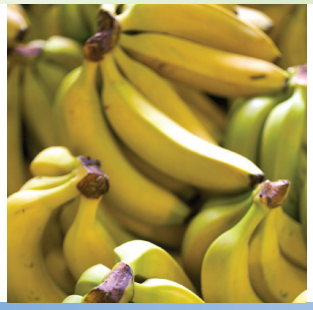
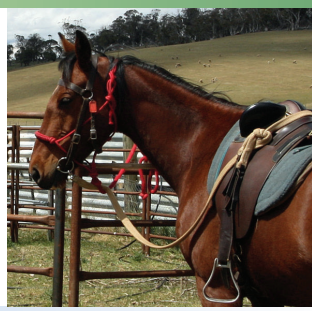
Department of Agriculture and Fisheries

Queensland Biosecurity Regulation

Decision Regulatory Impact Statement





Queensland Government

The Queensland Government is committed to applying Regulatory Best Practice principles to reduce the regulatory burden on the community, and to ensure that where regulation is used it is efficient, effective and in the public interest. The Regulatory Impact Statement (RIS) System Guidelines, issued by the Treasurer require all Queensland Government agencies to carefully assess the impacts of proposed regulation on business, community and the government. Consultation is key to improving regulatory quality at all stages of the regulatory development process. Where a regulatory proposal may provide a net benefit to the community but at the same time is likely to have significant adverse impacts on a section or sections of the community a Consultation RIS is required. The Consultation RIS provided the community with the opportunity to consider the options and their impacts and submit their views via a response. Stakeholder responses to the Consultation RIS were summarised and used to recommend base policy decisions in this Decision RIS.

This publication has been compiled by Biosecurity Queensland in the Department of Agriculture and Fisheries.

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Executive summary

Biosecurity is a set of preventive measures designed to reduce the risk of transmission of infectious diseases, quarantined pests, invasive alien species and living modified organisms. Biosecurity is integral to sustaining Queensland's prosperity and maintaining our unique environment and lifestyle. Biosecurity touches everyone's lives—from the safety of our food to controlling weeds in our backyards.

A pest or disease incident, chemical residue or food safety incident could close major international markets overnight, causing serious economic losses to local business, industry and communities. A pest or disease may destroy our native fauna and flora, and damage ecosystems if left unchecked. Our ability to enjoy the great outdoors could be severely limited if our recreation areas are infested with weeds or pests.

Biosecurity rules in Queensland are underpinned by legislation. The legislation seeks to minimise the likelihood and severity of adverse impacts on the Queensland economy, its environment, human health and social amenity due to plant and animal pests, and diseases, pest plants, animals, and other organisms and contaminants. Other aspects of biosecurity are achieved through education, effective preparedness, prevention, surveillance, response and ongoing management of biosecurity outbreaks and risks.

A new, updated and modernised Biosecurity Act has received assent and, on commencement, will replace six Acts and significant parts of three others that include obsolete and obscure provisions, and overlapping and inconsistent approaches to biosecurity. The legislation to be repealed is largely reactive and prescriptive, lacking the flexibility to enable efficient responses to Queensland's changing biosecurity risks. The legislation is also difficult for the community to understand, which in turn results in inefficient, and sometimes ineffective, administration.

The new Biosecurity Act provides a framework for an effective biosecurity system that helps minimise biosecurity risks and facilitates effective responses to impacts on human health, social amenity, the economy and the environment. The framework of the new Act also extends to ensuring the safety and quality of animal feed, fertilisers and other agricultural inputs. Furthermore, the new Act framework will help align Queensland responses to biosecurity risks with national and international obligations and requirements for assessing new markets for animals and plant produce.

On commencement, the Biosecurity Act will be Queensland's key piece of legislation for biosecurity. However, prior to commencement of the Biosecurity Act, the current subordinate legislation sitting under the Acts to be repealed or amended will need to be reviewed and aligned under the new Act. To do this, it is proposed to combine all relevant subordinate legislation into one biosecurity regulation. It was necessary therefore to review those twelve subordinate instruments and determine how an effective biosecurity system under the new Biosecurity Act could be put into operation.

Under the Biosecurity Act framework, opportunities are available to deliver operational or technical details through subordinate legislation or industry self-management processes. In that regard, the Act provides for regulations to be made about a range of issues, including prohibited matter, restricted matter, acceptable levels of contaminants, and notifiable incidents, entity registration, animal identification and tracing, movement records, particular biosecurity zones, local government responsibilities, land protection fund payments and barrier fence building authorities, compliance agreements, accredited certifiers, auditors and auditing, inspectors and authorised persons, permits, fees, compensation and standards.

Existing legislation relies heavily on the government intervening or taking responsibility for many endemic or existing pests and diseases. Under the Biosecurity Act, everyone who deals with biosecurity matter or a carrier, or who carries out an activity which poses a biosecurity risk, will have an obligation to take all reasonable and practical measures to prevent or minimise that risk. The action that must be taken in response to each risk does not necessarily need prescribing in regulation, but will require reasonable and practical measures. What constitutes reasonable or practical measures largely depends on the circumstances. Guidance on what is reasonable and practical could be provided through a range of methods, including codes of practice, guidelines, fact sheets or other educational tools. Ultimately, however, a person must apply that knowledge to address specific issues.

General biosecurity obligation

The Biosecurity Act applies a general biosecurity obligation (GBO) on everyone to take all reasonable steps to prevent or minimise a biosecurity risk. For example, just because there are no regulatory restrictions applying to a particular pest does not mean that a person does not have to do anything to prevent the spread of the pest. Consequently, this provides opportunities to move away from set regulations in relation to medium–low risk pests and concentrate resources on high risks, knowing that the medium–low risk pests are still covered under the GBO. In addition, moving to the GBO will introduce flexibility to use risk-mitigation measures best suited to the circumstances and minimise compliance costs.

Initially, this will create a less certain environment for those affected and those enforcing the biosecurity obligations. There are likely to be alternative views about the appropriate balance between prescriptive and flexible regulation. Many stakeholders may want more prescriptive regulation or government sign-off of how they propose to meet their GBO. It is essential therefore that stakeholders are aware of the opportunities under the GBO and that they are satisfied that the GBO will enable risks to be managed under regulatory provisions or non-regulatory measures.

The 12 current subordinate instruments for biosecurity contain many provisions that have been developed over time. Many of those provisions are no longer required, as they are obsolete, unnecessary or do not meet the biosecurity objectives. It is vital to maintain other current provisions, as they are based on national agreements or are the best methods to achieve biosecurity for Queensland. However, with some current provisions it was unclear whether they should be maintained or discarded, or whether an alternative regulatory approach would be better.

Impact assessment

The department and the Office of Best Practice Regulation identified the following issues as requiring further analysis to assess the overall impact to community, industry and government:

- new measures to minimise the impact of cattle ticks

- alternative regulatory approaches for managing banana, mango and bee pests
- introducing a fee for registering as a biosecurity entity.

Biosecurity Queensland established working groups for cattle ticks, bananas, mangoes, sugarcane and bees to consider options to deal with the identified issues. Note, however, that the sugarcane working group resolved all policy matters relating to sugarcane biosecurity regulations and OBPR did not determine that any of the matters relating to sugarcane required options.

The working groups undertook an impact analysis of each of these proposals, and the results were provided in a Consultation Regulatory Impact Statement (Consultation RIS) to demonstrate the impacts of each option identified on government, community and industry. The Consultation RIS provides an opportunity for the community to provide their views about the options provided.

The Consultation RIS identified a preferred option based on an evaluation of the benefits and costs identified. However, the preferred option did not necessarily represent the preferred industry option.

The issues presented in the Consultation RIS and the outcomes of consultation for each issue is shown below. However, it should be noted that further consultation, post the Consultation RIS, was necessary with the banana industry given the detection of Panama disease Tropical Race 4 in early 2015. The detection of this serious disease prompted a reconsideration of priorities in relation to the use of regulation for banana pests. The outcomes of consultation with the Australian Banana Growers Council (ABGC) on how banana pests should be managed is also provided below.

Alternative regulatory approaches for managing banana pests

The banana working group considered alternative regulatory and non-regulatory arrangements for dealing with pests and diseases of bananas. Three issues were raised, for which alternative solutions were identified. Those issues related to the current six pest quarantine areas (PQAs), regulated treatment requirements for yellow sigatoka and restrictions on residential planting of banana trees.

Two options are identified in the RIS in relation to the PQAs: maintain and transition the current PQAs as biosecurity zones; or maintain and transition the Far Northern and Southern PQAs as biosecurity zones and introduce a further biosecurity zone that covers the main banana-growing area. Two options were also identified for managing leaf spot and residential planting of banana trees. The first option relates to maintaining the current regulatory provisions, while the second option is to remove the regulatory provisions and instead rely upon the general biosecurity obligation.

The cost–benefit analysis for the options indicate that, overall, option 2 in all three cases provides the best outcomes for the community because it minimises the burden on industry in relation to its dealings with medium–low risk pests while ensuring an appropriate level of regulatory control applies to the high-risk pests.

New measures to minimise the impact of cattle ticks

In relation to cattle ticks, three options were identified for the primary hosts: maintain the current regulatory provisions; establish two biosecurity zones (free and infested) and prohibit the movement of host species that have ticks from the infested zone and infected properties;

or rely on the general biosecurity obligation, with fact sheets for how people will discharge their obligations.

Three options were also identified for secondary host species (horses, goats, sheep, mules and camelids): maintain current regulatory provisions; only animals that are tick-free may move; or rely on the general biosecurity obligation, with fact sheets for how people will discharge their obligations.

The cost–benefit analysis for the three options for primary host species indicates that, overall, option 2 provides the best outcomes for the community because it strikes an appropriate balance between minimising the impact of the regulatory burden and an appropriate level of regulatory control to minimise the economic impact of cattle ticks.

The cost–benefit analysis for secondary host species indicates that, overall, option 3 provides the best outcomes for the community because it strikes an appropriate balance between minimising the impact of the regulatory burden and an appropriate level of regulatory control to minimise the economic impact of cattle ticks through the movement of secondary host species.

Alternative regulatory approaches for managing mango pests

The mango industry working group considered the relevance of the two current Pest Quarantine Areas (PQAs) for mango leafhoppers, that cover Cape York and an area west of Cairns. Two options are identified in the RIS: maintain and transition the two PQAs as biosecurity zones, with some minor boundary changes to reflect the range extention of mango leafhoppers; or remove both PQAs as they are not working and replace with other less burdensome requirements that can equally deal with the biosecurity risks.

The cost–benefit analysis for the two mango leafhopper options indicate that, overall, option 2 provides the best outcomes for the community because it minimises the burden on commercial and residential mango-growers while ensuring an appropriate level of regulatory controls to minimise the economic impact from mango leafhoppers.

Alternative regulatory approaches for managing bee pests

The bee working group considered the relevance of the restricted area for Asian honey bees. Two options are identified in the RIS: maintain and transition the PQA as a biosecurity zone, with some minor boundary changes to reflect the extent of Asian honey bees; or remove the PQAs for Asian honey bees as they are not working and other less burdensome requirements can equally deal with the biosecurity risks.

The cost–benefit analysis for the two Asian honey bee options indicate that, overall, option 2 provides the best outcomes for the community because it minimises the burden on commercial and residential apiarists while ensuring an appropriate level of regulatory control to minimise the economic impact from Asian honey bees.

The working group also provided feedback and informed the policy which underpins the proposed regulation relating to the marking of hives and distance required between apiary sites.

Introducing a fee for registering as a biosecurity entity

Given the integral role played by property registration in enabling and facilitating the continued integrity of the biosecurity system in Queensland, and the distribution of benefits provided by registration, it is necessary to consider sustainable approaches for funding the property registration system that will ensure ongoing maintenance and help protect primary producers.

The RIS provides three alternative approaches that weigh the public and private benefits of the property registration system. The first option is for the continued provision of the property registration system with no fee—where the service is wholly subsidised by the Queensland taxpayer. The second option is for the introduction of a fee for property registration and renewal that recovers the full cost of providing the service. The third option is for the introduction of a fee for property registration and renewal that is subsidised by the Queensland Government—recognising both the public and private benefits provided by the continued maintenance of the system.

In summary, while none of the options are likely to strike the exact balance between public and private benefits, option 3, which recognises the compromise between the two, and proposes the cost for managing biosecurity be co-managed by the risk-creators and the government, delivers the best and most equitable outcome, and is therefore the best option to apply for industry, government and the community at large.

The Review Process

This Decision RIS has been developed through extensive consultation with affected parties, and relevant industries have been involved in outlining the policy options. Figure 1 provides an indicative timeline of the review.

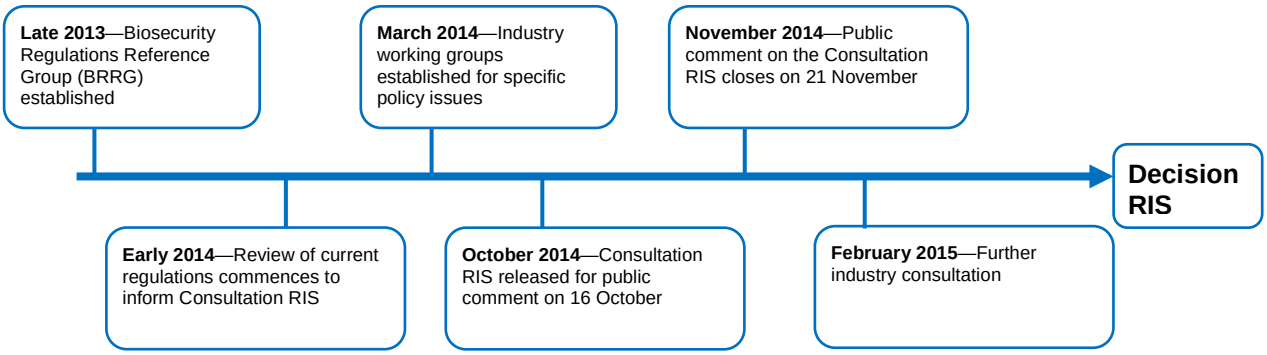

Figure 1 Review timeline

Outcomes from Consultation

A total of 625 submissions to the Consultation RIS were received. Around 350 responses were from farmers and 200 from hobby farmers. The following numbers of responses were received in relation to each issue identified in the Consultation RIS:

Banana Pests: Biosecurity Zones	26
Banana Pests: Treatment requirement for yellow Sigatoka	24
Banana Pests: Residential Planting Restrictions	22

Cattle tick: Primary host species	230
Cattle tick: Secondary host species	202
Management of Mango Leaf Hoppers	17
Management of Asian Honey Bees	41
Entity Registration Fee	391

The responses were from individuals, groups or from major industries or peak bodies. In their responses the respondees indicated if they supported or did not support the preferred option identified in the Consultation RIS. In addition many respondees provided useful comments why they did or did not support the prefered option.

Banana pest management

The Consultation RIS proposed that the option of maintaing three biosecurity zones provided the best outcome for the community to contain banana pests or prevent them entering the main banana growing region.

The three zone option adequately quarantines the rest of the State from black Sigatoka and banana bunchy top as well as protecting the main banana growing region from banana pests that are not already in that region. Three zones also removes unnessesary burden associated with restrictions on movement of plants and risk items from those areas that do not have a significant biosecurity risk. Notably the majority of respondees supported the three zone option including the key stakeholder groups.

Further consultation in relation to the proposed far northern zone recognised the benefit of splitting the zone into two, one above the Jardine River (far northern zone 1) and one from Coen to the Jardine River (far northern zone 2) as more pests and diseases are identified further north in the proposed zone and the Jardine River can be used as a natural barrier between the two zones.

The Consultation RIS proposed to discontine the regulatory treatment requirement for yellow sigatoka. The responses to the proposal to discontine the requirement were equal in number to those that wanted to maintain the requirement.

Following the Consultation RIS, in early 2015 Panama disease Tropical Race 4 was detected in the commercial banana growing region in north Queensland. The detection of this serious disease prompted a reconsideration of priorities in relation to the use of regulation for banana pests. Further consultation occurred with the Australian Banana Growers Council (ABGC) on how banana pests should be managed in light of this disease detection.

In light of the further consultation it is proposed to remove the requirement for yellow sigatoka as it is not a quarantine pest and is not considered to be a quarantine pest that justifies regulatory intervention. Instead it is proposed that a Guideline be established, as provided for under the Act, to articulate how banana growers can meet their general biosecurity obligation in respect to yellow sigatoka.

The Consultation RIS proposed that the current regulatory restrictions applying to the number and species of banana plants that may be grown residentially throughout the current PQA's be discontinued.

There were balanced numbers of responses to the RIS to discontinue or maintain the restrictions. However, further consultation occurred following the detection of Panama disease tropical race 4. During that consultation it was recognised that black sigatoka is a very serious threat to the banana industry and could cause catastrophic impacts on industry viablility if it was introduced into the Queensland major growing region. Black sigatoka is currently not found on the Queensland mainland and industry supports mitigation methods to minimise the potential for it to move onto the Queensland mainland and spread.

