



ACT BIOSECURITY STRATEGY 2016-2026



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FOREWORD

I am delighted to present the ACT Biosecurity Strategy 2016 – 2026.

The ACT Government is committed to protecting the economy, environment and community from the negative impacts of pests and diseases establishing or spreading in the ACT.

The *ACT Biosecurity Strategy 2016-2026* identifies the goals, objectives and supporting actions for addressing identified risks.

This strategy acknowledges that biosecurity is a shared responsibility and sets out recommended strategic directions for all stakeholders in the ACT's biosecurity to work towards over the next ten years. It provides the foundations for government, industry, non-government organisations and the community to work together and to share resources, knowledge and expertise to develop a strong and integrated biosecurity system across all land tenures.

I look forward to working with government agencies, industry, natural resource managers, land custodians or users, and community groups to strengthen the ACT's biosecurity through the delivery of this strategy.

Mick Gentleman MLA

Minister for Planning and Land Management



ACT BIOSECURITY STRATEGY

EXECUTIVE SUMMARY

The effective management of biosecurity risks is critical to minimising the impacts of weeds, pest animals, and plant and animal pests and diseases on our economy, environment and the community. The ACT Biosecurity Strategy highlights the importance of biosecurity for the ACT and identifies the goals, objectives and supporting actions for addressing biosecurity across the Territory.

This strategy acknowledges that biosecurity is a shared responsibility and sets out recommended strategic directions for all stakeholders in the ACT's biosecurity to work towards over the next ten years. It provides the foundations for governments, industry, non-government organisations and the community to work together and to share resources, knowledge and expertise to develop a strong and integrated biosecurity system for the ACT.

This strategy also recognises and responds to the fact that the ACT is surrounded by NSW and must work closely together to manage shared biosecurity threats. Hence its goals and outcomes are closely aligned with those of NSW.

This strategy identifies the key factors influencing increasing biosecurity risks and importantly, it recognises that zero biosecurity risk is unobtainable. The strategy identifies the pre-border, border and post-border elements of the biosecurity continuum¹ at both the national and ACT level and outlines actions for addressing biosecurity risks across the continuum to minimise the likelihood of biosecurity incidents and to mitigate their impacts.

VISION: BIOSECURITY – A SHARED RESPONSIBILITY

Our vision is that biosecurity is recognised as a shared responsibility of governments, industry and the community. We believe working toward this vision will enable the ACT to effectively meet the current and future challenges posed by biosecurity risks. The effective management of biosecurity risks, in close cooperation with NSW, will contribute to community wellbeing by supporting a strong local and regional economy and a healthy environment.

¹ The system that manages biosecurity risks off-shore, at the border and onshore.

WHAT IS BIOSECURITY?

“Biosecurity is the management of risks to the economy, the environment, and the community, of pests and diseases entering, emerging, establishing or spreading.” (Intergovernmental Agreement on Biosecurity²). Pests and diseases include weeds, pest animals, and pests and diseases of plants and animals.

BROAD GOALS FOR BIOSECURITY

The ACT’s broad goals for biosecurity are to manage pest and disease risks by:

- preventing their entry into the ACT;
- quickly finding, containing and eradicating any new entries; and
- effectively minimising the impacts of those pests and diseases that cannot be eradicated.



² <http://www.coag.gov.au/node/47>

POLICY PRINCIPLES

This strategy is underpinned by the principles listed below.

1. Biosecurity is a shared-responsibility between all governments, industry, natural resource managers, land custodians or users, and the community.
2. Effective biosecurity in the ACT is strengthened through close cooperation with NSW Biosecurity.
3. In practical terms, zero biosecurity risk is unattainable.
4. The biosecurity continuum is managed through a nationally integrated system that recognises and defines the roles and responsibilities of all sectors and sets out cooperative activities.
5. The pre-border, border and post-border elements of the biosecurity continuum are managed to minimise the likelihood of biosecurity incidents and mitigate their impacts.
6. 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.
7. Relevant parties contribute to the cost of biosecurity activities.
 - a. 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).
 - b. Governments contribute to the cost of risk management measures in proportion to the public good accruing from them.
8. Governments, industry and other relevant parties are involved in decision-making, according to their roles, responsibilities and contributions.
9. ACT's biosecurity arrangements comply with its national and international rights and obligations.

OUTCOMES

This strategy seeks to achieve the following outcomes:

- biosecurity is recognised as a shared responsibility by governments, industry and the community
- biosecurity protects the environment and community and contributes to sustainable economic growth
- biosecurity is underpinned by a responsive and consistent legislative framework, risk management framework, business systems and training.

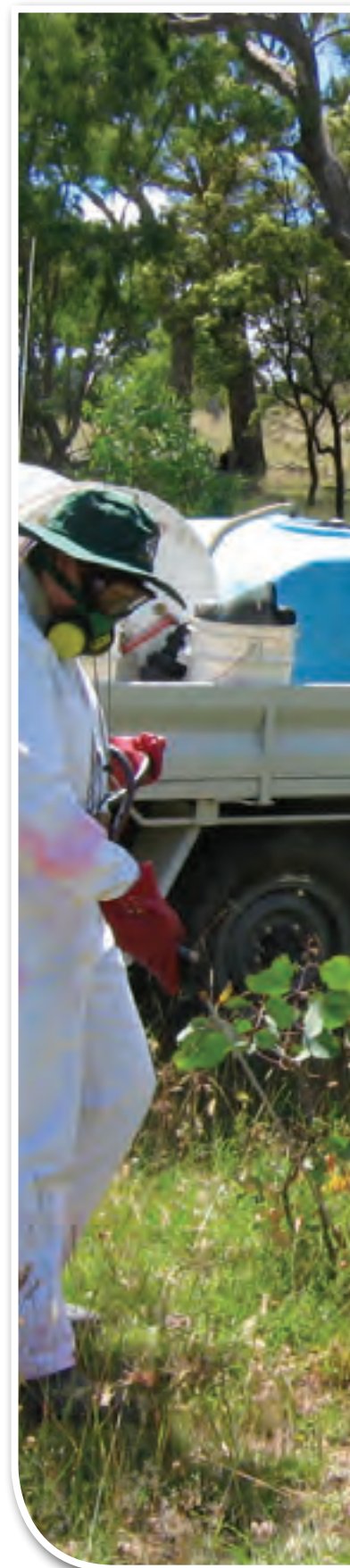
SCOPE OF THE STRATEGY

This strategy covers threats to primary industries, the environment, social amenity and human health in both terrestrial and aquatic environments caused by:

- weeds and pest animals
- animal pests and diseases, including zoonotic diseases (diseases of animals that may be transmitted to man under natural conditions – eg. brucellosis, rabies) plant pests and diseases.

This strategy does not address:

- chemical issues (including contamination or residue issues)
- food safety (except issues associated with zoonoses)
- genetically modified organisms
- animal welfare (except issues associated with animal health).



WHAT ARE WE PROTECTING

The total area of the ACT is 235,829 hectares of which 53% is conservation area, 21% is rural and the remainder is urban.

The ACT's natural assets include Namadgi National Park, which comprises 46% of the ACT and lies at the northern end of the Australian Alps National Parks, and Canberra Nature Park, which is interspersed with urban centres and gives the ACT its bush capital image.

Canberra's urban forest with over 620,000 exotic and native trees is a significant amenity asset to the city.

All rural land in the ACT under private control is held under some form of lease, licence or agistment agreement. Tenure for rural leases ranges from quarterly to 99 years. The majority of new leases require the lessee to prepare a Land Management Agreement. This agreement requires the lessee to identify the type and number of stock to be held on the lease. It also requires the lessee to identify pest animal and weed problems and to identify a control program and timeframe in which to undertake this program.

Grazing of sheep and cattle is the primary activity conducted on rural land in the ACT. There are 190 leases ranging in size from 1 hectare to 2,500 hectares. There are normally about 78,000 sheep, 12,000 cattle, 1,500 horses and 200,000 chickens held on these lands, however these numbers fluctuate in response to seasonal variations such as drought.

There are currently no feedlots, abattoirs or piggeries in the ACT and it is highly unlikely any will be established due to restrictions in the Territory Plan.

There are three poultry farms, the largest of which has approximately 200,000 laying hens. There is no other poultry farm for at least 50 kilometres.

The ACT government is responsible for the monitoring of the Canberra saleyards. Approximately 400 – 600 cattle pass through these saleyards each fortnight.

There are three significant zoological establishments in the ACT, one is the National Zoo and Aquarium (exotic and native animals) the other two are Tidbinbilla Nature Reserve and the Mulligans Flat Woodlands Sanctuary (native animals).

Forestry is the dominant plant industry in the ACT with 7,000 hectares of pine plantation under management. A small amount of grain and fodder cropping also occurs on rural leases.

The largest horticultural industry in the ACT is grape growing however there are small apple orchards, plantings of olives, truffle farms, a turf farm and a few market gardens. With its predominantly urban population and garden city ethos, gardening is popular and there is a thriving nursery industry.

Urban and suburban areas provide residential living for most of the ACT's population of 385,600³ and communal facilities such as sportsgrounds, public open spaces, shopping centres, roads, utilities and other infrastructure.

³ <http://www.abs.gov.au/ausstats/abs@.nsf/mf/3101.0>

OBJECTIVES OF THE STRATEGY

The objectives of the strategy are to:

- communicate a clear vision and build support for a strong and integrated biosecurity system for the ACT
- help meet the ACT's obligations under national biosecurity agreements
- provide the foundation for all stakeholders – government agencies, industry, natural resource managers, land custodians or users and community groups – to work together and help to make best use of the synergies across all groups
- identify a clear set of outcomes and actions that are relevant to the ACT and aligned with those of NSW⁴
- provide a framework for more detailed planning, monitoring and reporting of biosecurity programs.



