic gardens and arboreta, national plant protection organisations and plant scientists. The aim is to provide an early warning system of new and emerging plant pests and pathogens. PHA is involved in the development of a surveillance plan for Australia's major botanic gardens that are part of the IPSN. PHA's experience and expertise with AUSPestCheck as a platform for sharing pest surveillance data will be the foundation for this project.
- The National Forest Biosecurity Surveillance Strategy has been established by PHA to mitigate the risk of exotic forest pests establishing in Australia, and provide evidence to support claims of area freedom. Funding for the development of this strategy is from the Australian Government's Agricultural Competitiveness White Paper, the government's plan for stronger farmers and a stronger economy. To achieve the objectives, goals and outcomes outlined in the strategy, an implementation plan has been prepared to guide work over the next five years.

5. Plant biosecurity research and development

PHA invests in supporting and coordinating the planning and implementation of plant biosecurity research, development and extension. This ensures that plant biosecurity science is carried out in Australia to maximum benefit.

The Plant Biosecurity Research Initiative (PBRI) is a partnership between PHA, seven plant research and development corporations and Agriculture. PBRI was established in March 2017 to minimise damaging consequences of established and exotic pests, diseases and weeds that affect Australian plant industries, the community and the environment.

Several initiatives being invested in would have an impact on environmental biosecurity, including diagnostics for *Xylella fastidiosa* and next generation sequencing for post-entry quarantine. Research outputs would be equally applicable to agriculture and the environment.

Summary

- Environmental biosecurity is not entirely distinct from agricultural biosecurity, as there is a significant overlap in pests that affect plants grown in agriculture and those found in the environment or have social amenity in urban and other spaces.
- Beyond government agencies there are several key organisations that have the focus, drive and capacity to work on environmental biosecurity, including PHA.
- PHA has a wide remit with environmental biosecurity, including involvement in national biosecurity committees and initiatives, post-border responses to exotic plant pests, supporting preparedness for biosecurity incidents and coordinating surveillance programs to maximise the effectiveness and efficiency of detection of exotic pests.

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