In light of the need to protect Queensland from black sigatoka it is proposed that the restrictions on numbers and species of banana plants be maintained only in the Far Northern Banana Biosecurity Zones and not elsewhere in Queensland.

Cattle ticks – Primary & Secondary hosts

The Consultation RIS proposed that, in relation to primary host species, a two zone system provided the best outcome for the community because it strikes an appropriate balance between minimising the impact of the regulatory burden and an appropriate level of regulatory controls to minimise the economic impact of cattle ticks.

In relation to secondary host species, it was proposed that both the two zone system and relying solely on the GBO provided the same benefits to industry while still adequately managing the risks. Marginally it was considered that relying solely on the GBO was a better overall outcome for the community because it reduced regulatory burden more than the two zone system and therefore the Consultation RIS indicated the GBO as the preferred option.

Whilst marginally there was greater support to maintain the current regulatory regime in respect of both primary and secondary host species, none of the submissions provided persuasive arguments that would change the recommendations made in the Consultation RIS. The majority of the submissions which favoured retention of the current system relied on an argument that it works well and therefore doesn't need to be changed.

Consequently, in relation to primary host species, the Decision RIS recommends a two zone system.

In relation to secondary host species, the Consultation RIS recommended the sole reliance on the GBO as the preferred option because it reduced regulatory burden. The Consultation RIS does, however, recognise that, other than regulatory burden reduction, there was little difference between sole reliance on the GBO and the two zone system. Several of the main horse industry groups supported the two zone system over the GBO option as it provides more clarity in addressing the risks and enforceability of requirements with arguably a proportional increase in regulatory burden. It would also provide some comfort to those producers who are involved in primary host species that the issues relating to ticks in secondary host species is being addressed at an acceptable level.

Therefore, the Decision RIS recommends a two zone system, in relation to secondary host species, instead of the preferred option to rely solely on the GBO that was recommended in the Consultation RIS.

Mango Pests – Mango leaf hoppers

The Consultation RIS proposed that the option to deregulate the PQAs for mango leafhoppers was the preferable community outcome as it provides an appropriate balance between minimising the impact of the regulatory burden and an appropriate level of regulatory controls.

The majority of responses to the RIS supported the deregulation option and there were no additional arguments provided upon which to re-evaluate the cost/benefit analysis undertaken in relation to this matter.

Consequently, the Decision RIS proposes to deregulate the PQAs as it removes an unessessary regulatory burden while still maintaining biosecurity objectives.

Bee Pests – Asian Honey Bees

The Consultation RIS proposed that the option to deregulate the Asian honey bee restricted area was the preferable community outcome as it provides an appropriate balance between minimising the impact of the regulatory burden and an appropriate level of regulatory controls.

The majority of respondees did not support the preferred option in the Consultation RIS and wanted to maintain a restricted area for Asian honey bee. However, these respondees did not provide any further information or evidence on which to update the cost/benefit analysis.

On 26 August 2015 the bee working group that had been established to discuss the consultation RIS met to further discuss the RIS outcomes. Overall the group was not in favour of the removal of the Asian honey bee restricted area. However, as with the feedback on the RIS, no new information was presented that would justify retention of the restrictions.

Consequently, it is recommended that the preferred option in the Consultation RIS to discontinue the restricted area be maintained as there are no clear benefits from maintaining a restricted area but there are benefits from removing unnecessary regulatory burden.

It should be noted, however, that given the Asian Honey Bee Notice could no longer be justified, and that it was imposing an unnecessary burden on government and industry, it was repealed on 20 November 2015.

Introducing a fee for registering as a biosecurity entity (in relation to designated animals that are not bees)

The consultation RIS proposed that the option to introduce a fee for registering as a biosecurity entity that is two thirds subsidised by government provides the best community outcome.

The majority of responses received to the RIS indicated no support for any fee. However, the administration of property registration is subject to considerable funding pressure owing to a tightening fiscal environment and the data in the current PIC registration system is slowly degrading owing to inadequate resourcing.

On that basis it is important to resolve sustainable funding through cost recovery to ensure its effectiveness. It is recognised that property registration (in some form) is a requirement in all Australian states and territories.

Consequently, the Decision RIS proposes that a livestock entity registration fee be established for entities that derive a commercial benefit from livestock production, at a subsidised rate of one third of the full cost recovery fee and paid triennially. It also proposes that the exemption to the fee for hobby farmers be extended to beekeepers.

It should be noted that the proposed livestock entity registration fee, and all of the other proposed fees that were presented in the Consultation RIS, were based on the 2014/15 financial year and would therefore be indexed twice (3.5%) for the 2015/16 and 2016/17 financial years for commencement with the Regulations on 1 July 2016 (see attachment 6 for a comprehensive list of the proposed new fees).

1. Queensland biosecurity overview

1.1 Background

Biosecurity is the protection of people, animals and the environment from infectious disease, pests and other biological threats. It is achieved through systems that aim to prevent disease introduction or spread, or mitigate an outbreak if it occurs, and are reliant on national and international policies and plans for dealing with a disease event. Stopping the entry, establishment and spread of unwanted pests and diseases is vital for some of our most important industries, including horse racing, meat and livestock industries, and horticulture industries, and for protecting and preserving our native wildlife.

1.2 Reasons for biosecurity

Broadly, biosecurity seeks to address the following problems:

- the risk of introducing and spreading new invasive pests and diseases into Queensland which have the potential to damage the state's environment, economy or social amenity
- the risk of uncontrollably spreading high-risk endemic pests and diseases in Queensland which could increase the damage to the state's environment, economy or social amenity
- the risk of introducing and spreading contaminants that may impact on a biosecurity concern
- the appropriate sharing of responsibility for dealing with biosecurity risks across government, industry and the community
- the fair and equitable sharing of costs associated with managing the state's biosecurity risks across government, industry and the community.

The impact of biosecurity measures on the welfare of the Queensland economy, environment and society is difficult to measure because there are many known and unknown threats with unknown consequences. Intuitively, however, we know that the impact of biosecurity measures is positive. The following provides some background on the nature of the problems from an economic, environmental and social amenity perspective.

Economic

Queensland's agricultural sector has an annual gross value of production of around $12.5b, with almost $6b of this production exported. Market access for agricultural products is particularly dependent on the maintenance of a favourable pest and disease status.

The introduction of certain pests and diseases into Queensland could decimate both the domestic and agricultural markets. For example, the introduction of foot and mouth disease (FMD) into Queensland could cost the economy at least $9b.

Industries can also be severely affected by loss of production. An example for the animal industries is screw worm fly, a parasitic blowfly that attacks live animals of virtually all species. It is present in our near northern neighbouring countries and if it were to become established in Australia it would cause hundreds of millions of dollars in lost production annually.

Ensuring that there is continued confidence in our biosecurity systems is one of our most significant advantages in accessing global markets and developing the unprecedented new opportunities we see for our world-class, pest- and disease-free products.

Many agricultural chemicals are seen as integral to the control of pests, diseases, and invasive plants and animals. Detections of agricultural chemical residues can have serious economic consequences. Many developed countries have extensive chemical residue testing capacity and can screen for 1000 different chemicals at once. For example, in recent years, detection of residues of a banned antibiotic in pork by an importing country prevented a Queensland abattoir from exporting for many months while the issue was being rectified.

While individually invasive weeds tend not to have the massive impacts of some animal and plant pests and diseases, the number of potential invaders is much larger. Introduced weeds already collectively cost Australian agriculture around $4b in lost production. There is also the added impact on the environment and society.

Environmental

Invasive species are now identified as the greatest threat to Australian biodiversity after habitat loss. For example, guava or eucalyptus rust is an exotic fungal disease present in the Americas that could infect a wide range of native Australian trees. Apart from the economic impact on native forestry, this disease could cause major changes to forest composition and biodiversity. Control would be extremely difficult unless detected very early.

The marine and freshwater environments can also be severely impacted by invasive species. For example, the black striped mussel is a native of tropical and subtropical waters in the central Americas. It has spread to India, some parts of South East Asia and, possibly, Fiji. This mussel (like the Asian green mussel) is extremely prolific and causes massive fouling of wharves, marinas, seawater systems and other marine habitats. It was eradicated from marinas in Darwin in 1999, but re-introduction through commercial shipping movements is a high risk. This is also the case for a range of other exotic marine pests.

Social amenity

Introduced species and diseases can have devastating social impact on the community. For example, the introduction of terrestrial rabies is possible through pathways such as dogs on illegal fishing vessels visiting Australia. If established in Australia, there would be a very significant social effect through loss in public confidence after coming into contact with animals such as dogs and cats in urban and rural areas. Fire ants can also cause immense social impacts, with playing fields and parks having to be closed due to fire ant infestations.

Regulations necessary to protect the economy, environment and social amenity

The number of biosecurity incidents continues to increase each year due to a range of factors, including increased globalisation, tourism, competitive markets and changing commodity imports. Modern biosecurity protection methods must adapt to new and evolving situations. This ConsultationRIS presented regulatory arrangements that are considered necessary to help protect Queensland from biosecurity events. In cases where there are several options to achieve the desired objective, the Consultation RIS presented those options and discussed the costs and benefits of each option.

Agricultural inputs

With increasing price and global demand for agricultural chemicals, fertilisers, feed and feed ingredients there is a growing trend of product substitution or the importation and use of poor quality inputs. Recently, pig feed in one Australian state was detected to contain high lead

levels as a result of using a heavily contaminated zinc oxide as an ingredient. The incident resulted in significant market access issues for the industry in that state.

The cost of biosecurity

Managing the prevention and/or eradication of pests and diseases is costly. Industry and the community have ever increasing expectations that government will implement measures that offer sufficient protection from biosecurity events. While there are wider community benefits from good biosecurity measures, there are some industries and individuals that gain greater benefits than others. Currently, the fees and charges associated with biosecurity do not reflect the proportional benefits gained from biosecurity management. Likewise, the fees and charges do not reflect full cost recovery.

Increasing concerns

There are a range of reasons why the problems raised above may become more challenging to address.

Increased international travel of people

The volume of interceptions of risk materials by the Australian Government in personal baggage and mail articles is significant. Risk materials range from animal products presenting a risk of FMD if fed to livestock, to plant seeds that could introduce pests or diseases or become weeds in their own right. Seeds have even been found recently in clothing purchased over the internet. The cosmopolitan nature of Australian society also brings risks in terms of a significant proportion of the population having relatives living overseas. Skilled migrants are also coming to Australia in increasing numbers for temporary work, some helping to address a critical labour shortage in agriculture.

Changing patterns of commodity imports

Imports from countries with lower biosecurity standards present risks both in terms of the commodity itself, as well as packaging and containers. An example of the former is the rapid increase in recent years in the number of detections of wood borers in wood products, mainly originating from Asian countries. Examples of the latter are increased incursions of Asian honey bee and tramp ants through container and machinery movements.

Stockfeed, feed ingredients, grain and fertiliser imports have increased in recent years, due to droughts in Australia. Currently, Australia has no legislative authority at the point of import to address contaminant risks (other than quarantine issues) in grains, fish meals, other stock feeds or fertilisers.

One particular area of significant concern is the importation of ornamental fish. This is a growing trade and subject to relatively minor controls. This brings with it risks not only from aquatic animal diseases, but also from the fish themselves if released into the environment.

Spread of invasive species within near neighbour countries and ports

The level of investment in biosecurity in our near neighbours, PNG and Indonesia, is low in comparison to Australia's investment. There have been reports of the spread of diseases such as avian influenza and classical swine fever through Irian Jaya, with limited ability to prevent a spread into PNG. The proximity of PNG to Australian islands in the Torres Strait, together with traditional movements in this region presents a significant risk. The promotion of market gardens in indigenous communities for social and human health purposes, together with the generally low human density in Cape York, increases the risk of invasive

species spreading prior to detection. The Australian Government has also refocused its North Australia Quarantine Strategy operations to concentrate primarily on the border.

Another huge risk that is currently not well managed is the introduction of marine pests through shipping movements from heavily infested ports, especially in SE Asia.

Changing attitudes or risks people are willing to take to attain a competitive edge

Agricultural industries operate within a competitive environment. In situations where superior genetic material may exist overseas, people may be tempted to introduce planting material illegally, especially where our quarantine system either prevents introduction or is costly. This is the most likely way that citrus canker was introduced into Queensland. Legal imports also increase the risk, especially where there are large volumes of imports—equine influenza being a case in point. There is no such thing as zero risk.

Length of coastline

Queensland has the second longest coastline of all states at 6973km with another 6374km of island coastline, and it is probably most accessible to illegal and legal travellers. Interception of all of these travellers is almost impossible. This pathway is the most likely way that diseases like rabies would be introduced into Australia.

Access by migrating species

A number of bird species migrate to Australia annually, potentially bringing new strains of diseases like avian influenza. Transfer into local species and then introduction into poultry farms through poor biosecurity is the most likely way that we would experience an outbreak of a highly pathogenic strain like H5N1. Bat species also interchange between Australia and South East Asia, bringing risks of diseases like Nipah virus. The introduction of arbo viruses (insect borne), can also occur through wind-borne spread. This has occurred in Europe recently with the pathogenic strains of bluetongue virus.

Changing demographics

The ‘sea change’ phenomenon has seen an increasing ‘peri-urban’ agriculture sector where small farmers locate around urban areas. These farmers have varying levels of understanding about biosecurity and, through poor biosecurity practices, may allow establishment of invasive species that would not otherwise occur. This is compounded by lower reporting rates of suspect pest and disease in these areas, and an increased propensity for many pests and diseases to spread in closely settled areas.

Diversification of industries and changing land use

In difficult economic times, many producers are diversifying and growing new commodities; for example, new tropical fruits. This brings risks in terms of our level of knowledge of these crops and the associated risks, both through pests and diseases, and associated chemical use. Changing land-use patterns could increase the risk of outbreaks of pests, disease or weed infestations. Emergency use permits issued by the Australian Pesticides and Veterinary Medicines Authority (APVMA) may be required if there are no existing approved chemical controls relevant to the pest or situation.

1.3 Regulatory framework

A new Act for biosecurity has been passed through Parliament and sets up a new framework for biosecurity matters in Queensland. The Act is a consolidation of eight separate Acts that

will be repealed on commencement of the new Biosecurity Act on or before 1 July 2016. Currently, there are twelve subordinate instruments that apply to those Acts. They are:

- The *Agricultural Standards Regulation 1997* that provides standards for agricultural fertilisers, seeds and stock food in Queensland

- The *Apiaries Regulation 1998* that provides requirements for bee keepers about how and where apiaries should be kept

- The *Diseases in Timber Regulation 1997* that provides for the declaration of diseases that are harmful to the timber industry and the measures to exterminate, prevent or control the dissemination of disease

- The *Exotic Diseases in Animals Regulation 1998* that provides requirements in relation to dealing with animal diseases

- The *Exotic Diseases in Animals (Avian Paramyxovirus) Notice 2011* that prescribes avian paramyxovirus as an exotic disease and that Queensland is a restricted area for the movement of pigeons, pigeon eggs and pigeon fittings from Victoria into Queensland

- The *Exotic Diseases in Animals (Asian Honey Bee) Notice 2010* that provides a restricted area for the movement of bees or bee products to prevent the spread of Asian honey bees

- The *Land Protection (Pest and Stock Route Management) Regulation 2003* that provides requirements in relation animal pests, invasive animal boards and local government payments in relation to biosecurity

- The *Plant Protection Regulation 2002* that provides requirements in relation to labelling of plants, prescribed plant pests and pest quarantine areas

- The *Plant Protection (Approved Sugarcane Varieties) Declaration 2003* that restricts the varieties of sugarcane that may be used in specific quarantine areas

- The *Stock Regulation 1988* that provides requirements in relation to introducing stock from outside Queensland, travelling stock around Queensland, disease eradication programs, testing of stock for disease, use of the exotic disease diagnostic test, requirements for dipping and treating stock, feed restrictions for disease prevention and control and requirements to prevent and control Newcastle disease. The Stock Regulation also provides the mechanism to enable the management of contaminant and residue risks in livestock. While the management of chemical residue risks will be transferred into the *Chemical Usage (Agricultural and Veterinary) Control Act 1988,* the Biosecurity Act continues to provide for ways and obligations of managing risks posed to livestock production from contaminants

- The *Stock (Cattle Tick) Notice 2005* that provides requirements in relation to the declaration of cattle-tick zones and cattle-tick status on properties, the requirement for travel permits. and inspection and treatment regarding stock movement

- The *Stock Identification Regulation 2005* that provides requirements in relation to the registration of places with designated stock, the stock identification system and reporting requirements for movement of designated animals.

It is necessary therefore to review these twelve subordinate instruments and determine how an effective biosecurity system under the new Biosecurity Act can be put into operation.