⁴ <http://www.dpi.nsw.gov.au/biosecurity/biosecurity-strategy>

POLICY CONTEXT

This strategy is consistent with current ACT and Commonwealth biosecurity legislation and strategies, as well as national and cross-border agreements, in particular the Intergovernmental Agreement on Biosecurity, which was developed in response to the Beale review⁵ of Australia's quarantine and biosecurity arrangements.

Biosecurity in the ACT is currently governed by the following legislation and respective subordinate legislation and supporting strategies and plans:

- *Biosecurity Act 2015 (Cth)*
- *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*
- *Animal Diseases Act 2005 (ACT)*
- *Plant Diseases Act 2002 (ACT)*
- *Pest Plants and Animals Act 2005 (ACT)*
- *Nature Conservation Act 2014 (ACT)*
- *Emergencies Act 2004 (ACT)*
- *Fisheries Act 2000 (ACT)*
- ACT Pest Animal Management Strategy 2012 – 2022
- ACT Weeds Strategy 2009 – 2019
- ACT Biosecurity Emergency Plan

Commonwealth Legislation

The *Biosecurity Act 2015 (Cth)* (the Act) will commence on 16 June 2016. The Act was developed to underpin a more modern and responsive biosecurity system consistent with the findings of the Beale review.

The Beale review recommended a shift in focus from 'quarantine', which has a largely defensive connotation associated with isolation, to the broader concept of 'biosecurity' with an emphasis on managing risk rather than eliminating it, and a shift from a border focus to encompass fully pre-border and post-border measures.

The *Environment Protection and Biodiversity Conservation Act 1999 (Cth)* provides for the protection of the environment – especially matters of national environmental significance, and controls the international movement of plants and animals (wildlife), wildlife specimens and products made or derived from wildlife. Trading in wildlife can pose a serious threat to Australia's unique biodiversity and to plants and animals around the world.

Wildlife from other parts of the world can present a biosecurity risk if imported into Australia. That's why Australia strictly regulates the international movement of animals and plants, and animal and plant products.

⁵ <http://www.agriculture.gov.au/about/annualreport/annual-report-2008-09/annual-report-2008-09/special-report-review-australian-quarantine-biosecurity-bealereview>

ACT Legislation

The objectives of the *Animal Diseases Act 2005 (ACT)* and the *Plant Diseases Act 2002 (ACT)* are to protect the health and welfare of people and animals and to protect markets relating to animals and plants and associated products.

These Acts provide mechanisms for the detection, prevention and control of outbreaks of endemic and exotic animal and plant diseases in the ACT, and allow the Territory to assist in the prevention and control of outbreaks of endemic and exotic animal and plant diseases in other jurisdictions within Australia. The Acts outline procedures for imposing quarantines, prohibiting entry of material that could spread disease and for dealing with outbreak of diseases or pests. They provide for the declaration of a notifiable disease or pest.

The objectives of the *Pest Plants and Animals Act 2005 (ACT)* are to protect the ACT's land and aquatic resources from threats from pest plants and pest animals (including fish and invertebrates) and to promote a strategic approach to pest management. This Act provides for the declaration of various classes of pest plants and animals of concern, the preparation of pest plant and animal management plans in response to a declaration and establishes authority for the control of declared pest species. Land managers also have certain responsibilities under this Act.

The *Nature Conservation Act 2014 (ACT)* provides for the protection and management of native plants and animals, the identification of threatened species and ecological communities, management of national parks and reserves, and the conservation of the ACT's natural resources. It provides for the preparation of a Nature Conservation Strategy and action plans for threatened and migratory species, threatened ecological communities and key threatening processes. The Act's provisions include restrictions on importing and exporting plants or animals that may threaten biodiversity, penalties for the release of animals from captivity and for taking an invasive plant into a reserve, and for licensing the import and keeping of exotic wild animals. There is also provision for developing a Controlled Native Species Management Plan that can provide protection when native plants or animals are having an unacceptable impact on an environmental, social or economic asset.

The *Emergencies Act 2004 (ACT)* provides for the protection and preservation of life, property and the environment as well as effective emergency management. Emergency events include 'epidemic or animal disease' (eg, Foot and Mouth Disease, Equine Influenza). In a serious biosecurity emergency an emergency controller would be appointed who can control the movement of people, animals and vehicles in and around the emergency area and take control or possession of property, animals, substances or things in or near an emergency area.

The *Fisheries Act 2000 (ACT)* provides for the conservation of native fish species⁶ and their habitats, sustainable management of the ACT's fisheries, and provision of high quality and viable recreational fishing. This Act also regulates the taking, releasing, selling, exporting and importing of fish. The Act provides for the declaration of noxious fish species, however, these are routinely declared as pest animals under the *ACT Pest Plants and Animals Act 2005*.

The *Planning and Development Act 2007 (ACT)* provides for a Land Management Agreement (LMA) to be entered into between the Conservator and the lessee upon the granting of a rural lease. Its principal objective is to establish appropriate sustainable agricultural management practices and good farm biosecurity for the subject land while maintaining any ecological and cultural values present on the land, and protecting the environment from harm.

As at 2016 the ACT does not have stand-alone biosecurity legislation. This strategy identifies the need for a single contemporary, consolidated biosecurity act that supports the policy principles identified and is consistent with ACT's national and international obligations and responsibilities. Any legislative reforms will also need to be consistent with the ACT's human rights obligations under the *Human Rights Act 2004 (ACT)*.

⁶ Note that threatened native fish species are also protected under the ACT Nature Conservation Act 2014 (ACT).

ACT Strategies and Plans

The ACT Pest Animal Management Strategy 2012 – 2022 sets the framework and approach for managing the negative impacts of pest animals in the ACT and provides support to all stakeholders with responsibility for, or interest in, managing pest animals in the Territory.

The ACT Weeds Strategy 2009 – 2019 aims to reduce the impact of weeds on the environment, the economy, human health and amenity. It recognises that weed management is an integral component of sustainable management of natural resources and the environment, and that weed management requires an integrated, whole of community and government approach.

The ACT Emergency Plan and the ACT Biosecurity Emergency Sub-plan provide the Territory's emergency response arrangements for responding to biosecurity emergencies.

Intergovernmental Deeds and Agreements

The ACT supports a national approach to biosecurity and in January 2012 signed the national agreement on biosecurity between the Commonwealth, States and Territories – the Intergovernmental Agreement on Biosecurity (IGAB).

The IGAB strengthens the collaborative approach by the Commonwealth, States and Territories in managing biosecurity issues. It is underpinned by three national agreements: the Emergency Animal Disease Response Agreement (EADRA), the Emergency Plant Pest Response Deed (EPPRD) and the National Environmental Biosecurity Response Agreement (NEBRA). Each of these agreements includes a number of Commonwealth, State/ Territory and industry commitments, including that State and Territory level legislation must be reviewed to ensure consistency with the national approach.

Figure 1 shows the relationship between ACT and Commonwealth legislation, intergovernmental deeds and agreements and the strategy. In addition, the strategy is informed by and contributes to ACT strategic plans, such as the ACT Pest Animal Management Strategy and the ACT Weeds Strategy. Figure 1 shows key elements in the implementation of the strategy, which will underpin the biosecurity system in the ACT (see next section). Review and evaluation of implementation success will provide for continuous improvement of the strategy.



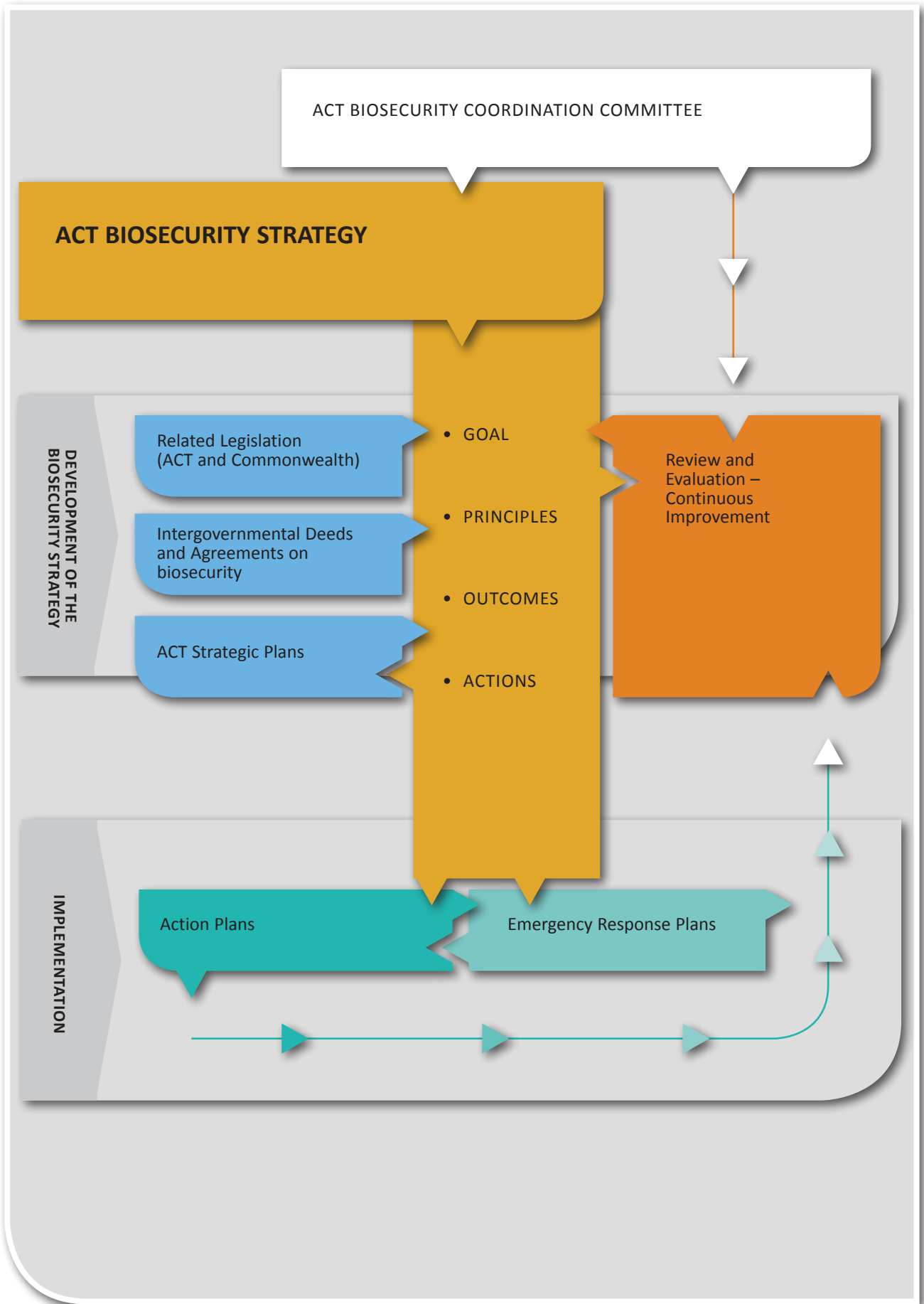


Figure 1: Context of the ACT Biosecurity Strategy

WHY BIOSECURITY IS IMPORTANT

Effective biosecurity contributes to the wellbeing and prosperity of the ACT. We need to manage biosecurity risks effectively to protect the economy, environment and community.

Economy

Australian products have preferred access to international markets because they are free of many of the pests and diseases found elsewhere. For example, an outbreak of a serious animal disease such as foot and mouth disease would result in the immediate closure of Australia's largest international markets for livestock and meat products. Terrestrial and aquatic weeds and introduced pest animal species (pigs, foxes, cats, rabbits, wild dogs) have significant impacts on the ACT in terms of the cost of management programs and loss of agricultural productivity.

Environment

Pests and diseases are among the biggest threats to the ACT's biodiversity and environment. Introduced pest animal species (eg, pigs, foxes, cats, rabbits, wild dogs, exotic fish) are primary causes of extinctions, contribute to the decline of many other native plants and animals, cause soil erosion and damage aquatic environments.

Environmental weeds are one of the most significant threats to biodiversity in the ACT. They displace native species, reduce habitat quality, modify vegetation structure and alter ecological functions. For example serrated tussock, a perennial, drought-resistant highly invasive tussock-forming grass, can develop into a monoculture within a few of years when left uncontrolled, completely excluding other vegetation. It can colonise both native and introduced pastures.

Exotic pests and diseases such as parasites of fish, dieback fungus (*Phytophthora cinnamomi*) and myrtle rust are an additional threat to biodiversity, with the potential to affect a wide range of native species.



Photo S Miller

Community

Biosecurity risks if not adequately managed can directly affect both human health and the community's ability to enjoy their surroundings.

Human Health

Some animal diseases can be transmitted from animals to people and cause disease and death. Examples include avian influenza, swine flu, Severe Acute Respiratory Syndrome (SARS), rabies, Hendra virus, anthrax, Menangle virus, Australian Bat Lyssavirus and bacterial organisms (*Salmonella*, *Escherichia coli*, *Listeria*, *Campylobacter*).

Public Amenity

Peoples' enjoyment of the outdoors can be adversely affected by some pests and diseases. For example European wasps, which have spread throughout the ACT since their first observed occurrence in the 1980s, prefer to nest around human habitation where they can scavenge food and sweet liquids. They can sting repeatedly and the stings are very painful. Large numbers of wasps can be attracted to picnics and barbecues and interfere with outdoor activities.

If red imported fire ants, which are currently limited to small areas of Queensland, were to become established in the ACT, they would seriously impact on our outdoor lifestyle. In the United States, people in fire ant- infested areas have changed their habits to avoid exposure to the ant. For example, people do not have picnics on the lawn, go barefoot or sit or lie on the ground or even stand for too long in one spot because they will be stung. The ACT Government contributes annually to two national programs to eradicate this pest under the NEBRA and a NEBRA-like agreement.

Destruction of a large European wasp nest – Youth Haven Farm Tuggeranong.



CASE STUDY RED IMPORTED FIRE ANT

The Red Imported Fire Ant (RIFA) originates from South America.

First detected in the Brisbane area in February 2001 the RIFA has so far been confined to a small area in south east Queensland.

The RIFA poses a serious social, economic and environmental threat.

Fire ants are very aggressive and are voracious feeders on small ground fauna, including insects, spiders, lizards, frogs, birds and mammals. Consequently, fire ants may displace or eliminate some of Australia's unique native species. The ants' habit of eating or damaging seeds can cause major changes in an ecosystem over time. Fire ants are also predatory, attacking insects and animals that pollinate native plants.

Newborn or hatching animals are particularly prone to attacks that can lead to death. Fire ants attack young animals and sting in and around the eyes, which can lead to blindness; and around the mouth and nose, which can lead to swelling and suffocation.

Fire ants sometimes feed on seeds, and can fatally damage some plants by tunnelling through roots and stems. They protect some species of pest insects that produce 'honeydew'. This downgrades the quality of produce and assists in the spread of some diseases.

Fire ants will also feed on important biological control agents and interfere with integrated pest management practices.

Fire ant mounds can destroy equipment such as irrigation systems and can also damage machinery during harvesting operations.

Fire ants also invade the food and water supplies of animals. The animals are unable to reach the food or water without being seriously stung, and this can lead to starvation and dehydration.

Stings from fire ants can cause a painful, burning itching sensation, which can last for up to an hour. Multiple stings give the sensation that the body is on fire.



Photos Queensland Government Department of Agriculture and Fisheries

There have been no detection's of RIFA in the ACT or surrounding NSW. 'High risk' enterprises in the ACT include garden centres, interstate removalists and their storage facilities, and fruit and vegetable wholesalers.

KEY COMPONENTS OF THE BIOSECURITY SYSTEM

Shared responsibility

This strategy recognises that biosecurity is a shared responsibility. Maintaining and improving the ACT's biosecurity status is the responsibility of stakeholders such as governments, industry, natural resource managers, land custodians or users, educational and research institutions and the community (Table 1). This strategy aims to strengthen the cooperation between all stakeholders in managing the ACT's biosecurity.

Table 1: Major Stakeholders Roles and Responsibilities

Stakeholders	Biosecurity Management objectives	Responsibilities
ACT Government Government veterinarians, Chief Plant Protection Officer, pest plant and animal managers – Parks and Conservation Service (PCS) and City Services, Environment and Planning Directorate, Emergency Services Agency, ACT Policing and ACT Health	Protect agricultural industries, biodiversity and social amenity values from incursions of pests and diseases in rural and urban areas of the ACT.	<p>Undertake biosecurity surveillance, eradication, containment and management programs in accordance with statutory requirements and intergovernmental agreements that address potential and actual pest and disease threats to rural industry, the natural environment and public amenities.</p> <p>Detect and report notifiable and prohibited pest plants and animal occurrences.</p> <p>Maintain a competent biosecurity emergency response capability.</p> <p>Provide leadership and coordination of biosecurity programs across different land uses and tenure.</p> <p>Deliver nationally consistent biosecurity outcomes through cooperation with regional and national forums and networks.</p> <p>Contribute to biosecurity research and education programs.</p> <p>Promote wider public understanding and awareness through community engagement and provision of information on pest and disease impacts and management issues.</p> <p>Undertake, monitor and evaluate government-funded pest and disease management programs.</p>
Regulators – Licensing and Compliance, Transport Canberra and City Services Directorate (TCCSD)	License plant and animal imports and exports; inspect premises and facilities for licence compliance and prohibited pest plants and animal species.	<p>Implement regulatory requirements and support programs that encourage responsible importing, exporting and of keeping of plants and animals with the potential to be a threat to biosecurity.</p> <p>Maintain a register of importers and keepers of pest plants and animals.</p>

Stakeholders	Biosecurity Management objectives	Responsibilities
Legislation and policy makers – Environment and Planning Directorate (EPD)	Develop and amend biosecurity related legislation and policies that guide emergency preparedness, response, management and regulation.	<p>Provide legislative and policy frameworks that protect the biosecurity of the ACT and surrounding region.</p> <p>Consider stakeholder and community interests in policy development.</p>
ACT Biosecurity Coordination Committee	Minimise the risk of entry, establishment or spread of exotic and endemic pests and diseases that have the potential to cause significant harm to people, animals, plants and the ACT's environment.	<p>Identify potential, emerging and established biosecurity threats and risk processes for the ACT.</p> <p>Advise on ranking of priorities for biosecurity action on a risk management basis.</p> <p>Advise on risks and best practice management for priority species and assets.</p> <p>Provide advice and leadership for coordinated surveillance, management and monitoring programs across the biosecurity continuum.</p> <p>Develop and implement an annual action plan.</p> <p>Promote communication between relevant stakeholders and provide advice and leadership to achieve strategic, coordinated biosecurity management across conservation, rural and urban lands in the ACT.</p> <p>Advise on training requirements and priorities to ensure that ACT Government officers have core competencies for managing a biosecurity emergency and delivering effective operational outcomes.</p> <p>Liaise and cooperate with NSW and Commonwealth stakeholders (and other jurisdictions as required) to deliver whole-of-ACT and cross-border biosecurity management outcomes.</p> <p>Ensure biosecurity management initiatives are consistent with ACT policies and legislation, and with national policies and legislation to which the ACT is subordinate, or is a member or signatory.</p> <p>Deliver the strategic actions agreed in the ACT Biosecurity Strategy.</p>
Commissioner for Sustainability and the Environment	Monitor the impact and management of pest plants and animals on biodiversity in the ACT.	Provide recommendations to the ACT Government regarding pest plant and animal management through State of Environment reports, referred investigations and complaint resolution processes.