While these subordinate instruments have been reviewed, a number of provisions have been identified as redundant and will not be transferred into the new regulation. These provisions were therefore not be considered in the Consultation RIS (see attachment 3). In addition, some of the existing regulatory requirements are the only viable options for addressing existing biosecurity concerns, and therefore will be transferred across to the new regulation in their current form. These provisions were also not considered in the Consultation RIS (see attachment 4).

1.4 Role of various governments in biosecurity

Biosecurity measures and activities are undertaken at the pre-border and border (Australian government) and post-border levels (Australian, state, territory and local government).

Effective responses to animal, plant and invasive species incidents and emergencies require planning at national, state or territory and district levels, as well as the involvement of affected industry parties and sometimes emergency management organisations.

The Intergovernmental Agreement on Biosecurity (IGAB), which came into effect in January 2012, is an agreement between the Commonwealth, State and Territory governments with the exception of Tasmania. It was developed to improve the national biosecurity system by identifying the roles and responsibilities of governments and oulining priority areas for collaboration to minimise the impacts of pests and disease on Australias economy, environment and the community.

The Emergency Animal Disease Response Agreement (EADRA), the Emergency Plant Protection Deed (EPPRD), and theNational Environmental Biosecurity Response Agreement (NEBRA) are contractual arrangements between the Commonwealth, state and territory governments, and affected parties to collectively and significantly increase Australia's capacity to prepare for, and respond to, biosecurity incidents that impact animal and plant production the environment and social amenity.

In the event of a biosecurity emergency response, agreed approaches to managing certain animal incidents are outlined in the Australian Veterinary Emergency Plan (AUSVETPLAN) and for plant pest incidents in PLANTPLAN.

Disease strategies and response policy briefs

AUSVETPLAN is a comprehensive series of manuals that set out the various roles, responsibilities and policy guidelines for agencies and organisations involved in an EAD response. AUSVETPLAN manuals are also used for training purposes and during exercises to ensure that relevant structures and processes are in place, with appropriately qualified personnel, well in advance of an EAD outbreak.

The availability of agreed AUSVETPLAN disease strategies ensures that informed decisions about the policies and procedures needed to manage an EAD incident in Australia are immediately at hand and there is no time lost in mounting the response. For this to occur, as many policy principles as possible should be agreed in 'peacetime'.

2. Problems facing biosecurity

It is widely accepted that biosecurity in Queensland and nationally is vitally important for industry, individuals and the community for economic,human health, social and environmental reasons. Examples of the cost associated with not having appropriate responses to emergency events, evolving and ongoing biosecurity risks, including emerging, endemic and exotic pests and diseases of animals and plants and invasive species, are outlined under the Issues section of the Decision RIS. Given these impacts, it is clearly in the interest of industry and the community to have a biosecurity system in place that minimises the risk of a biosecurity emergency. Consequently, it is clearly not an option to have a holistic non-regulatory approach to the general biosecurity system.

As previously mentioned, there are currently significant regulatory provisions relating to biosecurity in Queensland. The opportunity now exists to review the regulations and determine:

- which regulatory provisions should be removed (category 1)
- which regulatory provisions should be transitioned under the new Biosecurity Act (category 2)
- which regulatory provisions need to be considered in relation to either transitioning them under the new Biosecurity Act or applying revised regulatory mechanisms instead (category 3).

To determine which of the current regulations fall into these categories each provision was assessed using the criteria shown in Table 1 and presented in the Consultation RIS.

Table 1: Criteria for regulation review

Category	Criteria
1. Which regulatory provisions should be removed	• Can the current provision be justified in the context of the Government's red-tape reduction initiative? • Is the provision obsolete, duplicative or no longer required under the framework of the Act? • Are there alternative non-regulatory approaches that could achieve the biosecurity objectives? • Is the regulation not proportional to the biosecurity risk?
2. Which regulatory provisions should be transitioned under the new Biosecurity Act	• The provision is required under the framework of the Act: e.g. the Act provides for details to be prescribed in regulation • The provision implements a national agreement • There are no viable alternative approaches that could achieve the biosecurity objectives • The current regulation is effective and proportionate to the biosecurity risk
3. Which regulatory provisions need to be considered in relation to either transitioning them under the new Biosecurity Act or applying revised regulatory mechanisms instead	• There are viable alternative approaches (either regulatory or non-regulatory) to achieving the biosecurity objectives • There is need for further industry and community consultation to guide the approach taken

2.1 Category 3: Existing regulation to be further considered

Some of the existing regulation may no longer be the most effective way to manage identified pests and/or diseases which pose a biosecurity risk to specific sectors of the agriculture industry. In particular, the regulations appear to impose prescriptive and onerous biosecurity control measures that are not commensurate with the risks associated with the particular pest or disease.

2.1.1 Banana biosecurity management

The *Plant Protection Act 1989* and the *Plant Protection Regulation 2002* (the regulation) provide the core regulatory approach to plant biosecurity for the banana industry.

There are six pest quarantine areas (PQAs) implemented under the *Plant Protection Regulation 2002* which are currently used to manage banana pests. Cape York is covered by a PQA, with five additional PQAs across the rest of Queensland. . Restrictions apply on the moving of banana plants, soil and appliances into, out of or within a PQA. These PQAs have been in place for many years and it is timely to review their benefits in relation to biosecurity management.

The regulation also requires the treatment of banana plants that are infested with specified pests. Currently, yellow sigatoka is a prescribed pests under the regulation. It is endemic in a large area of Queensland and cannot be contained. It is important that landowners continue to treat plants that are infested with yellow sigatoka. However, these pests could be alternatively managed through industry best practice management measures.

The regulation currently includes restrictions in relation to residential plantations. For example a person must not grow more than ten banana plants, or 30 pseudostems, and restrictions apply on the types of banana plants that may be grown. The necessity of these restrictions has been questioned, particularly from those residents in regions of Queensland not infected with serious banana pests. In addition, the restriction on plant numbers of disease-resistant varieties in remote communities contradicts the *Queensland plan*, where the aim is to have diverse, economically prosperous and healthy communities.

2.1.2 Cattle ticks

Cattle tick (*Rhipicephalus (Boophilus) microplus*), an external parasite of a range of host animals, was introduced into Queensland during the 1890s and has since become endemic in areas which favour their habitation. Cattle tick has a range of hosts, including cattle, buffalo, deer (primary host species), horses, sheep, goats and alpacas (secondary host species). The cattle tick is regarded as a significant economic pest of the Queensland cattle industry because of its parasitic nature and transmission of diseases. The tick-borne parasites *Babesia bovis*, *Babesia bigemina* and *Anaplasma marginale* can cause tick fever, which is a serious, often fatal disease. Estimates of the damage caused by ticks and tick fever in Queensland varies. Playford [1] estimated the cost of ticks and tick fever in the northern Australian livestock industries to be between $222m and $250m per annum.

[1] Playford 2005, *Final Report Animal and Welfare*, Project AHW.054A, Review of research needs for cattle tick control, Phase I and II, MLA, Sydney. Figures adjusted by CPI to bring them to current dollar values.

A ‘natural’ tick line exists between areas where there is less than 500 mm per annum of rain and areas which experience greater than 500 mm of rain. This is because cattle tick is unlikely to become endemic in areas where the median rainfall is less than 500 mm per annum. During wetter than normal seasons, this natural line may vary but would settle back toward the 500 mm rainfall isohyet during dryer periods. The current regulatory regime prescribes a ‘tick line’ that creates a boundary between the tick-infested and tick-free areas, as well as buffer areas (control areas). This prescribed line largely follows the 500 mm rainfall isohyet until it reaches southern Queensland, where an area is created in the south-east corner of state, which falls inside the 500 mm isohyet but outside the infested area of the tick line. This area would become readily infested with ticks without the benefits of the prescribed tick line.

The control measures imposed by the notice include strict requirements on the movement of all stock in, within and out of, cattle tick zones, including inspection and treatment with acaracides. Some of these measures treat certain stock movements as high risk even though assessed as low risk. This means that some low-risk stock movements are subject to cattle tick control measures which are not commensurate with their risk level. For example, horses are subject to difficult and often ineffective treatment with chemical (acaracides) and onerous inspection requirements even though there is a low risk that their movement will spread cattle ticks.

2.1.3 Mango biosecurity management

There are two PQAs for mango leafhopper, the area covered by the Cape York PQA and an area west of Cairns, covering Dimbulah, Mareeba and Mutchilba districts.

The objective of the mango leafhopper PQAs is:

- to prevent mango leafhopper (*Idioscopus clypealis* and *I nitidulus*) being brought out of a PQA; and
- to limit the spread of *Idioscopus clypealis*, which has extended its range south of Coen.

Section 78 of the *Plant Protection Regulation 2002* restricts the introduction of mango leafhopper and mango plants from another state where mango leafhopper has been detected (currently the Northern Territory). De-stemmed mango fruit is not restricted.

An Inspector’s Approval presently allows movement of mango plants from within five kilometres of a detection of mango leafhopper to another location inside or outside the PQA provided a chemical treatment has been applied. There are three five-kilometre detection points centred on the townships of Dimbulah, Mareeba and Mutchilba.

Recent surveillance by Biosecurity Queensland has found that since 2009 *I clypealis* has extended its range west of Mareeba, and further north and south in Cairns Regional Council. Of the 13 sites where *I clypealis* has been detected in the Cairns Regional Council outside the PQA, seven of these sites are rest areas or public amenity sites, or tourist sites such as camp grounds and caravan parks. One site is a council depot, where there is regular storage and movement of vehicles. This evidence would suggest that *I clypealis* may be inadvertently moving in or on vehicles.

Additionally, mango leafhoppers could be spread by strong winds and storm activity. Major cyclones affecting the northern tropical coast and inland, such as Tropical Cyclones Larry and Yasi in 2006 and 2011 respectively, may have spread mango leafhopper in the regional area.

Given that mango leafhoppers have spread to other areas and there is evidence which suggests they may be spreading via unregulated vectors, the existing regulatory control measures may no longer be effective or appropriate.

2.1.4 Bee biosecurity management

Honey bees not only produce honey, but play a vital role in the balance of nature, especially the pollination of agricultural and horticultural crops and the house garden. Pollination is important for the viability of many pastoral enterprises, market gardens, orchards and seed industries.

Honey bees add an estimated $42.5m to Queensland's agricultural and horticultural industries each year. More than 107 000 commercial hives in Queensland produce around 75 kg of honey per hive annually. While honey is the major commercial output of the honey bee industry, additional income is sourced from beeswax, queen and packaged bees, propolis and, increasingly, pollination services to the horticultural industry.

Queensland's apiary industry is centred on the exotic European honey bee *Apis mellifera*. This species is susceptible to a number of significant biosecurity risks, including the Asian honey bee (AHB), species and genotypes and any pests that are vectored by them. Asian honey bees are the natural host for the *Varroa destructor* and *Varroa jacobsoni*—species of parasitic mites that feed on the immature and adult bees. Where these mites have become established, they have been known to kill out European honey bee colonies. Fortunately, these mites are not known to occur on bees in Australia.

Asian honey bee Java genotype drones are also capable of mating with European honey bee queens, which may reduce the population fitness of European bees. The mating of AHB and European honey bee queens may also have implications for the domestic and international trade of queen bees and genetic material.

Asian honey bees were detected in 2007 in Queensland and Biosecurity Queensland conducted an eradication program in response to the incursion. In January 2011, the National Management Group agreed that the pest was no longer technically feasible to eradicate and a nationally funded Ttransition to Management program commenced, with the intent to help Queenslanders to learn to live with AHB Java genotype. The management program was completed in June 2013.

The established population of AHB Java genotype in north Queensland has not introduced any new pests into Australia. However, should an incursion of an infested population occur, it could spread quickly within the existing population.

AHB Java genotype spreads naturally through swarming and absconding. Up to 10 swarms per year can occur, and swarms have been reported to travel up to 10 km from the original colony. Nests and swarms have been found on boats, trains, trucks and shipping cargo. This can be an effective means of spread over large distances.

To minimise the movement of AHB Java genotype, the *Exotic Diseases in Animals (Asian Honey Bee) Notice 2010* (the Notice) establishes a restricted area for AHB. The restricted area is made up of the localities and suburbs prescribed under section 5 and listed in the schedule to the Notice. The movement of a bee into the restricted area, and moving a bee, bee product or mechanical vector within, or out of, the restricted area is restricted. A permit may be issued for the movement of bees, bee products or mechanical vectors.

The restricted area was also to be removed in June 2013; however, it was kept in place while trade negotiations were held with Canada. These are now complete and Canadian trade conditions do not require a restricted area. However, industry still believes that the presence of a restricted area will aid subsequent overseas trade negotiations (e.g. with the United States of America).

The current regulatory restrictions are being questioned because they may not be the most effective and efficient method of minimising the biosecurity risks associated with AHB Java genotype.

3. Objective of government intervention

3.1 Objectives

Part A of the Consultation RIS focused on the regulatory biosecurity control measures for cattle ticks and pests of bananas, mangoes and bees. The policy objectives of the regulatory proposals contained in the Consultation RIS are to:

- ensure that the applicable biosecurity control measures are appropriate given the nature of the pest or disease (i.e. can the pest or disease be restricted or quarantined to an area of Queensland)
- ensure that the applicable biosecurity control measures are appropriate given the identified vectors for spreading the pest or disease
- enable the effective management of endemic pests and diseases by applying biosecurity control measures that are commensurate with risk
- ensure that the applicable biosecurity measures are consistent with industry best practice and the Queensland Government's commitment to reducing unnecessary regulatory burdens on business.

The preferred policy option will be the option that best achieves the policy objectives and provides the greatest net benefits to the community.

3.2 Authorising provision

The implementation of any biosecurity regulations will be consistent with the objectives of the new *Biosecurity Act 2014* to manage the impacts of animal and plant diseases, and pests in a timely and effective way and ensure the safety and quality of animal feed, fertilisers and other agricultural inputs. Section 503 of the Biosecurity Act provides the regulation-making power and what can be declared in a regulation, and section 503(1) gives the Governor in Council the power to make regulations.

4. Options to achieve the objectives

PART A Options for cattle ticks and pests of bananas, mangoes and bees

This section of the RIS provides issues for which there are options to meet the biosecurity objectives. The options may include regulatory and non-regulatory approaches. In considering the options presented, it is necessary to understand the tools available under the Act and how they can be used:

General biosecurity obligation

The Biosecurity Act applies a general biosecurity obligation (GBO) on everyone to take all reasonable steps to prevent or minimise a biosecurity risk. It is an offence to knowingly not comply with the GBO. The GBO applies to all biosecurity matter, which includes any living thing (other than a human), a pathogenic agent that can cause disease in plants, animals or zoonoses, a disease or a contaminant.

Given the GBO, it is not necessary to list all pests and diseases under the new Act to require a person to take an action on a pest or disease. It is also unnecessary to regulate specific requirements to minimise risk associated with a pest or disease, as the GBO would apply and require a person to take reasonable steps to prevent or minimise a biosecurity risk associated with a pest or disease.

Biosecurity zone

Under the Act a regulation can be made to establish a biosecurity zone. The purpose of a biosecurity zone is to create an area in Queensland in which restrictions on the carrier of biosecurity matter may be prescribed. This is desirable to ensure that where a biosecurity risk is identified in relation to particular biosecurity matter, it may be controlled by way of restricting the movement, sale, production or cultivation of a carrier of the regulated biosecurity matter. A biosecurity zone could be as large as the whole of Queensland, or as small as a local government area or a number of properties. Biosecurity zones are designed to be in place for the long term to deal with a specific risk that is isolated to a particular area of the state.

Biosecurity program

Under the Biosecurity Act, the chief executive or a local government may implement a biosecurity program for surveillance or prevention and control. A surveillance program is implemented to determine the extent of the presence of a biosecurity threat, monitor the effects of responses to a biosecurity risk, confirm the absence of a biosecurity threat, or to monitor compliance with the Act. A prevention and control program can prevent the entry, establishment or spread of a biosecurity threat in an area or manage, control or eradicate a biosecurity threat.

Code of practice

Under the Biosecurity Act, a regulation may make a code of practice about matters relating to biosecurity. For example, a code of practice could be made about appropriate land-use practices that must be used to prevent or minimise the spread of invasive animals and

invasive plants. A code of practice could also be made about the requirements that a person must comply with to meet their general biosecurity obligation. This could either be made as regulatory provisions or a regulation could adopt a code of practice. Alternatively, industry could make a code of practice about a particular matter that include a method(s) of how to minimise or not exacerbate a biosecurity risk. In this case, however, it would not be a mandatory requirement.

Guideline

A guideline outlines procedures which can help persons discharge their obligations under the Biosecurity Act. Guidelines are made by the chief executive in consultation with relevant entities. As opposed to a code of practice, a person will not be presumed to have failed to discharge the person's general biosecurity obligation because the person has failed to follow a guideline.

Biosecurity certificates

The *Plant Protection Regulation 2002* contains a range of pest quarantine areas (PQAs) that restrict the movement of pests and diseases and their carriers into, out of, or within a PQA. However, an exemption applies to those movement restrictions if a person obtains an inspector's approval. An inspector's approval would be conditional on the person having mitigated the risks of a pest or disease spreading through the movement.