Stakeholders	Biosecurity Management objectives	Responsibilities
Australian Government – Managers of National Lands	Manage pest plant and animals to maintain public amenities and safety; manage in accordance with specific land uses.	<p>Manage in accordance with Commonwealth legislation.</p> <p>Detect and report notifiable and prohibited pest plant and animal occurrences.</p> <p>Collaborate with other ACT land managers on coordinated pest plant and animal management programs to enhance outcomes on adjacent land management areas and maximise efficiency and benefits.</p> <p>Provide input to Australian and ACT Government legislation, policy, regulation and management frameworks.</p>
NSW Government agencies	Effectively manage biosecurity pests and diseases in NSW including regions adjacent to the ACT border.	Collaborate with ACT biosecurity stakeholders to address management issues and to develop and implement coordinated cross-border biosecurity emergency response and management programs to maximise efficiency and mutual benefits.
ACT rural landholders	Implement sound farm biosecurity and biodiversity management practices to protect the property from the entry and spread of pests and diseases ⁶ .	<p>Recognise the nature and causes of pest and disease impacts on agriculture and biodiversity.</p> <p>Detect and report notifiable and prohibited pest and disease occurrences.</p> <p>Manage pest and disease problems using appropriate techniques and practices.</p> <p>Cooperate with adjacent land managers to deliver positive pest and disease management outcomes.</p> <p>Provide input to government legislation, policy, regulation and management frameworks.</p> <p>Protect threatened species and communities through implementation of Land Management Agreements.</p>
Utilities	Assist in preventing the spread of pests and diseases	<p>Comply with sound farm biosecurity practices.</p> <p>Notify farm or land manager before entering a rural property or nature reserve.</p> <p>Wash down vehicles prior to entering a property and remain on formed roads.</p>
ACT Aboriginal community	Prevent damage to native plants, animals and ecosystems, and cultural assets of significance to the Aboriginal community.	<p>Recognise the nature and causes of pest plant and animal impacts on significant native plants, animals and ecosystems, and cultural assets.</p> <p>Advise the ACT Government and other land managers of impacts on significant assets and work collaboratively to reduce, remove or restore damage.</p> <p>Provide input into government legislation, policy, regulation and management frameworks.</p>

⁷ <http://www.farmbiosecurity.com.au>

Stakeholders	Biosecurity Management objectives	Responsibilities
Plant and animal biosecurity researchers	Improve understanding of the biology and ecology of biosecurity pests and diseases and research on management practices.	<p>Support research to address gaps in knowledge on biosecurity pests and diseases and management techniques and practices, in collaboration with stakeholders.</p> <p>Ensure research outcomes are delivered to relevant stakeholders.</p>
Horticulturists and plant nurseries. Animal traders, breeders and keepers	Avoid importing, exporting, keeping, breeding and sale of potential pest plants and animals for commercial purposes and/or personal interest.	<p>Refrain from the import or propagation/breeding and cultivation/keeping of pest plants and animals declared as prohibited species in the ACT</p> <p>Obtain a licence and registration, when required, to import, export, keep, sell and take plant and animal species, or release them from captivity.</p> <p>Maintain records in accordance with licence requirements.</p> <p>Minimise the risk of escape of species with pest plant or animal potential.</p> <p>Report escapes in accordance with legislative requirements.</p> <p>Promote awareness and understanding of pest plant and animal management issues by industry, trade, keeper and breeder groups.</p> <p>Provide input to government legislation, policy, regulation and management frameworks.</p>
Community members and groups	<p>Voluntary leadership and participation in the management of private and public lands including conservation (eg, National Parks Association; Conservation Council), Park Care and catchment groups.</p> <p>Ensuring that threats to conservation are appropriately managed.</p>	<p>Provide leadership and coordination for local group development and action on pest animal problems.</p> <p>Cooperate with other land managers and rural landholders to achieve local and regional pest plant and animal management outcomes.</p> <p>Promote awareness and understanding of pest plant and animal issues amongst community groups.</p> <p>Represent members' interests at pest plant and animal management networks and forums.</p> <p>Provide input to government legislation, policy, regulation and management frameworks.</p>
Travellers to the ACT	Prevent the introduction of biosecurity pests and diseases into the ACT.	Comply with any quarantine requirements when entering the ACT.

The ACT Government works with the Australian Government and other state and territory governments to develop and implement intergovernmental deeds and agreements and other national biosecurity initiatives (Figure 2).

Coordination is achieved through the National Biosecurity Committee and its sectoral committees under the guidance of the Agriculture Ministers’ Forum and Agriculture Senior Officials Committee. Under emergency response deeds and agreements for nationally significant pests and diseases (generally those that affect or have the potential to affect more than one jurisdiction), a National Management Group convenes to address each new pest or disease incursion, with technical advice provided by a supporting Consultative Committee.

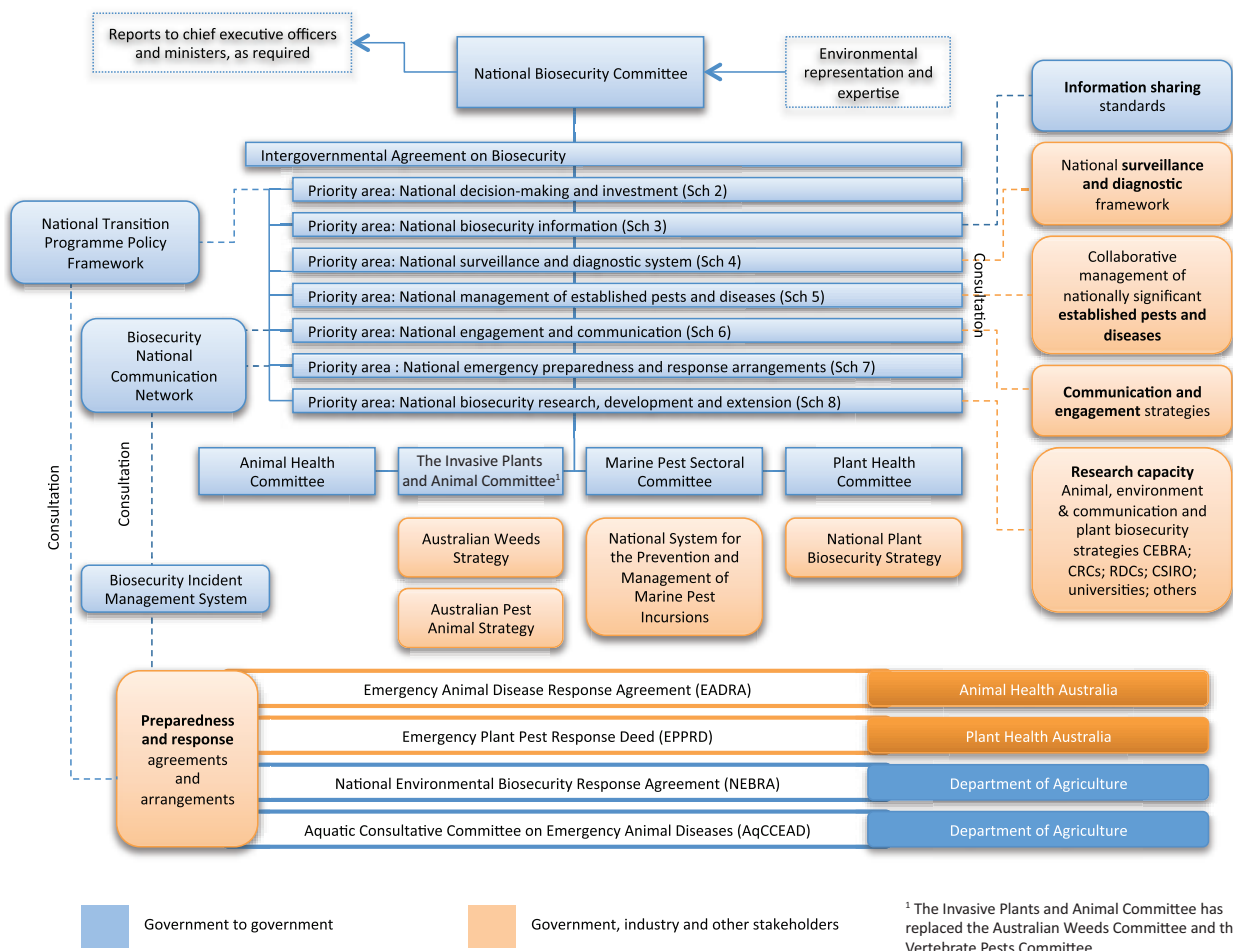


Figure 2: Arrangements supporting Australia’s biosecurity system in 2015.

The ACT is not an island

The ACT is unique in its location. Unlike the other Australian states and the Northern Territory, the ACT is surrounded by another jurisdiction (NSW) and has no coastline. These differences must be taken into account when considering biosecurity risk management. There are no natural barriers to incursions and given the potential for cross-border incursions to occur, the ACT must work cooperatively and collaboratively with NSW to identify and address biosecurity risks.

Current cross-border arrangements with NSW that help to reduce the ACT's biosecurity risk include close operational cooperation with regional Local Land Services and a Memorandum of Understanding on Agricultural and Animal Related Emergencies.

The ACT would benefit from greater collaboration with NSW on joint staff training programs, participation in NSW emergency responses and access to NSW biosecurity information systems and beekeeper registration.

Appropriate Level of Protection

This strategy recognises that zero biosecurity risk is unattainable and supports the concept of an Appropriate Level of Protection as determined by the Australian Government in accordance with the World Trade Organisation's Sanitary and Phytosanitary Agreement under the provisions of the IGAB.

The Appropriate Level of Protection for Australia is a high level of sanitary and phytosanitary protection aimed at reducing biosecurity risks to a very low level, but not zero.

Biosecurity continuum

The biosecurity continuum refers to the range of locations where biosecurity risks may arise – pre-border, at the border and post-border – and the activities undertaken across these locations. An integrated biosecurity system involves risk assessment and monitoring, surveillance and response across all three elements of the continuum (ie, pre-border, at the border and post-border). Each member of the community has a role to play across the biosecurity continuum to prevent, prepare for, detect and mitigate biosecurity risks, and respond to, manage and recover from biosecurity incidents should they occur. However, responsibility for primary oversight of pre-border and border biosecurity arrangements lies with the Australian Government, and primary oversight of post-border biosecurity arrangements lies with state and territory governments.

Risk-management

Decision-making and investment decisions must be based on a sound risk-management framework that considers the economic, environmental and community benefits and costs of each option. This is particularly relevant to a small jurisdiction with limited resources such as the ACT.

The ACT therefore needs to develop a biosecurity risk management system that will identify and prioritise known threats and help prepare for the unknown.

Prioritising biosecurity investments

The ACT Government has many calls on its budget. It is important that investment in biosecurity is directed to where return on investment is highest. Figure 3 illustrates the return on investment for different phases of a generalised invasion curve and appropriate actions for management. It highlights that a high return on investment is achieved through preventing entry of exotic and new threats, followed by early intervention and eradication if they do appear as opposed to investing in the management of widely established invasive species. This principle can generally be applied across the board to all pests and diseases. However, there are exceptions, for example, the use of biological control agents to manage widely established pest species such as rabbits can provide a high return on investment. Also, focusing resources on surveillance activities is not always cost effective if efforts are poorly targeted and no detections are made.

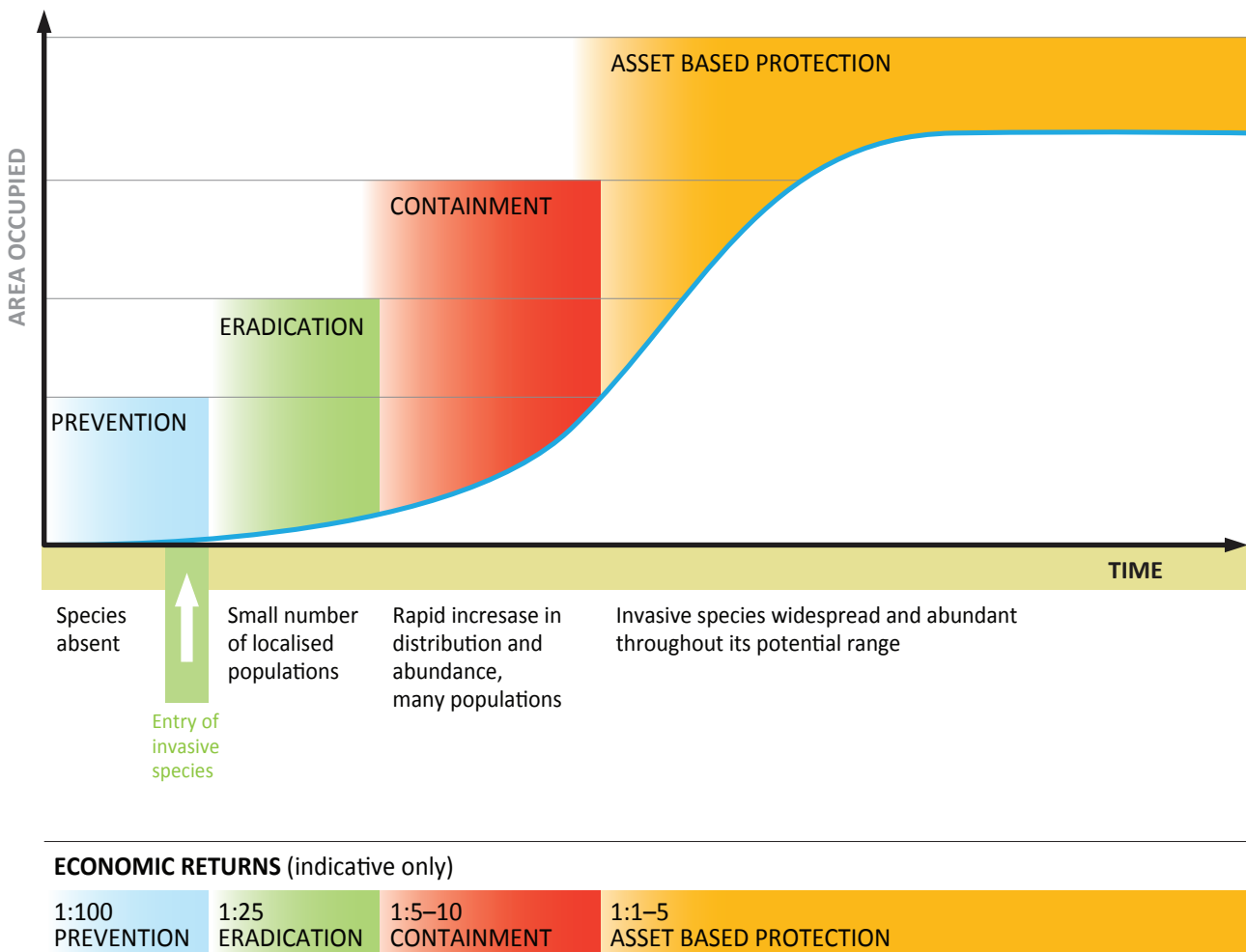


Figure 3: Appropriate management actions and economic returns at different phases of a generalised invasion curve (sourced from Biosecurity Victoria, Department of Primary Industries, Victoria).



Photo L Padgham

To assist in prioritising where to invest scarce resources and what approach to take, the Territory will use the NSW Department of Primary Industries' Biosecurity Threat Decision Tree as shown in Appendix A. This model, which is based on economic principles, ensures that biosecurity investment decisions are made as objectively as possible. It determines whether a role for government exists in relation to a specific problem by using 'market' failure tests. It guides the user to identify one of several government activities or programs that have the potential to address the problem in question and where appropriate the most appropriate cost recovery mechanism.

Science-based decision-making

Risk assessments, decisions and investments must be underpinned by robust scientific evidence. Access to leading-edge, rapid diagnostics and scientific knowledge to guide treatment and control strategies is important, particularly during an emergency. Being a small jurisdiction, the ACT does not have the capacity to maintain its own diagnostic and research facilities and must rely on interstate public sector and private cooperation. Better linkages will need to be formed with NSW and Victorian facilities, the CSIRO, cooperative research centres, universities and the health sector to support rapid decision making in relation to ACT emergency incursions.

Appropriate support mechanisms

An effective biosecurity system must be supported by modern legislation, technology, funding and business systems which support quick response and seamless cross-border cooperation in the event of a biosecurity emergency.

Continual improvement

To ensure continual improvement in biosecurity, this strategy and its supporting documents will be reviewed and evaluated periodically in consultation with key stakeholders, and consequential changes made as required.

GOVERNANCE

Strategic leadership and coordination is provided by the ACT Biosecurity Coordination Committee (BCC) which oversees the development and implementation of effective and integrated biosecurity legislation, policy and management programs. An ACT Weeds Advisory Group and a Pest Animal Management Group are subordinate groups that support the BCC.



Photo Mt. Majura Vineyard

MANAGING RISK – RESPONDING TO INCREASING CHALLENGES

Pests and diseases can inflict damage to our crops, livestock and farm profits, to our unique environment, urban amenity and occasionally on our human health.

To date Australia's geographic isolation, a history of strong quarantine measures and world class science and research capabilities have spared us from some of the serious impacts of exotic pests and diseases that circulate around the world. However, we are becoming increasingly vulnerable to their entry with increasing global trade and interconnectedness, and Australia is facing a greater challenge in protecting itself against biosecurity threats.

A changing climate, increases in the movement of plants, animals and people, together with declining levels of expertise and resources in the biosecurity system, is placing pressure on Australia's future ability to protect itself from exotic pest and disease threats, from emerging threats closer to home and to some established pests and diseases that represent an ongoing challenge.

According to the CSIRO the threat of invasive species to biodiversity is second only to habitat destruction. The CSIRO⁸ (2014) estimates that alien invertebrate and vertebrate pest animals and weeds cost Australia at least \$7 billion a year. In 2014/15 the ACT spent \$2.6 million on environmental weeds and vertebrate pests. It is estimated that 25% of costs to Australian consumers associated with food products are due to invasive pests and diseases. Weeds alone cost Australia approximately \$4 billion in control measures and loss of production each year.

Over the past three decades 70% of emerging diseases in people have originated in animals. Hendra virus, Coronaviruses like SARS and avian influenza are just a few diseases that fall within this category (CSIRO, 2013)⁹.

There are a number of key factors influencing Australia's and the Territory's increasing biosecurity risk exposure. These are described below.

Climate change

Modelling undertaken on behalf of the ACT and NSW Governments¹⁰ suggests that the effects of climate change in the ACT are likely to include:

- warmer average temperatures leading to more severe drought and extreme bushfire weather
- less overall rainfall with a change in the seasonal distribution and more frequent intense storm events.

Changes in climate will mean that for some species to survive they will need to either relocate or adapt. For other species the new climatic conditions will provide an opportunity for them to establish or to extend their range. A good example of this in the ACT is Madagascar Fireweed.



⁸ Commonwealth Scientific and Industrial Research Organisation (CSIRO), Biosecurity <http://www.csiro.au/en/Research/BF>

⁹ <http://www.csiro.au/en/Research/BF>

¹⁰ See ACT Planning Strategy http://www.planning.act.gov.au/tools_resources/legislation_plans_registers/plans/planning_strategy

Pests will generally extend southwards and to higher altitudes as a result of warming trends. Likely impacts of climate change are listed below:

- an increase in the risk of invasion by alien organisms new to Australia
- habitats will adapt and change in response to the changes in climatic conditions
- habitats affected by extreme climatic events may leave empty niches which pest animals and weeds colonise
- existing native or exotic species that were not previously pest species ('sleeper' species) could thrive under the changing conditions and become pest species
- the demise of native or exotic species may provide the opportunity for other 'sleeper' pest species to establish or increase their range due the lack of competition or natural control measures such as predation or grazing
- extreme storm events could lead to the escape of exotic animals which could then establish wild populations that have the potential to become pests
- increases in flood events and flood mitigation measures could also increase the rate of spread of aquatic pest plants and animals
- increases in fire and drought will favour the establishment of some weeds.