Under the new Biosecurity Act, the PQAs will be transitioned as biosecurity zones. Similar restrictions will apply on the movement of pests and diseases and their carriers into, out of, or within, a zone. However, there is no capacity under the Biosecurity Act to provide exemptions through an inspector's approval. Instead, the Biosecurity Act will permit a person to move a thing if it meets certain requirements and this will be evidenced by an acceptable biosecurity certificate.

A biosecurity certificate may be issued by either an authorised officer under the Biosecurity Act or a private person under an appropriate accreditation. A biosecurity certificate could, for example, state that the movement item is free of the relevant pest or disease, that the item has been subject to a stated treatment, or it meets a required standard stated in an accreditation.

Table 2: Options for banana biosecurity zones

Issue: Pest quarantine areas	Option 1—Status quo	Option 2—More targeted zones
Currently there are six PQAs for bananas that cover north Queensland and the east coast of Queensland. They are: - Far Northern PQA - Northern buffer PQA - Northern PQA - Southern buffer PQA - Special PQA - Southern PQA.	Maintain and transition the PQAs as biosecurity zones. Restrictions would apply on moving plants and risk items into, out of or within each zone. Overall, the concept of having six zones is to minimise the potential for pests and diseases to be moved from one region to another. However, the Far Northern PQA is	Maintain and transition the Far Northern and Southern PQAs as biosecurity zones, with the same restrictions as per option 1. The rationale for keeping these zones is the same as provided in option 1. The Northern PQA, Southern buffer PQA and Special PQA no longer function to control endemic strains of Panama disease, which have now become widespread.

These PQAs are designed to minimise the potential for spreading pests by restricting the movement of plants and appliances between and within the areas. In that regard, a person must treat their plants and appliances in specified ways to lawfully move them. PQAs are generally applied to keep one or more pests in an area or to keep pests out of an area. The current PQAs have been incrementally implemented over a long period of time and the rationale for them may not still be relevant.	necessary for containment and eradication of black sigatoka incursions from the Torres Strait, as previous incursions have historically started on the mainland in the Northern Peninsula area (tip of Cape York). The only black sigatoka detections in the Northern buffer PQA and the Northern PQA were likely linked to incursions already present in the Far Northern PQA. The Northern buffer PQA provides a buffer between the Far Northern PQA where black sigatoka is found and the Northern PQA in which over 90 per cent of Australia's bananas are produced. The buffer provides a spatial safety margin, and defined area for surveillance and containment activities for black sigatoka. The Southern PQA provides for containment of the banana bunchy top virus (BBTV). BBTV has been effectively contained within the current boundaries of the Southern PQA since at least 1986 and has not expanded its range significantly from the 1948 PQA boundaries. Movement restrictions on banana plants would still apply within the PQA, as well as out of the PQA, given that there are areas of the PQA remaining BBTV-free. The Special PQA provides a buffer between the Southern PQA that contains BBTV and the rest of Queensland. The buffer provides a spatial safety margin and defined area for surveillance and containment activities for BBTV. The Northern PQA covers the main banana-growing region and provides some protection from pests being moved into the region.	A further biosecurity zone is proposed for the main banana-growing area that covers from approximately 40 km north of Cooktown, directly west to Lakeland, then directly south to 40 mile Scrub National Park and directly east to Cardwell. The zone would cover over 90 per cent of the Australian banana production area and would protect pests from moving into it rather than the Far Northern and Southern PQAs that are designed to stop pests moving out.. In that regard, restrictions on moving plants and risk items into the zone would apply. Under the further biosecurity zone, restrictions would apply on planting varieties. In addition, greater concentrated surveillance could be possible in a partnership between industry and government. Industry could also enact best practice measures for use of indexed vegetative and tissue cultured planting material. The Northern, Northern buffer Special, Southern buffer and PQAs would be removed and, instead, the GBO would be used to restrict the movement of plants and risk items that are carriers of pests. Fact sheets, which will outline how a person may discharge their biosecurity obligation, will be published by the department.

Table 3: Options for banana leafspot treatment

Issue: Treatment requirement for yellow sigatoka	Option 1—Status quo	Option 2—No regulatory treatment method
Currently, if a person has yellow sigatoka or leaf speckle (collectively referred to as leafspot) on their banana plants above prescribed levels for the PQA, they must treat the plants in the way provided by the regulation. The regulation states that a plant requires treatment in the Northern PQA if the infestation covers more than 5 per cent of the leaf. For other PQAs, treatment is required if the infestation is more than 15 per cent from November to May, or 30 per cent from June to October. Both yellow sigatoka and leaf speckle are endemic across much of Queensland and, according to the pest risk analysis, are therefore not quarantine pests (i.e. they cannot be effectively quarantined). While it is important that landowners continue to treat plants that are infested with yellow sigatoka and leaf spot, there are alternative solutions to applying current regulatory provisions.	Maintain and transition the requirement to treat plants in a specified way in relation to yellow sigatoka and leaf spot. Yellow sigatoka is a disease that must be controlled on individual farms, otherwise the disease can get out of control at a regional level. While yellow sigatoka is problematic, it does not have as much of an impact on the industry as black sigatoka does. Yellow sigatoka can mask the early symptoms of black sigatoka. When levels of the pest get above 30 per cent, the fruit start ripening on the plant and mixed ripeness occurs. This can impact on whole consignments. The pathogen can develop resistance rapidly to controlling systemic and curative fungicides, and de-leafing, and keeping leaf levels below 5 per cent in the wet tropical Far North PQA contributes to lengthening the life of the chemistries used and minimises the number of sprays required (environmental and community effects). Spores of the fungus are readily spread from one farm to another. Consequently, those growers treating their plants can have them continually being infected by another nearby grower who is not treating their plants. The current treatment methods are effective at controlling the disease, as long as the timing is right. Pathologists advise that the recalcitrant landowners may be small in proportion; however, they can play a major role in the spread of disease and in the development	Discontinue regulating treatment requirements for yellow sigatoka and leaf spot. Under this option, industry would be responsible for ensuring they are meeting their general biosecurity obligation (GBO) to not exacerbate a biosecurity risk. Growers should be dealing with yellow sigatoka and leaf spot as part of their on-farm best management practices. The GBO will give greater flexibility for the management of biosecurity matter, allowing government to take appropriate action commensurate with the biosecurity risk. There is an obligation under the Act for shared responsibility for biosecurity risk, with industry best placed to manage the medium to low biosecurity risks, and government best placed to manage high-level biosecurity risks. There are already industry best practice systems for the management of leafspot, which include the use of protectant fungicides and de-leafing, which integrate and help extend the life of systemic and curative fungicides. Government resources are finite and are usually directed at higher risk areas. If there was a desire to adequately resource an appropriate level of prescriptive enforcement commensurate with the restrictions, there would be a need to significantly increase the level of funding, or redirect resources from the high-risk matters. The leaf spot

	of resistant fungal populations.	regulations were developed specifically to regulate an endemic pest of production and funds to do so were provided by the banana industry under the (repealed) state banana industry levies. No other plant industry has its non-quarantine foliar plant pests prescriptively regulated by the state government, and the community norm for landowners is to be compliant. Non-compliance by commercial banana growers is typically caused by economic pressures post-cyclone recovery or low price cycles, to which the industry could choose to provide or not provide assistance. Rapid diagnostics allow for differentiation of black sigatoka from yellow sigatoka in confusing situations and industry could opt to continue to conduct a voluntary surveillance program of production areas in instances where landowners are not meeting their GBO. Other industries have demonstrated that it is possible to have long-term sustainable collective action systems to manage serious pests of production, which can operate with minimal or no government intervention. An example is the Area Wide Management of fruit flies in the Central Burnett. Government has the capacity under the GBO to require a person to do things that minimise the risk of biosecurity matter spreading. Education and awareness are effective tools to encourage compliance with the GBO and the BQ website can provide information on what people should do to minimise the risk of yellow sigatoka.

Table 4: Options for residential banana planting

Issue: Restrictions on plant numbers and species grown for residential purposes	Option 1—Maintain residential restrictions on planting numbers and varieties in the Far Northern and Southern zones, as well as the main banana-growing region	Option 2—Discontinue residential restrictions on planting numbers and varieties except for the main banana-growing region and the Far Northern zone for varieties
The regulation restricts the number of banana plants that a person may grow on their land for non-commercial purposes. A person must not grow more than ten plants or 30 pseudostems. In addition, the regulation details the varieties of banana plants that may be grown in each of the current PQAs. The rationale for these regulations is to minimise the potential for spread of disease through greater host pathways in relation to the numbers, and to minimise the potential for spreading black sigatoka in relation to the species restriction. The rationale for both of these regulations may be relevant in some areas of Queensland but not in others.	Maintain the restrictions that a person must not grow more than ten banana plants or 30 pseudostems of a listed variety that is black sigatoka resistant in the Far Northern and Southern biosecurity zones, and the main banana-growing region. ***Far Northern biosecurity zone*** Black sigatoka is present in the Torres Strait and could easily move to the mainland. While it is not practical to remove all banana plants between the Torres Strait and the main banana-producing region of north Queensland, the risk of black sigatoka spreading can be minimised by having a 'buffer' of resistant plants in the Far Northern biosecurity zone. In this regard, the current list of resistant plants will need reviewing to ensure that resistance has not broken down. In relation to the restriction on numbers, potentially there are a range of pests that could move from the Torres Strait onto the mainland, including moko, Tropical Race 4 and eumusae leaf spot. By limiting the number of plants that may be present and not managed, there is a means to reduce the risk of the exotic pests having a host to establish on, and on which inoculum can build up, leading the higher probability of establishment in banana plants in the current Far Northern and Northern buffer zones. Limiting the numbers of residential plants allowed will provide greater efficiency during eradication programs. Exemptions could be given to communities who grow banana plants for food security self-sufficiency.	Discontinue the restrictions that a person must not grow more than ten banana plants or 30 pseudostems of a listed variety that is black sigatoka resistant in the Far Northern and Southern biosecurity zones, but maintain them in the main banana-growing region. ***Far Northern biosecurity zone*** While black sigatoka is present in the Torres Strait and could easily move to the mainland, there is no method to determine the minimum number of plants that would mitigate the risk of black sigatoka spreading in the Far Northern biosecurity zone. Due to the dry monsoonal tropics environment and water constraints, which is poor for growing banana plants, and the sparse residential settlements in the region, it is unlikely that removing the planting number restriction would impact on the overall number of banana trees in the region. Remote communities in the Far Northern zone already bear the agronomic penalties such as lower yield and wind susceptibility characteristics of many of the black sigatoka resistant varieties that may be planted. Under the *Queensland Plan* all communities should have a right to be diverse, economically prosperous and healthy. There is a renewed interest by Indigenous communities to sell, trade or gift

	Southern biosecurity zone Restricting numbers of banana plants for residential plantations will provide greater efficiency for the detection of and containment/eradication of banana bunchy top. Number restrictions will assist in reducing the potential for host bridging by the aphid vector particularly along the increasing conurbated north-eastern boundary of the Southern PQA.	cooking and dessert bananas within their local areas. Removing plant number caps is essential for this to be realised. ***Southern biosecurity zone*** Restricting numbers of banana plants for residential plantations in the southern PQA would be unenforceable, as the area is very large and highly conurbated, and would place a significant regulatory burden on a large section of the Queensland community (up to ~3.05m people, ABS 2012). Urban or suburban landowners on standard residential blocks would be too space limited and therefore unlikely to plant their entire land area with banana plants. Instead, the biosecurity risk could be managed by targeted surveillance, and education and awareness at the high-risk north-eastern boundary of the Southern PQA.

4.3.2 Cattle ticks

Background

The *Stock (Cattle Tick) Notice 2005* (the Notice) is very prescriptive in how stock may be moved between the cattle tick zones, and movement restrictions can be onerous and confusing for stock moving from the infected zone to the free zone. The Notice requires most stock movements be subject to treatment with chemical (acaracides) and inspection prior to movement. Control zones also exist along the borders of the infected and free zones. A control zone is an area which is marginal for survival of ticks but can become infected when seasonal conditions are favourable.

Questions have been raised as to whether some of the restrictions under the Notice are necessary or whether parts could be removed to reduce regulatory burden. Generally, cattle pose a high risk of moving ticks. However, restrictions under the Notice are particularly onerous for horse owners, because treatment of horses with acaracides is difficult and often ineffective. Horses are considered a secondary species for ticks, and well-groomed horses are considered at very low risk of spreading ticks.

Biosecurity Queensland worked with industry to determine options for managing cattle tick in Queensland. There was a preference to also include a non-regulatory option. However, under the Act, the general biosecurity obligation will always operate, as it imposes an obligation on everyone to take an active role in minimising biosecurity risks and cannot be

excluded. Therefore, the third option is the closest to a non-regulatory option as is possible under the Act.

Table 5: Options for cattle tick management outlined in the Consultation RIS

Issues	Option 1: Maintain status quo	Option 2: Establish two zones	Option 3: Rely on the general biosecurity obligation
Cattle tick zones - Cattle tick free zone - Cattle tick control zones - Cattle tick infected zone	Maintain the current three zones (infected, free and control), and restrictions and exemptions for movements of primary and secondary host species between these zones. The current regulations prescribe compulsory treatment for stock movements, including prescribed timeframes for stock treatments, physical inspection of stock and supervised treatment of stock.	Establish two biosecurity zones (Cattle tick biosecurity free zone and cattle tick biosecurity infected zone) ***Primary host species (cattle, buffalo and deer)*** Travel within the biosecurity infected zone will be unrestricted. Travel within the biosecurity free zone will be unrestricted unless the property of origin is infected, in which case the animals will need to be tick-free before movement to the destination. Travel from the biosecurity infected zone or an infected property in the biosecurity free zone to a property in the free zone (including an abattoir and feed lot) will require the animals to be tick-free before movement to the destination. Outbreaks on properties in the biosecurity free zone must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders. ***Secondary host species (camelids, donkeys, goats,***	Rely only on the general biosecurity obligation. No prescribed zones but the natural tick line which occurs at the 500 isohyet would be used as an indication of where tick infestations are more likely to occur. A map published by the department would indicate where the 500 isohyet line is. The person responsible for moving the animals must discharge their general biosecurity obligation by ensuring they do not aggravate a biosecurity consideration.The requirement for treatment will be based on risk. The person responsible for moving the animals must undertake appropriate measures before leaving a tick-infected area or property to go to a tick-free area. Treatment methods which may be used will be provided by the department in fact sheets published on the departmental website. Outbreaks of ticks on properties in areas which are generally in tick-free areas must be managed by those responsible for managing the property. Failure to manage the

		horses, mules and sheep) Animals must be tick-free if moving from the biosecurity infected zone or an infected property to the biosecurity free zone. The person moving the animals will be responsible for inspecting the animals to ensure they are tick-free. If the animals are infected, the most appropriate treatment method may be selected. Fact sheets will provide methods for inspection and appropriate treatments	outbreak appropriately may be dealt with through the use of biosecurity orders.

Inspection and treatment requirements for moving primary host species[2]			
Movement into the free zone or control zone from the infected zone	Animal movements from these zones are regulated and must undertake a three-step treatment process: 1) Preliminary treatment[3] of animals must be undertaken before leaving the infected zone. 2) Presentation of animals at a clearing facility in the infected zone or presentation of animals in the control or free zone if moved by direct conveyance, under a travel permit and not less than 4 days after preliminary treatment. 3) Animals must pass a clean inspection and undergo a supervised treatment at a clearing facility before they can continue their travel. The clean inspection and supervised treatment must be completed not less than 4 days after preliminary treatment.	Animals must be free of ticks prior to leaving the infected zone. The person responsible for the movement may choose the treatment method. Guidance on the appropriate treatments and methods of treatment will be provided by the department in fact sheets published on the departmental website. Records of the treatments will be required to be kept.	The requirement for treatment will be based on risk. The person responsible for moving the animals must undertake appropriate measures before leaving a tick-infected area to go to a tick-free area. Treatment methods that may be used will be provided by the department in fact sheets published on the departmental website. Outbreaks of ticks on properties in tick-free areas must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.

[2] Section 3(1)(a) of the Notice defines primary hosts species as buffalo, cattle and deer.
[3] Preliminary treatment means doing any of the following that can reasonably be expected to ensure they are tick-free-when presented-: dipping, spraying or other treatment with an approved chemical or an approved non-chemical treatment.