In responding to climate change challenges, the ACT has developed a Climate Change Adaptation Strategy. This adaptation strategy will help identify key impacts and risks for the agriculture sector, allowing it to better plan for the future and enabling regional food security.

Globalisation

Globalisation is integrating the world economy and increasing the volume and range of products traded internationally.

Increases in tourism and a greater demand for international goods have contributed to a growth in passenger and cargo movements, all of which increase the risk of exotic pest and disease incursions despite the best efforts of border security. Australia's biosecurity is particularly vulnerable to the influx of goods from the Asian sub-continent as these countries host many new and emerging diseases but may lack the resources to manage biosecurity challenges. The risk is increased where poor socio-economic conditions exist in the country of origin.

Modern communications, in particular the internet, are increasing the trade in exotic plant and animal species for pets and commercial use and this increases the risk to our biosecurity. There has also been an increase in global movements of genetic material as farmers endeavour to increase productivity, which places particular demands on pre and post-border biosecurity services.

Population growth

Population spread into new habitats, the urbanisation of rural regions, and increasingly intensive agriculture all complicate the ability to contain a pest or disease incursion and the risk of zoonoses.

New diseases and pests

New pests and diseases are emerging from a range of sources such as trade including an increase in internet trading, changing environmental conditions driven by climate trends, ornamental plants escaping from home gardens and increased visitation to natural areas.

CASE STUDY: MADAGASCAN FIREWEED (SENECIO MADAGASCARIENSIS)

Madagascan Fireweed is a Weed of National Significance and a Prohibited Pest Plant in the ACT. It is poisonous to horses and cattle and has the potential to invade native grasslands and quickly degrade agricultural pasture. Control costs can be high.

The plant forms a persistent seed bank if not controlled before it flowers. It can also rapidly take over heavily grazed and neglected pastures and roadsides, competing strongly with existing plants. It seeds prolifically and grows to maturity quickly.

Madagascan Fireweed reproduces almost exclusively by seed. It can alter its germination response, adapting its growing and flowering behaviours to suit changing environmental conditions. The weed is commonly found in coastal areas of NSW and is an occasional occurrence in the surrounding regions.

The first incursion of Madagascan Fireweed occurred in the ACT in 2011. Since that time small infestations have been detected and have quickly been brought under control. However, in July 2014 significant infestations of Madagascan Fireweed were discovered in a number of ACT suburbs after it was introduced in couch turf and landscape materials sourced from interstate. The ACT Government responded quickly, activating its Biosecurity Emergency Plan.

A public awareness campaign was initiated to alert the public of the risks associated with the weed, to assist them in the identification of the weed and to inform them of what they should do if they see this weed. ACT Government staff responded to reported sightings, working to control the incursion as quickly as possible and to remove the plant before it flowered and its seeds spread. A monitoring program was then put in place to ensure any further outbreaks are controlled quickly.



Financial constraints

Governments need to allocate scarce revenue among many competing demands so it is essential that costs of ensuring biosecurity are shared fairly across all risk creators and beneficiaries, and government funding is directed to the areas of greatest risk and greatest public benefit. Limited resources mean a limited capacity to undertake pest management programs or regulatory activities such as regular inspection of plant nurseries, pet shops, imported soil, fodder and turf, and markets and fetes.

Lack of knowledge

There is likely to be an emerging shortage of highly qualified plant and animal pest and disease professionals – partly associated with ‘baby boomer’ retirements and partly the result of competing career alternatives.

There are often gaps in knowledge and understanding relating to pest species due to lack of existing information, related research or effective extension of research outcomes. This is particularly relevant to new and emerging pests.

Emerging risks

Changing agricultural and socio-economic conditions and the growth of Canberra will present new biosecurity risks in the future. The Canberra Airport will commence catering for international flights in 2016 and the Master Plan for the airport includes an intention to use its 24-hour status to become Sydney’s freight airport. This will provide a direct pathway for exotic overseas pests and diseases to enter into the ACT and require establishment of stronger quarantine border controls. The return of defence aircraft from overseas direct to the Fairbairn Air Force facility is another potential entry point for new pests and diseases that threaten the Territory’s biosecurity. The ACT Government will need to work closely with the Australian Government to tighten border biosecurity through these entry points.

Likely future peri-urban development, including growth in smaller scale farming and lifestyle enterprises in rural communities, the growing popularity of urban agriculture ventures in an around the ACT and a culture of non-traditional crops and livestock, will increase the range of biosecurity pest and disease threats which may have to be responded to.

Meeting community expectations for greater variety and availability of food, garden and amenity plants and for new and exotic animals also creates new pathways for the introduction of pests and diseases to the primary industries and environmental sectors.

The growth in pesticide resistance amongst existing weed and pest species is also of concern. Poor practices in the use of chemicals and antibiotics used to treat pests and diseases can lead to resistance to treatments and make weed species more difficult to control.

The ACT Biosecurity Strategy will apply the precautionary principle to emerging risks and assume a steadily increasing biosecurity threat from external sources such as trade and the movement of goods and services entering the ACT.

CASE STUDY: CASE STUDY – RED-EARED SLIDER TURTLE

The Red-eared Slider Turtle is an American species which cannot be kept legally in Australia as it has become an invasive pest animal in several states. It is important to prevent this species spreading through the Murray-Darling Basin. Keeping of other related species is also illegal. To date two Red-eared Slider Turtles have been found in the ACT, one was an escaped pet and the other was found living in a dam near the Murrumbidgee River.

Some aquarium plants and animals, exotic reptiles and ferrets are all animals that have a proven record of establishing in the wild near the ACT.



BUILDING BIOSECURITY CAPABILITY AND CAPACITY

The ACT is a small jurisdiction which demands innovative solutions for meeting our biosecurity responsibilities. These will include:

- prioritising biosecurity resources and investment to areas of greatest biosecurity risk and impact
- developing a contemporary legislative framework and reducing the regulatory burden and compliance costs facing ACT residents when they manage pests and diseases, while improving regulatory capacity
- taking a more strategic approach to the science that underpins biosecurity and the adoption of technology through stronger partnerships, particularly with our universities and the CSIRO, better linkages with the national industry groups based in Canberra and better extension with local industries
- increasing the awareness of biosecurity in government, industry and the community to get more people involved in managing biosecurity risks and help them understand the role they play
- building the capability of Canberrans to undertake biosecurity activities and deliver biosecurity services in partnership with Government
- forming stronger linkages and increasing cooperation and coordination with NSW and other jurisdictions to reduce the risk of incursions and improve our capacity to address them
- identifying suitable funding sources, including cost sharing where appropriate, to support biosecurity activity

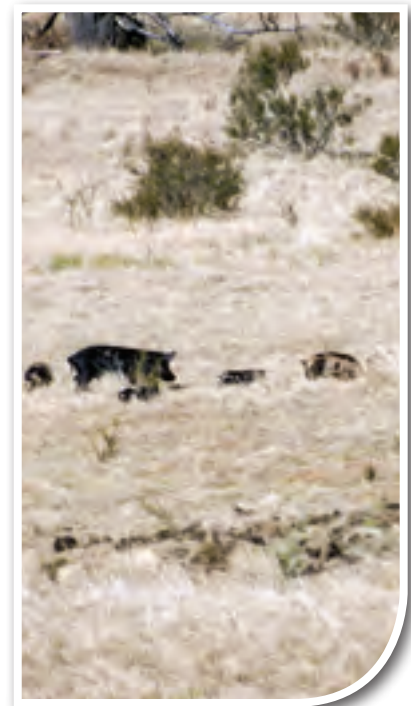


Photo L Padgham

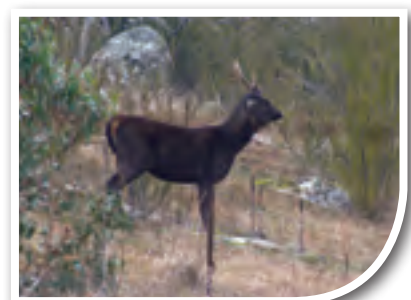


Photo Michael Machonachie

IMPLEMENTATION, REPORTING, REVIEW AND EVALUATION

The Biosecurity Coordination Committee (BCC) oversees the Territory's biosecurity governance arrangements and is responsible for implementation, reporting and review of this strategy. The BCC will report on the implementation of the strategy as part of the ACT Government's Annual Report with additional independent reporting by the Commissioner for Sustainability and the Environment every four years.

Interim reviews of the strategy will be conducted annually with a formal review and evaluation after five years. A review will include as a minimum an evaluation of the implementation of the actions based on performance indicators. The strategy will also be reviewed as required to ensure that it is up-to-date and reflects current legislation, scientific knowledge, technical expertise and management practices.



CASE STUDY: EQUINE INFLUENZA NATIONAL STANDSTILL

Early on Saturday 25 August 2007 the ACT was notified that horses suspected of having a highly virulent exotic disease called Equine Influenza (EI) had been detected in an equestrian centre in Sydney. By that afternoon a national standstill was declared that prevented the ACT's 2,500 horses from being moved until further notice. A Local Disease Crisis Centre was established to manage the ACT response and all horses in horse studs, riding schools, farms and government horse holding paddocks were quarantined. Border controls and road blocks were put in place on that evening to prevent the entry into or exit of horses from the ACT.

On 21 September 2007 NSW introduced a zoning system to govern horse movements as part of the Equine Influenza Protection Plan, which also included the ACT. The aim of the zoning system was to keep the area of infection within containment lines, whilst enabling movement under strict movement guidelines applicable to each zone.

These restrictions remained in place until the 27 September 2007 when the ACT was classified as a green zone which allowed a relaxation of the movement of equine species within this zone. This allowed riders and industry reliant on public riding to again undertake these activities on their property without a permit, and outside of their property with a permit.

On 28 February 2008, the NSW Government declared that EI had been eradicated, lifting most of the remaining movement restrictions on horses.

The outbreak had a significant financial and social impact on the ACT horse industry and severely strained the resources of responding ACT Government agencies.

The success of the national EI response is reflected in the fact that Australia is one of only a few countries that have eradicated EI.

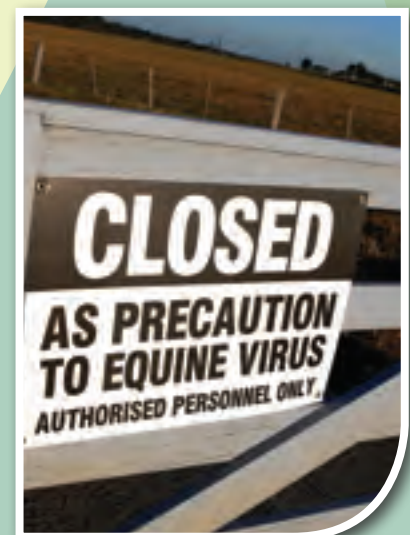


Photo SMH

OUTCOMES AND ACTIONS FOR IMPLEMENTING THE ACT BIOSECURITY STRATEGY

OUTCOME 1. Biosecurity is recognised as a shared responsibility by Government, industry and the community			
Actions	Performance Indicator/s	Responsibility	Timeframe Short-term (up to 2 yrs) Medium-term (2-5 yrs) Long-term (> 5 yrs)
1.1 The ACT Biosecurity Coordination Committee (BCC) oversees the ACT's biosecurity arrangements to minimise the risk of entry, establishment or spread of pests and diseases that have the potential to cause significant harm to people, animals, plants and the ACT's unique environment	<p>BCC Terms of Reference reviewed annually to ensure that activities remain targeted at the highest biosecurity risks and greatest public benefit</p> <p>BCC membership is reviewed annually and consists of representatives from across the ACT Government with the relevant skills and knowledge to make a positive contribution to the ACT's biosecurity</p>	ACT Government (BCC)	Annual
1.2 The BCC will form collaborative working relationships with its counterparts in other jurisdictions (states, territory and Commonwealth) and relevant industries to facilitate the timely exchange of information. This will ensure that the ACT is informed and involved at all levels of biosecurity management and related decision-making processes	<p>Working relationships have been formed and, where necessary, arrangements such as memoranda of understanding (MOU) have been agreed to</p> <p>(eg ACT and NSW Memorandum of Understanding for Regional Collaboration)</p>	<p>ACT Government (EPD & TCSCD)</p> <p>Other jurisdictions including NSW and Commonwealth Government</p> <p>Industry representatives.</p>	Ongoing
1.3 ACT representation at relevant regional and national conferences, meetings, workshops, activities and on committees	<p>ACT represented on regional and national sectoral committees and at conference, meetings and workshops (eg the National Biosecurity Committee and its subordinate groups)</p> <p>ACT representatives report on regional and national engagement to BCC</p>	ACT Government (EPD)	Annual
1.4 Provide support for and work collaboratively with community groups (eg. rural landholders, Friends of organisations, Landcare, Conservation Volunteers, Equestrians) to deliver improved biosecurity outcomes for the ACT.	<p>Project applications assessed and, where appropriate, support is provided for biosecurity- related projects with a public benefit component and other relevant strategies such as the climate change adaptation strategy</p> <p>Community groups engaged in the management of biosecurity in the ACT including integration of community activities into annual operations plans and reporting</p>	ACT Government (EPD)	Ongoing

OUTCOME 1. Biosecurity is recognised as a shared responsibility by Government, industry and the community

Actions	Performance Indicator/s	Responsibility	Timeframe Short-term (up to 2 yrs) Medium-term (2-5 yrs) Long-term (> 5 yrs)
1.5 Explore new partnership options with key ACT stakeholders	<p>New partnerships are formed and engaged in the management of biosecurity in the ACT</p> <p>Relevant ACT stakeholders invited to participate in BCC (or subordinate group meetings) where appropriate to specific biosecurity issues</p>	<p>ACT Government (EPD)</p> <p>See key ACT stakeholders in Table 1 of the strategy.</p>	Ongoing
1.6 Promote public awareness of priority biosecurity issues in the ACT through appropriate communication channels	<p>Web-based information, signage, media releases, brochures and leaflets are available at strategic locations as well as targeted mail-outs, information sessions, mobile displays, television and radio</p> <p>Communication activities reported through the annual review process for subordinate strategies (weeds and pest animals) and other relevant strategies such as the climate change adaptation strategy, or to the BCC</p> <p>Public awareness has increased. To be measured through survey and through an increase in community participation</p> <p>Increases in compliance and reporting</p>	ACT Government (BCC)	Short-term
1.7 Industry-wide biosecurity plans relevant to the ACT are identified and their implementation by industry in the ACT is supported	<p>Biosecurity arrangements discussed with ACT peak bodies and industry participants.</p> <p>Assistance provided by ACT Government in implementation of industry-wide biosecurity plans where appropriate</p>	ACT Government (EPD) & industry representatives	Medium-term
1.8 Ensure Land Management Agreements (LMA) for rural leases include the identification and management of pests and diseases and outline the landholder responsibilities in terms of biosecurity	<p>LMAs address pest and disease management and outline biosecurity responsibilities.</p> <p>Review of the LMA (occurs every 5 years) to determine compliance</p>	EPD and rural landholders	Short-term (ongoing)
1.9 Form collaborative partnerships with education and research institutions to ensure the management of biosecurity issues is based on sound scientific evidence and research	Management of biosecurity issues responds to and reflects scientific evidence and research	BCC Other state, Australian government and tertiary research agencies	Medium-term (ongoing)

OUTCOME 2: Biosecurity protects the environment and community and contributes to sustainable economic growth

Actions	Performance Indicator/s	Responsibility	Timeframe Short-term (up to 2 yrs) Medium-term (2-5 yrs) Long-term (> 5 yrs)
2.1 Provide skilled licensing and compliance officers to monitor and enforce biosecurity matters.	<p>Increase in the number of trained officers and resources for undertaking monitoring and compliance activities</p> <p>Monitoring and compliance undertaken and penalties applied as necessary</p> <p>Key areas of non-compliance addressed through education and awareness campaigns (ref: Action 1.6)</p>	ACT Government (EPD & TCSCD)	Short-medium term
2.2 Develop and implement effective biosecurity systems for surveillance and monitoring of existing and potential pests and diseases and product tracing (eg NLIS, mapping, LMAs, hotlines)	<p>Systems in place that assist in the surveillance, monitoring and tracing of pests and diseases</p> <p>Pest animals and weeds can be effectively monitored and traced through the delivery of relevant strategic actions under the pest animal, weed and climate change adaptation strategies</p> <p>Reduced detection and response times for new pest and disease incursions</p> <p>New incursions reported annually to relevant sectoral committees</p>	ACT Government (EPD)	Medium-term
2.3 Prepare and maintain an ACT Biosecurity Emergency Plan to address incursions	<p>Biosecurity Emergency Plan has been developed</p> <p>Biosecurity Emergency Plan is reviewed every five years to ensure consistency with national strategies and policies</p>	ACT Government (EPD)	Short-term
2.4 Develop and regularly review response plans for high risk pests and diseases	Response Plans developed and reviewed	ACT Government (EPD)	Medium-term (ongoing)
2.5 Develop and maintain operational plans for pests and diseases	Up-to-date operational plans for pests and diseases in the ACT	ACT Government (EPD)	Annual
2.6 Reduce the adverse impacts of established pests and diseases for priority high-value sites and assets	Reduction in adverse impacts or in abundance and/or distribution of pests and diseases demonstrated through effective monitoring, assessment and reporting of control programs	ACT Government (EPD, TCCSD), other stakeholders engaged in coordinated control programs	Annual

OUTCOME 3: Biosecurity is underpinned by a responsive and consistent legislative framework, risk management framework, business systems and training

Actions	Performance Indicator/s	Responsibility	Timeframe Short-term (up to 2 yrs) Medium-term (2-5 yrs) Long-term (> 5 yrs)
3.1 Review current biosecurity legislation and amend as necessary to respond to emerging biosecurity threats and reforms in Commonwealth and NSW legislation as well as scientific evidence and new technologies	Updated and harmonised legislation in place	ACT Government (EPD)	Short to Medium-term
3.2 Review compliance mechanisms (ie reporting, monitoring and penalties) as part of the review of current biosecurity legislation in the ACT	Review completed and legislative amendments made	ACT Government (EPD)	Short to Medium-term
3.3 Identify existing pests and diseases in the ACT and ensure lists of declared weeds, pest animals and diseases (Disallowable Instruments under biosecurity legislation) are kept up-to-date	List is updated as necessary on a risk management basis Lists incorporate nationally- agreed pests and diseases and categorisation is consistent with that of other jurisdictions, eg, the national noxious fish list, Weeds of National Significance	ACT Government (EPD)	Ongoing
3.4 Develop stand-alone biosecurity legislation for the ACT that incorporates existing pest plants and animals, and plant and animal disease legislation	ACT Biosecurity Act	ACT Government (EPD)	Medium to Long-term
3.5 Develop a risk management framework that will help determine the risks associated with identified threats to biosecurity and to inform decisions about allocation of resources	Risk management framework developed and adopted Incorporate risk management systems already in place such as the NSW Weeds Risk Management System	ACT Government (EPD)	Short-term