Movement within the free and control zone from infected property[4] undergoing approved program (includes at high-risk property[5])	Movement of animals from an infected property is regulated. Animals must undergo a supervised preliminary treatment, plus a clean inspection followed immediately by supervised treatment not less than 4 days after preliminary treatment. Infected properties must undertake an approved program. Approved programs are programs for the eradication or control of cattle tick which are approved by the chief inspector of stock. Properties can be designated as high risk if the chief inspector considers there is a high risk of cattle tick being on the property. A high-risk status means the animals are subject to greater restrictions.	There will be no approved programs. Outbreaks of ticks on properties in the free zone must be managed appropriately. Animals must be free of ticks prior to leaving an infected property. The person responsible for the movement may choose the treatment method. Guidance on methods of appropriate treatment will be provided in fact sheets. Outbreaks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders. Records of the treatments will be required to be kept.	The requirement for treatment will be based on risk. The person responsible for moving the animals must undertake appropriate measures before leaving a tick-infected area or property to go to a tick-free area. Treatment methods which may be used will be provided by the department in fact sheets published on the departmental website. Outbreaks of ticks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.
Movement from an infected property undergoing an approved program in the free zone or a control zone	Animals being moved by direct conveyance to an infected zone must have a clean inspection. If animals are being moved by direct conveyance on an approved route there are no requirements. For all other movements a clean inspection is required, followed immediately by supervised treatment. *Exemptions* Movements are exempt from preliminary treatment if the movement is a direct conveyance to an infected zone using an approved route or to an adjacent	There will be no approved programs. Outbreaks of ticks on properties in the free zone must be managed appropriately. Animals must be free of ticks prior to leaving the infected property if they are travelling to the free area. The person responsible for the movement may choose the treatment method. Guidance will be provided in fact sheets. Outbreaks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of	The requirement for treatment will be based on risk. The person responsible for moving the animals must undertake appropriate measures before leaving a tick-infected property to go to a tick free property or area. Treatment methods which may be used will be provided by the department in fact sheets published on the departmental website. Outbreaks of ticks on properties must be managed by those responsible for managing the property. Failure to manage the

[4] Infected property means a property which has been decided to have an infected status because of the presence of cattle tick.
[5] 'High risk' property that is not infected but the chief inspector has decided is at high risk of cattle tick being on the property.

	infected zone without passing through another property in the free or control zone or a travel permit has been issued.	biosecurity orders.	outbreak appropriately may be dealt with through the use of biosecurity orders.
Movement from an infected property not undergoing an approved program in the free zone or a control zone	Animals moving by direct conveyance from a control to an infected area without passing through a free zone require a clean inspection only. Animals moving from a property in the control zone which adjoins an infected zone to an infected zone without passing through the control zone do not require any procedures. For all other movements a supervised preliminary treatment and clean inspection immediately followed by a second supervised preliminary treatment not less than 4 days of the first treatment is required.	There will be no approved programs. Outbreaks of ticks on properties in the free zone must be managed appropriately. Animals must be free of ticks prior to leaving the infected property. The person responsible for the movement may choose the treatment method. Guidance will be provided in fact sheets. Outbreaks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.	The requirement for treatment will be based on risk. The person responsible for moving the animals must undertake appropriate measures before leaving a tick-infected property to go to a tick-free property or area. Treatment methods which may be used will be provided by the department in fact sheets published on the departmental website. Outbreaks of ticks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.
Movement to approved meat works[6]	Movement to an approved meat works is exempt from the requirement for preliminary treatment if all conditions of the approval of the meat works are complied with and at least one of the following applies: o The movement is a direct conveyance from an at risk(high) property or an at risk (low) property in a control or free zone; o the stock have at any place had a visually clean inspection and dipping or clean inspection;	Steps must be taken to ensure there is minimal risk of the spread of ticks prior to moving animals direct to an abattoir if the animals have originated from the infected zone or an infected property in the free zone, and the abattoir is in the free zone or if there is travel through the free zone to get to an abattoir in the infected zone. The animals may be moved on any route but must be slaughtered within 5 days of arrival. The animals must not be released to a holding paddock prior to slaughter. The animals must be kept on a hard surface while at	The requirement for treatment will be based on risk. The person responsible for moving the animals must undertake appropriate measures before leaving a tick-infected area or property to go to a tick-free area. Treatment methods which may be used will be provided by the department in fact sheets published on the departmental website. Outbreaks of ticks at an abattoir if the abattoir is in the free zone will have to be managed by those

[6] The chief inspector may approve a meat works if it is an accredited meat works and is in the free or control zone, and has a hard standing area that allows stock held for slaughter to be held there continuously or it is in the infected zone or it is in another state and has been approved under a designated interstate arrangement.

	o the movement is from an infected property in a control or free zone and is not undertaking an approved program, and the stock have had a supervised treatment followed by a clean inspection; o the movement is by direct conveyance using an approved route to a meat works in an infected zone; o a travel permit has been given for the movement and all conditions of the permit have been complied with. The chief inspector may approve a meat works as an approved meat works if it is an accredited meat works[7] and: • it is in the free zone or control zone and has a hard standing area that allows stock held for slaughter to be continuously held in the area; or • it is in the infected area; or • it is in another state and has been approved under a designated interstate arrangement.	the abattoir. Meat works will not be 'approved'. Outbreaks of ticks at an abattoir if the abattoir is in the free zone will have to be managed by those responsible for the abattoir. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.	responsible for the abattoir. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.

[7] 'Accredited meat works' means a meat works operated by an entity holding an accreditation under the *Food Production (Safety) Act 2000* authorising the holder to process meat at the meat works.

Movement to a controlled[8] meat works	Meat works can apply to be a 'controlled' meat works. The chief inspector may approve a meat works as a controlled meat works if it is an accredited meat works and the chief inspector is satisfied there is a low risk of cattle tick escaping from it to another holding. Movement to a controlled meat works is exempt from the requirement for preliminary treatment if either the animals are from the Queensland infected zone or an infected property undergoing an approved program; or an at risk (high) or at risk (low) property in any zone if: o They are from an infected zone and the movement is a direct conveyance to the meat works using an approved route; and o From when they are unloaded at the meat works they are held continuously on a hard standing area; and They are to be slaughtered within 5 days of arrival; and all conditions of the approval of the meat works applying to the movement are complied with.	Steps must be taken to ensure there is minimal risk of the spread of ticks prior to moving animals direct to an abattoir if the animals have originated from the infected zone or infected property in the free zone, and the abattoir is in the free zone or if there is travel through the free zone to get to an abattoir in the infected zone. Abattoirs will not be prescribed as 'controlled'. All abattoirs will be subject to the same requirements. Outbreaks of ticks at an abattoir if the abattoir is in the free zone will have to be managed by those responsible for the abattoir. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.	The requirement for treatment will be based on risk. The person responsible for moving the animals must undertake appropriate measures before leaving a tick-infected area or property to go to a tick-free area. Treatment methods that may be used will be provided by the department in fact sheets published on the departmental website. Outbreaks of ticks at an abattoir if the abattoir is in the free zone will have to be managed by those responsible for the abattoir. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.
Movement of cattle to a feedlot[9]	The chief inspector may approve a feedlot for cattle, goats or sheep as an approved feedlot if the chief inspector is satisfied there is	Steps must be taken to ensure there is minimal risk of the spread of ticks prior to moving animals direct to a feedlot if the animals have	The requirement for treatment will be based on risk. The person responsible for

[8] The chief inspector may approve a meatworks as a controlled meat works if it is an accredited meatworks and the chief inspector is satisfied there is a low risk of cattle tick escaping from it to another holding.

[9] The chief inspector may approve an EPA licensed feedlot as a controlled cattle feedlot if the chief inspector is satisfied there is a low risk of cattle tick escaping from it.

	a low risk of stock in the feedlot being exposed to cattle tick and the feedlot is a licensed feedlot situated in the infected zone. The chief executive may approve a licensed feedlot as a controlled cattle feedlot if the chief executive is satisfied there is a low risk of cattle tick escaping from it. Movement of cattle from an approved feedlot is exempt from the requirement for preliminary treatment if the animals have been in the feedlot for a continuous period of 35 days and the movement is a direct conveyance to an approved or controlled meat works or a controlled sale yard, and all the conditions of the approval of the feedlot applying to the movement are met. Movement to a class 1[10] controlled cattle feedlot is exempt if: o The property on which the feedlot is located is not an infected property or is undergoing an approved program; and o If the stock are from an infected zone they have at any place had an unsupervised plunge dipping before entering the feedlot; and o All conditions for the approval of the feedlot applying to the movement are complied with. A movement of stock to a class 2[11] controlled cattle	originated from the infected zone or an infected property in the free zone, and the feedlot is in the free zone or if there is travel through the free zone to get to a feedlot in the infected zone. Feedlots will not be determined as 'controlled' or 'approved'. The requirements will apply to movement from the infected zone or infected property to all feedlots in the free zone. Outbreaks of ticks at a feedlot if the feedlot is in the free zone are to be managed. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders. Animals moving from the feedlot must be tick-free if they are travelling to any property in the free area.	moving the animals must undertake appropriate measures before leaving a tick-infected area or property to go to a tick-free area. Treatment methods that may be used will be provided by the department in fact sheets published on the departmental website. Outbreaks of ticks in feedlots must be managed by those responsible for managing the feedlot. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.

[10] Class 1 controlled cattle feedlot means a controlled cattle feedlot in the control zone.
[11] Class 2 controlled cattle feedlot means a controlled cattle feedlot in the free zone.

	feedlot is exempt if: o The property on which the feedlot is located is not an infected property or is undergoing an approved program; and o if the stock are from an infected zone, within 96 hours before entering the feedlot they have had a visually clean inspection and a supervised plunge dipping at a clearing facility; and o all conditions of the approval of the feedlot applying to the movement are complied with.		
Movements to a controlled sale yard	Sale yards can apply to be considered 'controlled sale yards'. The chief inspector may approve a sale yard as a controlled sale yard if the chief inspector is satisfied there is a low risk of cattle tick escaping from it to another holding. The movement of stock to a controlled sale yard is exempt if the controlled sale yard is in the control or free zones and all conditions of the approval of the sale yard applying to the movements has been complied with.	Animals must be free of ticks prior to leaving the infected zone or an infected property in the free zone if the destination sale yard is in the free zone. The person responsible for the movement may choose the treatment method. Guidance will be provided in fact sheets. If the sale yard is in the infected zone and the animals originate in the infected zone but do not pass through the free zone then no treatment is required. If the animals are to be moved into the free zone from a sale yard in the infected zone, the animals must be tick free before they are moved. Ticks on animals that are in a sale yard in the free zone must be managed appropriately by those responsible for managing the sale yard. Failure to manage the outbreak	The requirement for treatment will be based on risk. The person responsible for moving the animals must undertake appropriate measures before leaving a tick-infected area or property to go to a tick-free area. Treatment methods that may be used will be provided by the Department in fact sheets published on the departmental website. Ticks on animals in sale yards that are in the free zone must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.

		appropriately may be dealt with through the use of biosecurity orders.	
Inspection and treatment requirements for moving secondary host species[12]			
Movement into the free zone or control zone from infected zone	Presentation at a clearing facility in the infected zone, or presentation in the control or free zone if moved by direct conveyance, under a travel permit. Clean inspection and supervised treatment at clearing facility.	Animals must be tick-free if moving from the infected zone to the free zone. The person moving the animals will be responsible for inspecting the animals to ensure they are tick-free. If the animals are infected, the most appropriate treatment method may be selected. Fact sheets will provide methods for inspection and appropriate treatments. Outbreaks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.	The requirement for treatment will be based on risk. The person responsible for moving the animals must undertake appropriate measures before leaving a tick-infected area or property to go to a tick-free area. Treatment methods that may be used will be provided by the department in fact sheets published on the departmental website. Outbreaks of ticks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.
Movement within the free and control zone			
From infected property undergoing approved program	Clean inspection followed immediately by supervised treatment	There will be no approved programs. Outbreaks of ticks on properties in the free zone must be managed appropriately. Animals must be tick-free if moving from an infected property to the free zone. The person moving the animals will be responsible for inspecting the animals to ensure they are tick-free. If the animals are infected, the most appropriate treatment method may be selected. Fact sheets will provide methods for inspection and appropriate treatments.	The requirement for treatment will be based on risk. The person responsible for moving the animals must undertake appropriate measures before leaving a tick-infected area or property to go to a tick-free area. Treatment methods that may be used will be provided by the department in fact sheets published on the departmental website. Outbreaks of ticks on properties must be managed by those responsible for managing the property.

[12] Section 3(1)(b) of the Notice defines secondary host species as camelids, donkeys, goats, horse, mules and sheep.

		However, outbreaks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.	Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.
From an infected property not undergoing an approved program	Clean inspection followed immediately by supervised treatment.	There will be no approved programs. Outbreaks of ticks on properties in the free zone must be managed appropriately. Animals must be tick-free if moving from an infected property to a non-infected property in the free zone. The person moving the animals will be responsible for inspecting the animals to ensure they are tick-free. If the animals are infected, the most appropriate treatment method may be selected. Fact sheets will provide methods for inspection and appropriate treatments. Outbreaks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.	The requirement for treatment will be based on risk. The person responsible for moving the animals must undertake appropriate measures before leaving a tick-infected area or property to go to a tick-free area. Treatment methods that may be used will be provided by the department in fact sheets published on the departmental website. Outbreaks of ticks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.
From at risk (high) property	For stock other than goats or sheep, the required procedure is a clean inspection followed immediately by supervised treatment. For goats and sheep the required procedure is a clean inspection. However, a clean inspection is not required for goats or sheep in a consignment moved by direct conveyance to an accredited meat works if at the meat works the	There will be no approved programs. Outbreaks of ticks on properties in the free zone must be managed appropriately. Animals must be tick-free before moving to a property in the free zone. The person moving the animals will be responsible for inspecting the animals to ensure they are tick-free. If the animals are infected, the most appropriate treatment method may be selected.	The requirement for treatment will be based on risk. The person responsible for moving the animals must undertake appropriate measures before leaving a tick-infected area or property to go to a tick-free area. Treatment methods that may be used will be provided by the department in fact sheets published on the departmental website.

	animals are not mixed with other stock and are held in a hard standing area, and the animals are to be slaughtered within 5 days of arrival.	Fact sheets will provide methods for inspection and appropriate treatments. Outbreaks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.	Outbreaks of ticks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.
From an at risk (low) property	No required procedure	There will be no approved programs. Outbreaks of ticks on properties in the free zone must be managed appropriately. Animals must be tick-free before moving the animal. The person moving the animals will be responsible for inspecting the animals to ensure they are tick-free. If the animals are infected, the most appropriate treatment method may be selected. Fact sheets will provide methods for inspection and appropriate treatments. Outbreaks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.	The requirement for treatment will be based on risk. The person responsible for moving the animals must undertake appropriate measures before leaving a tick-infected area or property to go to a tick-free area. Treatment methods that may be used will be provided by the department in fact sheets published on the departmental website. Outbreaks of ticks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.
Movement from the free and control zone			
Stock moving from an infected property undergoing an approved program	For stock moving by direct conveyance to an infected zone, the required procedure is a clean inspection. However, a clean inspection is not required if an approved route is used for the conveyance. For all other movements, the	There will be no approved programs. Outbreaks of ticks on properties in the free zone must be managed appropriately. Animals must be tick-free if moving from the infected zone to the free zone. The person moving the animals will be responsible for	The requirement for treatment will be based on risk. The person responsible for moving the animals must undertake appropriate measures before leaving a tick-infected area or property to go to a tick-free area.

	required procedure is a clean inspection followed immediately by supervised treatment.	inspecting the animals to ensure they are tick free. If the animals are infected, the most appropriate treatment method may be selected. Fact sheets will provide methods for inspection and appropriate treatments. Outbreaks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.	Treatment methods that may be used will be provided by the department in fact sheets published on the departmental website. Outbreaks of ticks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.
Stock moving from an infected property not undergoing an approved program	For stock moving by direct conveyance from a control zone to an infected zone without passing through a free zone, the required procedure is a clean inspection. If the property adjoins an infected zone and is in a control zone and the stock are moved from the property to the infected zone without passing through another part of the control zone, there is no required procedure.	There will be no approved programs. Outbreaks of ticks on properties in the free zone must be managed appropriately. Animals must be tick-free if moving from the infected zone to the free zone. The person moving the animals will be responsible for inspecting the animals to ensure they are tick free. If the animals are infected, the most appropriate treatment method may be selected. Fact sheets will provide methods for inspection and appropriate treatments. Outbreaks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.	The requirement for treatment will be based on risk. The person responsible for moving the animals must undertake appropriate measures before leaving a tick-infected area or property to go to a tick-free area. Treatment methods that may be used will be provided by the department in fact sheets published on the departmental website. Outbreaks of ticks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.
Stock moving from a risk(high) property	No required treatment for stock moved by direct conveyance to an infected zone For movements other than sheep and goats, the required procedure is a	There will be no approved programs. Outbreaks of ticks on properties in the free zone must be managed appropriately. Animals must be tick-free if moving to the free zone. The person moving the animals	The requirement for treatment will be based on risk. The person responsible for moving the animals must undertake appropriate measures before leaving a tick-infected area or property

	clean inspection. However, a clean inspection is not required for goats or sheep in a consignment moved by direct conveyance to an accredited meat works if at the meat works the animals are not mixed with other stock and are held in a hard standing area, and the animals are to be slaughtered within 5 days of arrival.	will be responsible for inspecting the animals to ensure they are tick-free. If the animals are infected, the most appropriate treatment method may be selected. Fact sheets will provide methods for inspection and appropriate treatments. Outbreaks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.	to go to a tick-free area. Treatment methods that may be used will be provided by the department in fact sheets published on the departmental website. Outbreaks of ticks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.
Movement from an at risk (low) property	No required procedures	There will be no approved programs. Outbreaks of ticks on properties in the free zone must be managed appropriately. Animals must be tick-free if moving to the free zone. The person moving the animals will be responsible for inspecting the animals to ensure they are tick free. If the animals are infected, the most appropriate treatment method may be selected. Fact sheets will provide methods for inspection and appropriate treatments. Outbreaks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.	The requirement for treatment will be based on risk. The person responsible for moving the animals must undertake appropriate measures before leaving a tick-infected area or property to go to a tick-free area. Treatment methods that may be used will be provided by the department in fact sheets published on the departmental website. Outbreaks of ticks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.
Particular movements of racehorses and trotting horses	The movement of racehorses and trotting horses are exempt from the relevant treatment or inspection described above if the movement is direct to a race course for the purpose of racing or training and the duration of the stay	Animals must be tick-free if moving to the free zone. The person moving the animals will be responsible for inspecting the animals to ensure they are tick-free. If the animals are infected, the most appropriate treatment	The requirement for treatment will be based on risk. The person responsible for moving the animals must undertake appropriate measures before leaving a tick-infected area or property

Particular movements of manageable, groomed secondary host species	at the racecourse is 5 days or less. If the movement is a direct conveyance to or from a scheduled competition event from either: o a place in an infected zone; o an infected property undertaking an approved program in another zone; o an at risk (high) property in any zone and o the event is held outside an infected zone, the movement is exempt from preliminary treatment if the animals are returned to the property of origin within 5 days after leaving it. If the stock are returned to the place of origin more than 5 but less than 15 days after leaving it the movement to the event is exempt from supervised treatment and the movement from the event is exempt.	method may be selected. Fact sheets will provide methods for inspection and appropriate treatments. Outbreaks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.	to go to a tick-free area. Treatment methods that may be used will be provided by the department in fact sheets published on the departmental website. Outbreaks of ticks on properties must be managed by those responsible for managing the property. Failure to manage the outbreak appropriately may be dealt with through the use of biosecurity orders.
Exemption from supervised treatment for particular horses	The movement of a manageable, groomed horse from an infected zone is exempt from supervised treatment if the movement is a direct conveyance to a control or free zone, and a veterinary surgeon has certified by written notice that the horse will react adversely to chemical treatment and the horse is returned to the infected zone within 5 days after it enters the free or control zone.		

4.3.3 Mango biosecurity management

Background

Queensland currently has two species of mango leafhoppers (*Idioscopus nitidulus* and *Idioscopus clypealis*). Both species are found in the far north of Queensland and a Cape York pest quarantine area (PQA) is declared under the regulation that restricts the movement of a mango plant out of the PQA to prevent the spread of mango leafhopper out of the PQA.

In addition, the regulation declares a PQA for an area west of Cairns, covering Dimbulah, Mareeba and Mutchilba districts. *I clypealis* is found in this area and, like the Cape York PQA, the objective is to prevent the spread of a mango leafhopper out of the PQA.

To minimise the spread of mango leafhopper within a PQA, there are also restrictions on the movement of mango plants with the PQAs.

To move a plant under the current regulations, a person must obtain an inspector's approval that requires the plant to be free of mango leafhopper.

Despite the PQAs being in place for mango leafhopper, surveillance by Biosecurity Queensland has found that since 2009 *I clypealis* has extended its range west of Mareeba and further north and south in Cairns Regional Council. Likewise *I nitidulus* has been found in Coen, which is around 40 km south of the Cape York PQA.

Of the 13 sites where *I clypealis* has been detected outside the PQA, seven of these sites are rest areas or public amenity sites, or tourist sites such as camp grounds and caravan parks, and one site is a council depot, where there is regular storage and movement of vehicles. This evidence would suggest that *I clypealis* may be inadvertently moving in, or on, vehicles.

Additionally, mango leafhopper could be spread by strong winds and storm activity. Major cyclones affecting the northern tropical coast and inland, such as Tropical Cyclones Larry and Yasi in 2006 and 2011 respectively, may have spread mango leafhopper in the area.

If mango leafhopper is spreading due to movement in vehicles and weather conditions then it raises questions of whether specific regulatory restrictions are effective for plant movements.

Table6: Options for managing mango leafhopper outlined in the Consultation RIS

Issue	Maintain biosecurity zones	Discontinue the biosecurity zones
There are two PQAs for mango leafhopper: - the area covered by the Cape York PQA; and - an area west of Cairns, covering Dimbulah, Mareeba and Mutchilba districts. Mango leafhopper has spread beyond both of the PQAs.	Maintain both PQAs but extend them to include the sites where mango leafhopper has been detected. Restrictions would apply on moving plants out of any zone. Restrictions would also apply to moving plants within the zone that are infected with mango leafhopper. Retaining and expanding the two mango leafhopper PQAs will slow down the spread of the pest to the economically important Dry Tropics mango production areas; in particular, I nitidulus, which is causing	Discontinue both PQAs and rely on the GBO for minimising risks associated with movement of mango leafhopper. Specific fact sheets that outline how a person may discharge their biosecurity obligation, will be published by the department. More resourcing is needed to educate people to rid their transportation from mango leafhopper before they travel. Both species of mango leafhopper have been detected outside of the PQAs, meaning that the PQAs and movement controls are not entirely effective. In addition, there are

	economic injury to commercial mangoes in the Northern Territory. Declaring the PQAs in a regulation keeps the matter on the biosecurity agenda and a continuity of policy to make it easier for the target audience to understand their obligations in relation to moving mango plants, and their obligation to treat plants for mango leafhopper. It could be argued that the GBO may not be specific or strong enough to prevent accidental or deliberate introduction of mango leafhopper into new areas. This may result in extensions of range and economic injury (yield reduction from feeding and egg-laying into the developing fruit at flowering and downgrading of fruit due to sooty mould).	two main pathways for the spread of mango leafhoppers that cannot be regulated. These are vehicle-assisted movement and severe weather events. The movement of infested mango plants as nursery stock and mango budwood are pathways that can be regulated. However, there is no evidence to suggest that mango leafhopper is being spread on plants for planting. It is also important to note that breaches of movement restrictions can only be detected after movement has occurred. The current industry and government resources being applied to the management and enforcement of mango leafhopper regulations could be redirected to high priority matters for mangoes. For example, these resources could be applied to a program of preparedness for red banded mango caterpillar, mango leaf gall midge, and preparedness and management options for mango leafhopper, including new APVMA approved treatments for use in Queensland should or when mango leafhopper reach commercial production areas, in particular, in the Dry Tropics. Under the new Act, producers of mango plants for propagation could implement industry best practice measures to meet their GBO, and education and awareness programs could be targeted at the travelling public and commercial businesses operating in known mango leafhopper infested areas.

4.3.4 Bee biosecurity management

The *Exotic Diseases in Animals (Asian Honey Bee) Notice 2010* (the Notice) establishes a restricted area for Asian Honey Bee (AHB). The restricted area is made up of the localities and suburbs prescribed under section 5 and listed in the schedule to the Notice. The movement of a bee into the restricted area, and moving a bee, bee product or mechanical vector within or out of the restricted area is restricted. A permit may be issued for the movement of bees, bee products or mechanical vectors.

Asian honey bee was found in North Queensland in 2007 in the Cairns region, and has since been found at Mareeba and Lake Eacham, and as far south as Mena Creek. The genotype which is present in North Queensland is the *Apis cerana* Java genotype. This genotype cannot be managed for honey production and pollination services due to its tendency to swarm and abscond. AHB can become a major competitor for nectar pollen and nesting sites in the natural environment, and is considered a threat to queen bee production as a result of cross breeding between European honey bee queens and AHB drones.

AHB can produce up to 10 swarms per year, and swarms have been reported to travel up to 10 km from the original colony. AHB is also a hitchhiker and can nest in boats, trains, trucks and shipping cargo. This can be an effective means of spread over large distances. The current restrictions only focus on the movement of a small number of carriers.

The main area of bee production most affected by the presence of *Apis cerana* Java genotype is the queen bee. This is due to closures or restrictions on export markets. In 2010, the USA closed its border to all queen bees originating in Australia. The closure was not only because of the presence of AHB in Australia, it was also due to the incidence of ‘slow paralysis virus’ or ‘colony collapse disorder’ in the USA where the cause and source of infection was unable to be indentified. The USA is currently undertaking an import risk assessment, but there has been no timeframe given for the completion of the assessment.

Canada’s import requirements do not specify the imposition of any particular regulatory tool before market access is granted. Instead, the import requirements for Canada are based on an apiary demonstrating freedom of *Apis cerana* within the apiary rather than demonstrated freedom in a stated area.

The National Bee Pest Surveillance Program operates to detect new incursions of exotic bee pests and pest bees. The program primarily relies on sentinel hives that are maintained in locations throughout Australia, and that are believed to be high-risk locations for the introduction of bee pests and pest bees. This program is a joint industry and government funded program.

The natural spread of *Apis cerana* coupled with accidental translocation of AHB through movements of vehicles, or the spread of the pest via ports of entry, may be more likely to cause the spread of the pest than the movement of bee keepers. The effectiveness of any regulatory restrictions therefore needs to be carefully considered and weighed against other measures of biosecurity detection such as surveillance programs.

Table 7: Options for managing Asian honey bees outlined in the Consultation RIS

Issue	Option 1: maintain a biosecurity zone	Option 2: discontinue a biosecurity zone
There is currently a restricted area in north Queensland for *Apis cerana.* The movement of bees, bee products or mechanical vectors within or out of the restricted area are prohibited without a permit. *Apis cerana* has been detected outside of the restricted area and is no longer fit for purpose.	Create a biosecurity which encompasses the extent of all known detections of the AHB (Java genotype). This biosecurity zone may extend as far south as Kennedy at the Queensland coast and would prohibit the movement of bees, bee products or mechanical vectors out of the restricted area without a permit.	Rely only on the GBO for minimising risks associated with movement of the Asian honey bee and have fact sheets that provide the most appropriate ways of managing the risks of *Apis cerana*. Continuing notification requirements for AHB, as well as surveillance and monitoring programs, will assist with identifying new incursions.

5. Benefits and costs

The following section provides an analysis of the benefits and costs of the current management arrangements (status quo) to allow for a comparison with the proposed options for biosecurity management.

5.1 Banana biosecurity management

Table 8: Costs and benefits for banana biosecurity zones

Issue: **biosecurity zones**	**Impact group**	**Option 1—Status quo**	**Option 2—More targeted zones**
There are six pest quarantine areas (PQAs) for bananas that stretch along the entire east coast of Queensland. These PQAs are designed to minimise the potential for spreading pests by restricting the movement of plants and appliances between and within the areas. In that regard a person must treat their plants and appliances in specified ways to lawfully move them. It is proposed to transition the far northern and southern PQAs into biosecurity zones, as this would protect the rest of Queensland from black sigatoka and bunchy top virus. The other PQAs	***BENEFITS***		
	Industry	The current restrictions are maintained to deal with all high-risk and medium-risk pests. The restrictions in each zone provide a layered protection to the major banana-growing region. The restrictions are familiar to industry, providing comfort that clear rules are in place to follow and enforce. There is an expectation that clear rules are more easily followed and enforced. There is a perception that greater enforcement capacity would be applied if the restrictions are in prescriptive regulation. By having the PQAs in regulation keeps the objectives of quarantine on the agenda, rather than under the GBO, where they could be forgotten about.	The biosecurity zones where banana pests are no longer able to be quarantined (i.e. have spread out of the current zones) will be removed. The biosecurity zones that still contain high-risk quarantine pests (i.e. the Far North PQA for black sigatoka and the Southern PQA for banana bunchy top virus) will be maintained to protect the rest of the state. A banana pest biosecurity exclusion zone (BEZ) that covers the main banana-growing region (> 90% of national production) is proposed. This option provides for restrictions on moving high-risk items to prevent high-risk quarantine pests being introduced into the exclusion zone. The other areas in Queensland where the risks are low will have no restrictions. However, under the GBO, which is enforceable, a person must take action to

are mainly in place to restrict the spread of medium-risk pests such as yellow sigatoka and minimise the spread of any pest into the main banana-growing region. Consequently, two options are proposed to deal with these risks.			ensure that they do not spread or exacerbate pests, regardless of whether they are able to be quarantined. Relying on the GBO rather than set legislation provides greater flexibility in addressing risks.
	Government	Front-line government staff will be familiar with the restrictions under the biosecurity zones and little training would be required. Enforcement and administrative procedures for biosecurity zones will change little from those currently applying to PQAs.	Government resources can be more readily applied to high-risk matters rather than focusing on both high and medium–low risks. Greater flexibility will be provided to update procedures for meeting the GBO rather than having to amend the regulations.
	Community	Some people have a perception that clear regulatory provisions are necessary to ensure compliance of meeting a GBO.	The community would have greater confidence that higher-risk matters are being more effectively managed and resourced than spreading that management and resources across high and medium–low risk matters.
	COSTS		
	Industry	There is potential to focus on medium–low risk matters to the detriment of high-risk matters. This could lead to a high-risk pest such as bunchy top virus or black sigatoka spreading out of the biosecurity containment zones. An eradication response could cost up to $60m, or if the pest has spread too far, eradication may not be possible. The biosecurity environment is constantly changing, and a regulatory approach does not provide the desired flexibility or align with community norms to meet the challenges of preventing and containing the spread of high-risk quarantine pests. There would be continued regulatory burden by placing specified requirements on people,	Industry may perceive that the requirements associated with the GBO are not as clear and as easy to follow as regulatory provisions. There is likely to be less enforcement capacity allocated to compliance of the GBO compared to a regulatory regime.

		which is arguably unnecessary. The cost to obtain a biosecurity certificate to move a restricted item within the state is proposed to be $46.12 and may act as a disincentive to comply when the charges are introduced.	
	Government	To effectively enforce the six biosecurity zones would require spreading the enforcement capacity across both high and medium–low risk matters. Allocating resources to medium–low risk matters may increase the potential risk of high-risk pests spreading into or within the state. Government would be responsible for implementing emergency plant pest provisions, which in the case of black sigatoka could cost up to $60m[13] p.a. and up $40m[14] plus for banana bunchy top virus (including production losses and government's share of eradication costs). This option would not meet the government red-tape removal agenda as there is an alternative non regulatory option that is proportional to the biosecurity risk.	Front-line government staff will need to be trained under the new Act to operate under the GBO provisions. Enforcement and administrative procedures will need aligning to the new Act. However, both these costs are likely to be incurred regardless, as staff will need to be conversant with the new Act provisions on its commencement.
	Community	Allocating compliance resources from high-risk matters to medium-risk matters raises the risk of an incursion of a high risk pest. A potential $40m or $60m plus impact on industry would have flow-on impacts on communities. This impact would flow through to the community, particularly in regional communities.	The community may perceive that the requirements associated with the GBO are not as clear and as easy to follow as regulatory provisions.

[13] Is expected to exceed A$60m. This is a quantitative representation of Australia's ALOP with respect to bananas, and includes production losses to growers, and the costs of eradication attempts shared by industry and government (i.e. via the EPPRD).Our estimate of TCP z 0 compares to expected losses of over A$180m if all quarantine restrictions on bananas imported to Australia are removed (i.e. TCP z *). This means that the increase in the present value of producer costs predicted to result from a relaxation of phytosanitary measures from their current levels(i.e.DTCP¼ TCP z * ☐TCP z 0) is estimated to average over A$125m per year over 30 years across banana-producing regions of Australia. The standard deviation of the distribution of DTC http://www.academia.edu/2595432/Predicted_economic_impact_of_Black_Sigatoka_on_the_Australian_banana_industry

[14] Dr John Thomas Principal virologist QAFFI, unpublished data 2012.