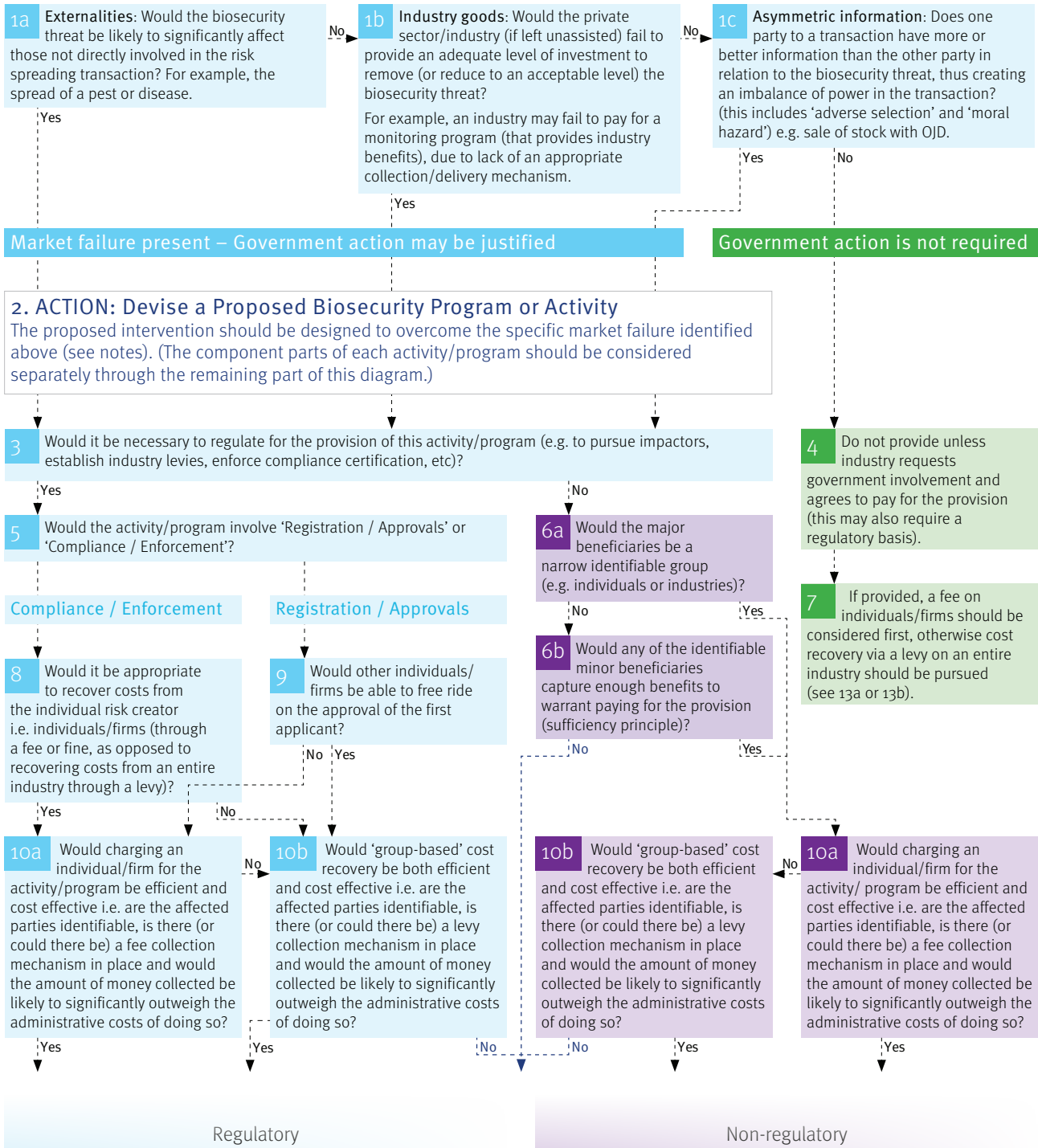
OUTCOME 3: Biosecurity is underpinned by a responsive and consistent legislative framework, risk management framework, business systems and training

Actions	Performance Indicator/s	Responsibility	Timeframe Short-term (up to 2 yrs) Medium-term (2-5 yrs) Long-term (> 5 yrs)
3.6 Review subordinate strategies (ie ACT Pest Animal Management Strategy, ACT Weeds Strategy) to ensure consistency with this ACT Biosecurity Strategy and overarching national strategies and frameworks (eg, Australian Weeds Strategy, Australian Pest Animal Strategy, Established Pests and Diseases of National Significance Framework)	Updated strategies that are complementary	ACT Government (EPD)	Medium-long term
3.7 Develop and implement an Emergency Response and Preparedness Training Strategy	A strategy has been developed to outline ongoing training requirements for relevant ACT Government staff	ACT Government (EPD)	Short-term
3.8 Provide ongoing opportunities for delivery of appropriate national, state and territory training to relevant ACT Government employees including licensing and compliance officers and rangers. Extend training opportunities to other ACT biosecurity stakeholders where appropriate	<p>Increase in the number of ACT Government staff participating in relevant training and in the application of the training in licensing and compliance activities</p> <p>Staff training is sufficient to respond effectively to a pest or disease incursion of national significance in accordance with ACT obligations under the IGAB</p> <p>Training opportunities are extended to other key ACT biosecurity stakeholders participating in government- coordinated biosecurity activities</p>	ACT Government (EPD, TCCSD)	Short-term (ongoing)
3.9 Conduct regular biosecurity response simulation exercises as part of staff training and accreditation requirements	Training exercises undertaken and staff accredited. Other biosecurity stakeholders (eg, industry, rural landholders, NSW agencies) participate where appropriate	ACT Government (EPD)	Short-term (ongoing)

APPENDIX A

BIOSECURITY THREAT DECISION TREE

1. ACTION: Clearly Identify the Nature of the Problem – then conduct a Market Failure Test as below



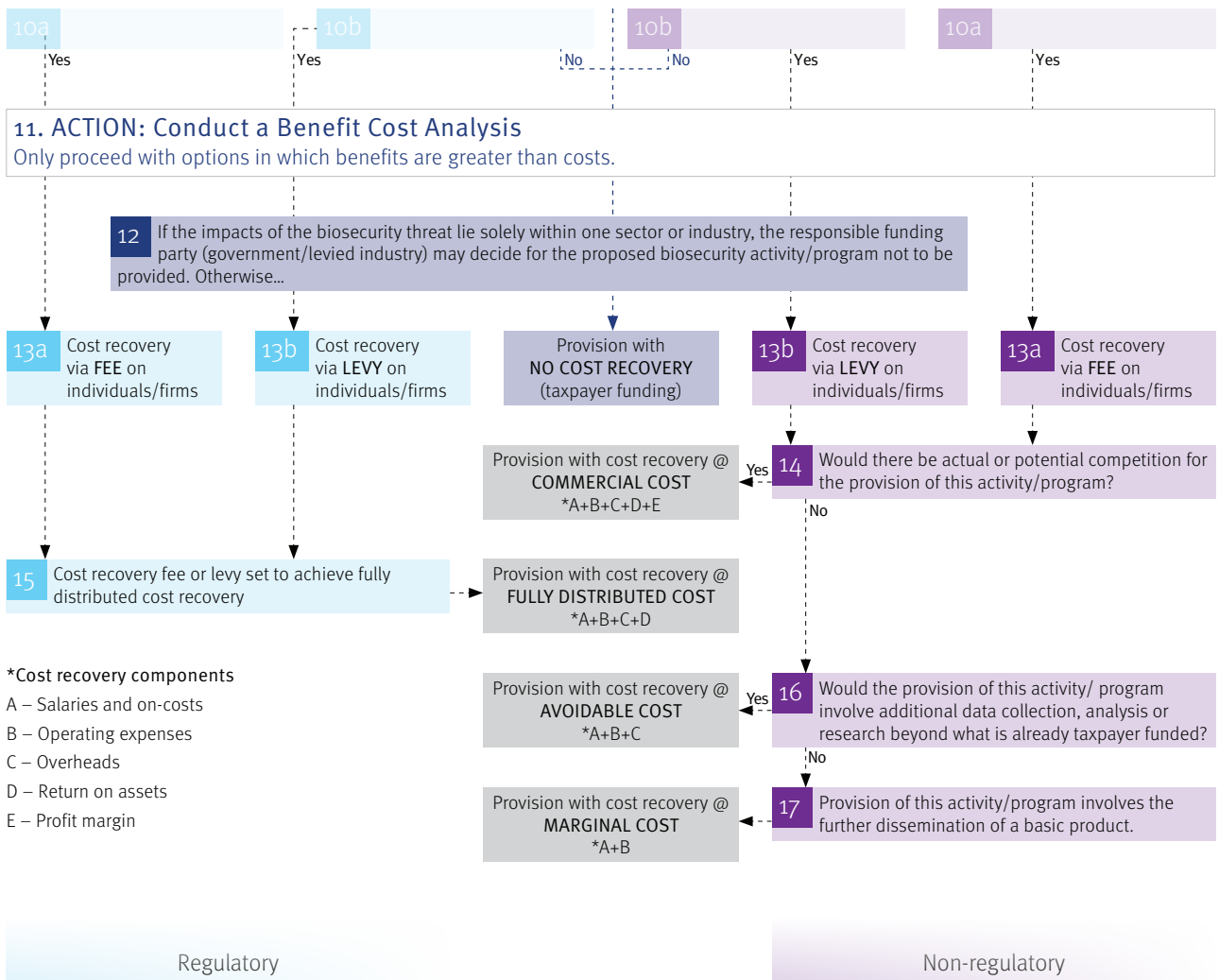


Photo: L. Padgham

GLOSSARY

Term	Definition
Climate change	Increasing greenhouse gas concentrations resulting in changes to the pattern of temperature, rainfall (volume, frequency and distribution), solar radiation, humidity, and evaporation.
Emergency Animal Disease Response Agreement Emergency Plant Pest Response Deed National Emergency Biosecurity Response Agreement	Agreements signed by the ACT Government which include Federal, State jurisdictions as well as industry. The agreement allows for the contribution of funding on a shared basis when a defined disease or pest event occurs within a jurisdiction. The idea being to spread the cost associated with handling the disease or pest event provided the defined terms and conditions are followed.
Intergovernmental Agreement on Biosecurity (IGAB)	An agreement between the Commonwealth and all state and territory governments, with the exception of Tasmania. The IGAB aims to strengthen the working partnership between governments and to improve the national biosecurity system and minimise the impact of pests and disease on Australia's economy, environment and the community. The IGAB Schedules identify priority areas for collaboration.
Zoonotic disease	A disease caused by infectious agents that can be transmitted between (or are shared by) animals and humans.



ACT
Government

**ACT
BIOSECURITY 2016-2026
STRATEGY**