Table 9: Costs and benefits for leafspot treatment regulation

Treatment requirement for Yellow sigatoka	Impact group	Option 1—Status quo	Option 2—No regulatory treatment method
	BENEFITS		
Currently if a person has yellow sigatoka or leaf speckle (collectively referred to as leafspot) on their banana plants above prescribed levels for the PQA, they must treat the plants in the way provided by the regulation. Both yellow sigatoka and leaf speckle are endemic across much of Queensland and, according to the pest risk analysis, are therefore not quarantine pests. While it is important that landowners continue to treat their plants that are infested with yellow sigatoka and leaf spot, there are alternative solutions to applying current regulatory	Industry	Yellow sigatoka has been regulated as a serious pest of production since 1930 and the current method of prescribing allowable disease levels in both commercial and residential plantations has been used since 1999, following a spate of black sigatoka incursions during the 1980s and 1990s. Industry understands and supports this approach. Black sigatoka symptoms are easier to detect when yellow sigatoka is under active control, as symptoms are similar. Incursions of black sigatoka need to be detected quickly for eradication to be successful and cost-effective. The prescribed de-leafing treatment used for compliance is important for the management of resistance of the few and expensive selective fungicides used to control both yellow sigatoka and which may need to be used in a black sigatoka incursion and minimises the number of sprays required.	Under the GBO a person must take action to ensure that they do not spread pests. Consequently, it is not necessary to have prescriptive requirements for yellow sigatoka as a person must deal with the pest to ensure that it does not spread. The GBO is enforceable but has the benefit of allowing a person flexibility to do what they believe is necessary to address the risks rather than inflexible arrangements under a regulation. In that regard the de-leafing treatment could continue to be used under the GBO or an alternative arrangement that ensures the pest does not spread. Rapid diagnostics will allow for the differentiation of black sigatoka from yellow sigatoka in confounding situations.
	Government	The treatment method has been in place for many years and therefore is familiar to inspectors. Enforcing the treatment method is relatively simple, as a person must comply with the treatment requirement if a prescriptive allowable disease level is reached.	Regulation of yellow sigatoka under the GBO would allow scarce resources to be redirected to high priority biosecurity risks, better protecting the state's economy.
	Community	The de-leafing treatment helps minimise environmental exposure which could occur under increased fungicide usage regimens.	The community will gain the benefits from moving resources from medium-low risks to higher risk biosecurity risks that could have devastating impacts.

provisions.	***COSTS***		
	Industry	Industry contributes in excess of $117k per annum to the surveillance and enforcement of the yellow sigatoka. Industry could better use these funds to better on farm management practices that are aimed at appropriately treating banana pests such as yellow.	It could be argued that moving to the GBO would lose an industry focus on the treatment of yellow sigatoka. Without clear and concise direction, such as that that given under a regulation, industry compliance with treating yellow sigatoka on their plants may be reduced.
	Government	Government provides in excess of $322k per annum of resourcing to the surveillance and enforcement of the yellow sigatoka. These resources could be redirected to dealing with higher risk matters.	Government will still be required to enforce the GBO in relation to yellow sigatoka. This enforcement will be more challenging than under clear and concise regulation, and additional training in risk management will be necessary for authorised officers.
	Community	The cost to the community is that both industry and government funds used to address yellow sigatoka could be redirected to higher risk matters.	If industry loses focus on the treatment of yellow sigatoka under the GBO it may impact on the environment through increased fungicide use and diminish capacity to detect black sigatoka early by visual methods.

Table 10: Costs and benefits for residential banana planting regulation

Issue: Restrictions on plant numbers and species grown for residential purposes	**Impact group**	**Option 1—Maintain residential restrictions on planting numbers and varieties in the Far Northern and Southern zones as well as the main banana-growing region**	**Option 2—Discontinue residential restrictions on planting numbers and varieties except for the main banana-growing region and the Far Northern zone for varieties**
The regulation restricts the number of banana plants that a person	***BENEFITS***		
	Industry	Restricting the numbers of residential plants in the Far Northern biosecurity zone will reduce the risk of the exotic pests having a host to establish	Some remote communities in the Far Northern zone rely on bananas as a food source and would gain benefits (food security) from

may grow on their land for non-commercial purposes. A person must not grow more than ten plants or 30 pseudostems. In addition, the regulation details the varieties of banana plants that may be grown in each of the current PQAs. The rationale for both of these regulations may be relevant in some areas of Queensland but not in others.		on, and on which inoculum can build up. Restricting the numbers of residential plants in the Southern biosecurity zone will assist in reducing the potential for host bridging by the aphid vector in relation to banana bunchy top. Also, limiting the numbers of residential plants allowed will provide greater efficiency during eradication programs.	being allowed greater numbers of plants to offset the difficult growing conditions of the northern monsoonal tropics, and lower yield and wind susceptibility characteristics of many of the black sigatoka resistant varieties currently available. The option would comply with the *Queensland Plan* (healthy, economically diverse communities) allowing remote communities to grow greater numbers of bananas to sell/exchange within their local areas. The conditions for growing banana plants in the Far Northern zone are challenging and therefore a lifting of the restrictions in the area is unlikely to significantly increase the residential banana populations, or the surveillance requirements for early detection of black sigatoka. Lifting the restriction in the Southern zone is unlikely to have a great impact on the numbers of plants, as many people are currently unaware of the requirement and most suburban landowners on standard residential blocks would be too space limited and therefore unlikely to plant their entire land area with banana plants. The current southern list of approved banana varieties (*Cultivars for Residential Plantations*) includes the black sigatoka susceptible variety *Ladyfinger*, because it was too widespread in south-east Queensland as it was impractical for it to be eradicated from *Residential Plantations*, when the regulation was introduced in the 1990s.

			Under this option the biosecurity risk could be managed by targeted surveillance and education and awareness at the high risk north–eastern boundary of the Southern zone.
	Government	The restrictions on numbers and varieties have been in place for many years and therefore the requirements are familiar to inspectors.	Restricting the numbers and varieties for residential growers is not a high-risk matter and resources associated with the compliance of these restrictions should be directed to high priority pests.
	Community	The restriction on numbers of residential plants may reduce the risk of the exotic pests having a host to establish on, and on which inoculum can build up.	Removes an unenforceable regulatory burden, more often invoked in neighbor disputes, rather than in a biosecurity context.
	COSTS		
	Industry	The restriction on residential planting numbers is arbitrary and there is no evidence that the restriction would mitigate the risk of black sigatoka spreading in the Far Northern biosecurity zone.	While it is unlikely, there is a possibility that significant numbers of new residential banana plants may be grown residentially thereby increasing the potential for hosting pests.
	Government	The annual costs associated with enforcing the restrictions are estimated to be about $20k. Given there are an estimated 1.65m households in Queensland, it is likely that only a small percentage of these households are complying with the current restrictions.	No significant costs are apparent.
	Community	Restricting numbers of banana plants for residential plantations in the southern PQA would be unenforceable, as the area is highly populated and would place a significant regulatory burden on a large section of the community. Remote communities will be restricted in their ability to grow sufficient bananas for community purposes without obtaining a permit giving them an exemption to the planting restriction.	No significant costs are apparent.

5.2 Cattle ticks

Table 11: Costs and benefits for cattle tick management outlined in the Consultation RIS

-		Option 1: Maintain status quo	Option 2 Establish two zones	Option 3 Rely on the general biosecurity obligation
Primary host species—cattle, buffalo and deer		Maintain the current three zones and restrictions and exemptions.	Establish two biosecurity zones (cattle tick biosecurity free zone and cattle tick biosecurity infected zone). Prescribe restrictions for moving only tick-free animals from the tick-infested zone or an infested property into the free zone.	No prescribed zones. Rely on the general biosecurity obligation and fact sheets on how the obligation may be discharged.
	BENEFITS Industry	Producers in the south east corner of the state inside of the 500 mm isohyet but outside of the infested area receive most of the benefits of maintaining the current restrictions.	Less complexity in legislation resulting in less regulatory burden. Producers in the tick-infested zone or with tick-infested properties will be able to select the treatment methods and travelling routes that best suit their circumstances. This will result in significant savings. There are savings to be gained by allowing animals, which originate in the infected zone to be transported via a more direct route and without the need for a supervised treatment to an abattoir in the infected zone where they pass through the free zone. It has been estimated that the possible	No complex legislation, therefore reduced regulatory burden The industry manages cattle tick very well within the tick-endemic regions. This is achieved through incorporating suitably adapted breeds of cattle into production systems and using vaccine. Using high-cost acaracides will eventually lead to total resistance by cattle ticks to these chemicals. Reducing the use of acaracides will reduce the potential for chemical residues in Queensland beef. There are savings to be gained by allowing animals, which

			savings would be between $5.08[15] to $5.52 per head[16] if more direct routes to transport cattle to abattoirs in the south east were available. Similarly, there are savings to be gained if animals are not required to undertake a supervised treatment and can take a more direct route to feedlots. If a more direct route is taken from a property in the infested zone into a tick-free zone and then to a feedlot in a tick-infested zones the saving is approximately $1.89 per head.[17] Potential savings on treatment costs because of not requiring inspections and supervised treatments is estimated to be between $5–10 per head.[18] These savings are likely to increase if taking more direct routes becomes a viable alternative if the need to have supervised treatments is removed. There would be a greater opportunity for the use of rail transport by producers sending cattle from north west	originate in the infected zone to be transported via a more direct route and without the need for a supervised treatment to an abattoir in the infected zone where they pass through the free zone. It has been estimated that the possible savings is $5.52 per head. These savings are likely to increase if taking more direct routes becomes a viable alternative because the need to have supervised treatments is removed. Potential savings from not requiring supervised treatments is $5–10 per head. Similarly, there are savings to be gained if animals are not required to undertake a supervised treatment and can take a more direct route to feedlots. If a more direct route is taken from a property in the infested zone into a tick-free zone and then to a feedlot in a tick-infested zone, the saving is approximately $1.89 per head. Potential savings from not requiring supervised treatments

[15] From 2007 to 2011, TRANSIT estimated 458 892 cattle would have needed to take the detour to avoid the tick-free zone. The total additional transport cost would have been $2.33m or $5.08 per head. This represents about 9% of the transport cost to the abattoir. (Source CSIRO, 2014)

[16] From 2007 to 2011, 7.21m cattle were transported to the top 10 abattoirs. About 62% of the cattle crossed the tick line, with 1m crossing from the infested zones to the tick-free zone and back into the infested zone en-route to the abattoirs using a direct route. The savings from taking a more direct route rather than travelling through the infested zone to the abattoirs was approximately $5.4m over 2007 to 2011 (12% savings). (Source CSIRO, 2014)

[17] From 2007 to 2011, about 277 317 cattle travelled from an enterprise in a tick-infested zone into a tick-free zone, then to a feedlot in the infected zone. The savings for using a more direct route rather than detours would be approximately $524 125 over 5 years (6% savings) at approximately $1.89 per head. (Source: CSIRO, 2014)

[18] Based on the average costs of a supervised treatment and inspection.

			Queensland to south east abattoirs via Winton[19]. This would reduce heavy transport on the roads and create further savings on transport. There will be greater flexibility and less expense to those smaller producers who can only move on weekends when clearing facilities are usually closed or are open and charge significantly higher rates. The level of risk to the tick-free zone from infection should not change. Therefore, producers in the free zone would continue to receive the same level of benefits without incurring greater costs. Reduced veterinary costs because of reduced injury to animals from not using plunge dips and associated equipment. There would be fewer losses of animals as a result of not using plunge dips and associated equipment. There would be indirect savings from stock not losing condition as a result of the impact of increased travel, being unloaded, put through dips and loaded again. The loss of condition can be up to 10 kg per animal per trip and animals may	is $5–10 per head. There will be greater flexibility and less expense if the move is made on the weekends when clearing facilities are usually closed or are open and charge significantly higher rates. Producers in the free zone would continue to receive the benefits of the efforts of those in the infected zone. Reduced veterinary costs because of reduced injury to animals from not using plunge dips. Reduced loss in animals as a result of not using plunge dips and associated equipment. Indirect savings from stock not losing condition as a result of the impact of increased travel, being unloaded, put through dips and loaded again. The loss of condition can be up to 10 kg per animal per trip and animals may lose further condition because of loss of appetite following treatment. Reduced reliance on acaracides may allow for them to be used for longer before total resistance occurs. There will be greater certainty for producers that their stock will be delivered to abattoirs

[19] The total number of cattle moving from shires in North-West Queensland (Winton, McKinlay, Flinders, Richmond, Burke, Carpentaria and Cloncurry) from 2007 to 2011 were 144 282 at a cost of $10 268 805. (Source: CSIRO, 2014)

			lose further condition because of loss of appetite following treatment. The reduced reliance on acaracides may prolong their effectiveness before total resistance occurs. Less risk of chemical contamination of Queensland beef. There will be greater certainty for producers that their stock will be delivered to abattoirs and feedlots on schedule, because any delays caused by a failure to clear at a clearing facility will be avoided. Similarly, there will be greater certainty for abattoirs and feedlots that animals will arrive on schedule, resulting in less disruption to production.	and feedlots on schedule because there will be no delays at clearing facilities. Similarly, there will be greater certainty for abattoirs and feedlots that animals will arrive on schedule resulting in less disruption to production.
	Government	There are no benefits to government maintaining the current restrictions. The enforcement and administration of these provisions are challenging and resources intense. As resources are finite, higher-risk issues usually have priority over the enforcement of legislation, which deals with the management of endemic species. Therefore, the current enforcement levels are lower than optimum. However, the risks	The risk would be managed by those in the best position to manage the risk. The government would intervene only where producers are not appropriately managing risks. Therefore, the government could focus resources on higher-risk areas. The level of resourcing for optimal enforcement under this option would be much less than under Option 1 without a corresponding	The risk would be managed by those in the best position to manage the risk. The government would intervene only where producers are not appropriately managing risks. The level of resourcing for optimal enforcement under this option would be less than under option 2. However, there may be an increase in risk that particular tick-free areas would become infested over time.

		associated with the endemic pest are not increasing. Maintaining an appropriate level of enforcement of this legislation would require an additional expenditure by government. This extra cost would need to come from other areas or from additional funding to the department.	increase in risk.	
	Community	Clearing facilities are located in 20 regional areas and employ approximately 40 people in total.	New opportunities for employment may be generated where producers choose to treat animals on farm and require specialised services. Greater confidence that resources are being directed to high-risk areas and the costs of industry doing business are reduced. On major highways such as the Bruce Highway there will be reduced use by heavy vehicles. Road use may be more evenly distributed, thereby reducing congestion, increasing safety and reducing the maintenance costs of roads. Confidence that government is reducing costs. Reduced costs for people who have a small number of stock to move because of the reduction regulatory burden. Better animal welfare	New opportunities for employment may be generated where producers choose to treat animals on farm and require specialised services. Greater confidence that resources are being directed to high-risk areas and the costs of industry doing business are reduced. On major highways such as the Bruce Highway there will be reduced use by heavy vehicles. Road use may be more evenly distributed, thereby reducing congestion, increasing safety and reducing the maintenance costs of roads. Confidence that government is reducing costs. Reduced costs for people who have a small number of stock to move because of the reduction in regulatory burden. Better animal welfare

			outcomes from reduction in handling and transporting of animals, and exposure to drowning and injury caused by use of plunge dips. Better workplace health and safety outcomes from a reduction in the exposure to chemicals in plunge dips. Reduced risk of contamination of land and meat from chemicals.	outcomes from reduction in handling and transporting of animals, and exposure to drowning and injury caused by use of plunge dips. Better workplace health and safety outcomes from a reduction in the exposure to chemicals in plunge dips. Reduced risk of contamination of land and meat from chemicals. New opportunities for employment may be generated where producers choose to treat animals on farm and require specialised services.
COSTS	Industry	Complexity of regulatory measures can lead to increased costs and/or greater non-compliance. Producers in the tick-endemic areas incur the entire costs associated with maintaining the current provisions. Reduced opportunity to take a more direct transport route leads to higher production costs. Failure to clear at a clearing facility can result in return trips to the property of origin, causing delays. Estimated costs of treatment at clearing facilities would be approximately $5–10 per head. There are	The costs to industry in the infested zone for moving stock regularly to or through the free zone would be reduced significantly because of less complex legislation. Those producers who have properties in the control zones may incur more costs in the short to medium term. Any increase in costs may be offset by savings created by the opportunity to use more direct routes to abattoirs and feedlots, and the ability to select the most direct route to the proposed destination. Costs associated with the complexity of regulatory measures would be significantly	Complete deregulation could result in significant ongoing costs in newly infested regions of approximately $35.5m per annum if only acaracides were used to manage the infestations. However, this option does not propose complete deregulation. Therefore, the impact on newly infested regions would be expected to be considerably less. Moving to tick-resistant varieties of cattle would reduce these costs. However, this would result in significant costs being incurred to producers with susceptible cattle. This would be short to medium costs as producers make the

		also on farm costs associated with preliminary treatments, where required. Veterinary costs because of injury to animals from not using plunge dips. Losses as a result of animals that are killed or injured as a result of using plunge dips and associated equipment at clearing facilities. Indirect costs from stock losing condition as a result of increased travel, being unloaded, put through dips and loaded again. The loss of condition can be up to 10 kg per animal per trip and animals may lose further condition because of loss of appetite following treatment. Continual reliance on the main acaracides in clearing dips has resulted in resistance. Continued use will lead to total resistance. The only option will be to move to tick-resistant breeds, which will have a significant cost to certain sectors of the industry in the short to medium term.	reduced.	change. Complexity of regulatory burden is reduced considerably. The costs to industry in the infested zone that move stock regularly to or through the free zone would be reduced significantly because of less complexity in legislation and savings from freedom to choose travel routes and treatment options. Producers in the free zone may incur costs or need to follow the lead of beef producers in the tick-endemic areas by switching to tick-resistant breeds.
	Government	Enforcing the restrictions is very challenging and resource intense. Government resources are finite and usually directed at higher-risk areas. Therefore, if there was a desire to adequately resource an appropriate level of enforcement commensurate with the	The level of resources required to administer and enforce this option would be less than option 1, because those who are best placed to manage the risks will have greater responsibility in managing the risks. This option would allow finite government	The level of resources required to administer and enforce this option would be less than option 2 because those who are best placed to manage the risks will take the majority of the burden of managing the risks. This option would allow finite government

		restrictions, there would be a need to significantly increase the level of funding or redirect resources from the high-risk matters.	resources to be directed at the prevention and management of higher-risk issues.	resources to be directed at the prevention and management of higher risk issues.
	Community	The community meets the cost to government through taxes and would bear the burden of any increase in funding to support administration and enforcement of this option. There is an impact on animal welfare as a result of the use of plunge dips. Animals are at risk of broken limbs, bruising and drowning as a result of using plunge dips. Contamination of the environment as result of spill from plunge dips. Authorised persons who service the clearing facilities are at risk of exposure to the acaracides.	The cost to the community would be reduced commensurate with government cost reductions. There would be a risk that the clearing facilities would close because of the drop in demand caused by on farm treatment. There would be less heavy transport on the Bruce Highway due to availability of travel routes through the free zone. This would reduce congestion, improve safety and reduce impact on the road surface.	The cost to the community would be reduced commensurate with government cost reductions. There would be less heavy transport on the Bruce Highway due to availability of travel routes through the free zone. This would reduce congestion, improve safety and reduce impact on the road surface. There would be a risk that the clearing facilities would close because of the drop in demand caused by on farm treatment.

5.3 Mango biosecurity management

Table 12: Costs and benefits for managing mango leafhopper outlined in the Consultation RIS

Issue: **There are two PQAs for mango leafhopper—the area covered by the Cape York PQA and an area west of Cairns, covering Dimbulah, Mareeba and Mutchilba districts.** **Mango leafhopper has spread beyond both of the PQAs.**	**Impact Group**	**Option 1—Maintain both PQAs but extend them to include the sites where mango leafhopper has been detected.**	**Option 2—Discontinue both PQAs and rely on the GBO for minimising risks associated with the movement of mango leafhopper.**
	BENEFITS		
	Industry	The current restrictions on moving mango plants within and outside of the PQA minimise the risk of spreading mango leafhopper that may be moved with the plants. Industry is familiar with the arrangements and regard them as important to minimise the spread of mango leafhopper. Having the rules stated clearly in a regulation is arguably more easy to follow and comply with. There is a perception that greater enforcement capacity would be applied if the restrictions are regulated.	Mango leafhopper is likely to continue to spread through weather and movement in vehicles. Restricting the movement of plants controls only one movement vector. Restrictions on the movement of mango leafhopper would continue under the GBO. Unnecessary regulatory burden would be removed as those wishing to move a plant would not require a biosecurity certificate.
	Government	Front-line government staff will be familiar with the PQA requirements and little training would be required.	Government resources can be more readily applied to deal with higher-risk issues while the risks associated with mango leafhopper will still be managed under the GBO.
	Community	Some people have a perception that clear regulatory provisions are necessary to ensure compliance of meeting a GBO.	Under this option the limited resources could be applied to high-risk matters, which would ultimately provide a greater community outcome.
	COSTS		
	Industry	Mango leafhopper has spread beyond the PQA areas and the likely vector for the movement is	Industry may perceive that the requirements associated with the GBO are not as clear and as easy to follow

		by vehicle or weather. Extending a restriction area to cover the extent of mango leafhopper under a biosecurity zone would require compliance resources. With limited resources available it would potentially reduce resources that are applied to higher-risk matters. Given that there are no controls on vehicular movements and weather, there is a high likelihood of further spread beyond the current detections and a regulatory approach does not provide the desired flexibility necessary to constantly adapt to those changes. There would be continued regulatory burden by placing specified requirements on people which is arguably unnecessary. While the cost to obtain a biosecurity certificate is low (around $46) it is still an impact that is unnecessary.	as regulatory provisions. Industry perceives that removing the zones would send the wrong message to industry that they do not need to treat their plants before moving them. There is likely to be less enforcement capacity allocated to compliance of the GBO compared to a regulatory regime. Concerns have been raised about the implications for interstate market access for nursery stock. It is argued that increased burden may be placed on Queensland to treat its mango plants before they are moved into another state. However, this is currently not an issue as Victoria and South Australia do not currently regulate against the Northern Territory, which has endemic Idioscopus nitidulus). If this did become an issue, Biosecurity Queensland could negotiate market access arrangements ahead of the introduction of the new regulations. This has already been achieved with spiralling whitefly/melon thrips and other pests. Mango leafhopper hosts may require treatment and Biosecurity Queensland could issue an area freedom certificate for parts of the state that are not infested.
	Government	The current PQAs have failed to contain mango leafhopper and restrictions on plant movements is unlikely to prevent further spread through vehicular and weather movement. Significant resources would be required to effectively enforce the restrictions. These resources would need to come from additional funding or a reallocation from higher risks.	Front-line government staff will need to be trained under the new Act to operate under the GBO provisions. Enforcement and administrative procedures will need aligning to the new Act. However, both these costs are likely to be incurred regardless, as staff will need to be conversant with the

			new Act provisions on its commencement.
	Community	Under this option the limited resources would be applied to medium-risk matters, which would ultimately reduce the resources applied to high-risk matters.	The community may perceive that the requirements associated with the GBO are not clear and as easy to follow as regulatory provisions.

5.4 Bee biosecurity management

Table 13: Costs and benefits for managing Asian honey bees outlined in the Consultation RIS

Issue: Asian honey bee zone		**Option 1—Maintain the zone**	**Option 2—Remove the zone**
There is currently a restricted area in north Queensland for *Apis cerana.* The movement of bees, bee products or mechanical vectors within or out of the restricted area are prohibited without a permit. *Apis cerana* has been detected outside of the restricted area and is no longer fit for purpose.	***BENEFITS*** Industry	Prescribe a biosecurity zone which would encompass the extent of all known detections of AHB Java genotype. The zone may extend as far south as Kennedy on the Queensland coast. Movement restrictions placed on bees, bee products or mechanical vectors moving out of the zone.	Rely on general biosecurity obligation, fact sheets about managing AHBs and moving all risk items of AHBs.
	Industry	A known risk pathway for the spread of AHBs is addressed which may result in a reduction in the rate of spread. May assist in facilitation of international trade.	All known risk pathways for the spread of AHBs can be addressed through the provision of education and fact sheets linked to the general biosecurity obligation. May assist in the facilitation of trade.
	Government	There are no benefits for government in establishing a zone. Asian honey bees are considered endemic and natural spread is inevitable. Prescribing an area and regulating movement of risk items will not provide an assurance that AHBs will not spread.	The level of resources required to administer and enforce this option would be less than option 1 because those who are best placed to manage the risks will have greater responsibility in managing the risks. This option would allow finite government resources to be directed at the prevention and management of higher-risk

			issues. Increased flexibility in responding to changes in the range and disease status of AHB because there is no requirement to amend a regulation. Resources can be better used to respond to AHB detections
	Community	There are no identifiable benefits for the community.	Overall, the use of resources will be better targeted to higher-risk issues.
COSTS	Industry	Minimal costs except for obtaining a permit and complying with the conditions of the zone and a permit. This option does add to regulatory burden and compliance issues for industry. Export of queen bees to the USA ceased in 2010 when AHBs were first detected. The impact of this market closure has been felt by the industry, and the spread of AHBs will not have any greater impact on this market. However, there may be some impact on the Canadian market. The value of queen bee exports from Queensland which could be lost is *Apis cerana* spreads to southern Queensland is approximately $1.5m.	There will be costs involved in ensuring people comply with the general biosecurity obligation through inspection and monitoring of hives.
	Government	A biosecurity zone is not considered the most effective method of controlling AHB. AHB is now considered an endemic pest and has the ability to spread naturally, with and without movement assistance. Therefore, creating a biosecurity zone will not prevent the spread of AHB, even if the zone were strictly enforced. Enforcing the restrictions is very challenging and resource	Savings to government through less time required to amend, review and administer legislation. The GBO allows for a more flexible approach to dealing with AHB.

		intense. Government resources are finite and usually directed at higher-risk areas. Therefore, if there was a desire to adequately resource an appropriate level of enforcement commensurate with the restrictions, there would be a need to significantly increase the level of funding or redirect resources from the high-risk matters. The cost of making constant changes to the zone because of the expansion of spread of Asian honey bee through the state.	
	Community	The costs to the government are borne by the community.	Costs to the community would be less because of reduced government costs.

5(b) Fees

The Fees section of the Consultation RIS covered a new structure for biosecurity fees and proposed changes to the quantum of fees based on methodologies outlined under the *Queensland Government principles for fees and charges*. Note that the quantum of the proposed fees that were included in the Consultation RIS were based on the financial year 2014/15, and therefore any proposed fees in the Decision RIS would be indexed twice (3.5%) for the 2015/16 and 2016/17 financial years for commencement with the Regulations on 1 July 2016.

Biosecurity Queensland currently offers number of both regulatory and non-regulatory services to assist Queensland businesses to comply with their legal requirements to minimise biosecurity risks. Many of these services are currently provided at a loss to government and, as a result, are subsidised by Queensland taxpayers. This predominately reflects the historical context in which the fees were originally developed, but does not align to current government policy and does not appropriately share the costs of biosecurity risk management with those who create risk.

Many of the services are for private benefit, as they effectively facilitate commercial activities and access to markets. The current under-recovery of the costs of providing these biosecurity services is inconsistent with the principle of user pays; that is, those who use and benefit from the services should pay for them. At the moment these costs of doing business are not borne by the users or beneficiaries but are externalised and subsidised by the community at large.

This results in a suboptimal allocation of the limited government resources available for management of biosecurity risks. Resources are unnecessarily diverted to lower-risk biosecurity concerns rather than being focused on high value, high risk biosecurity concerns.

Under the current framework for biosecurity management in Queensland, 87 regulatory or non-regulatory fees apply. The fees relate to the issuing of permits, interstate certification and plant health inspection, cattle tick inspection and training, beekeeper registration, obtaining information, artificial breeding centre inspection, and land protection publications. This fee structure is inefficient, and can no longer be maintained under the new Biosecurity Act. It is proposed to discontinue 28 fees currently prescribed by regulation, and 24 non-regulatory fees under the new fee structure because they are no longer necessary, are not used or can be consolidated with other fees. See attachment 5 for a full list of discontinued fees.

The Act establishes a new fee framework that provides efficiency and an effective structure for industry and the community to contribute to the management of biosecurity matters. Under this framework, current fees can be rationalised and joined together into a simpler system so that fewer fees are required. The RIS proposes a reduction in the number of fees overall from 87 to 36.

Restructuring of fees in line with the new Act provides an opportunity to consider the appropriateness of each fee level. The levels of the current fees have not been assessed for many years and are not aligned with the *Queensland Government principles for fees and charges*. In accordance with those principles, all fees and charges are categorised by the service provided, and costed accordingly. Each category has its own costing methodology—developed by the Queensland Government.

Table 14: Fees and charges calculating methodology

Category of service	Description of service	Methodology
1	Regulatory services	Full cost recovery (labour + operating + indirect costs)
2	Non-regulatory services without real or potential competitors	Full cost recovery (labour + operating costs)
3	Non-regulatory services with real or potential competitions	At market based prices or, where this is not readily available, at a level that is consistent with the competitive neutrality provisions of the *Full Cost Pricing Policy*

Each Queensland Government department is responsible for assessing the costs associated with providing their services and applying the above methodology. In that regard, the Department of Agriculture, Fisheries and Forestry has used the following process to calculate appropriate fee levels:

Category 1

Labour costs + indirect costs (overhead costs) + operating costs

Category 2

Labour costs + operating costs

Category 3

Labour costs + indirect costs (overhead costs) + operating costs + market adjustment

To calculate the fees, DAF has used the following approach for labour costs, operating costs, indirect costs and market adjustments:

Labour costs (salary only) are calculated by multiplying each person's time directly spent on the service in question by the hourly rate (or part thereof) for each person. For example, it may involve time spent processing and assessing an application, or updating a database.

Operating costs are the materials consumed through providing the service; for example, the acaricide used to treat cattle ticks, or envelopes and stationery.

Indirect costs include employment overheads such as annual leave, superannuation and sick leave. They also include the costs of the management, legal, and administrative services and infrastructure such as building lease costs, computers and vehicles required to facilitate the provision of a particular service.

It is very difficult to determine indirect costs for each individual service. Consequently, DAF has established a model to ensure consistency when determining fees or charges. The model is based on calculating total departmental overheads (indirect costs) and applying them to each service based on time spent on those services. The modelling results in a multiplier of 2.85.

For example, if the direct labour cost of a service is $100 (time spent on service x hourly rate), this is multiplied by 2.85 to estimate the total cost of providing the service—$285. The additional $185 represents the indirect cost of providing that particular service.

However, a number of factors that were included in the original calculation of the multiplier were predominately 'government only' activities. These included services like ministerial correspondence and legislative development. It was considered that as these activities were not related (even indirectly) to the provision of specific services, that they were more appropriately covered by the taxpayer as a whole, rather than individuals using government services that provide a private financial benefit. As a result, the multiplier was revised down from 3.00 and only considers indirect costs that have a role in the delivery of services.

The multiplier for DAF is higher than some departments due to the diverse nature of the portfolio, and the high concentration of staff in regional areas. This reflects the rural origins of the department, and a commitment to front-line service delivery anywhere in Queensland.

Operating costs are the materials consumed through providing the service; for example, the acaricide used to treat cattle ticks, postage and printing associated with issuing a permit.

Market adjustments apply a notional profit margin that ensures commercial providers of the service are not disadvantaged by under-pricing due to the department's non-commercial structure. A 'mark-up' is applied to the cost of a service, with real or potential competitors to ensure that the market operates on a level playing field.

The departmental 'mark-up' is 11.5 per cent, and represents the average rate of return on investment the department would expect to raise through competitive services[20]. The department acknowledges that a range of diverse service delivery models may enable agile competitors to deliver services at lower prices, and uses market benchmarks to further inform market adjustments. This enables the department to balance the returns required to develop a market with the impact of higher costs of services.

In practice, the forumals used to calculate cost recovery for different categories of service are detailed below:

Category 1

Labour costs x 2.85 (for indirect costs) + operating costs

Category 2

Labour costs + operating costs

Category 3

Labour costs x 2.85 (for indirect costs) + operating costs + market adjustment (i.e. add 11.5% on top of cost of providing service

An example calculation for a regulatory (category 1) fee is detailed below.

[20] The market adjustment has been calculated using a standard weighted average cost of capital model and external data.

Table 15: Example calculation for a regulatory fee

Labour costs	Labour costs x Indirect costs	Operating costs	Total cost
Average time spent processing an application (and average inspector pay level) —20 min at AO2(8)	Application of the multiplier to consider the cost to the taxpayer of facilitating the service	Average materials consumed in provision of service - paper, printing, postage etc.	Subtotal + operating costs
0.33 x $26.94	8.98 x 2.85		$25.60 + $2.60
$8.98	**$25.60**	**$2.60**	**$28.20**

Current fees charged for services provided by Biosecurity Queensland do not accurately represent the cost of providing the services. This ensures that these services are partially subsidised by the Queensland taxpayer. This is an unsustainable framework that will be addressed by the Biosecurity Regulation. The services described by the fees below deliver private benefits and are ordinary business costs.

The 29 fees identified in the far right column of Table 16 are those proposed to be transitioned under the new Act framework. Table 16 also shows where the proposed fee is derived from under current legislation.

Table 16: General fee table

Current fee	Current fee level ($)	Transition details	Proposed fee	Unit	Category of service	Proposed fee level ($)
Regulatory fees						
Land Protection (Pest and Stock Route Management) Regulation 2003 (Schedule 5)						
Declared pest permit						
(i) application fee	$285.55	Current permit fees are to be replaced by prohibited and restricted matter permit fees (which have a broader application under the Biosecurity Act). Only one fee per permit (the application and permit fees have been combined). A fee waiver may be granted.				
(ii) permit fee	$214.10		Issue or renewal of permit for the use of restricted matter, for the purpose of biological control, commercial use or scientific purposes for a period of up to 3 years	per permit	Category 1—regulatory service	$365.25
for another purpose mentioned in schedule 3						
(i) application fee	$42.70		Issue or renewal of permit for the use of prohibited matter, for the purpose of scientific research for a period of up to 3 years	per permit	Category 1—regulatory service	$365.25
(ii) permit fee	$85.55					
Request to extend compliance period under a pest control notice	$68.70 *note that this fee has since been discontinued, but the cost of providing the service remains the same.	Basis for generic fee for amendment of relevant authorities.	Amendment of conditions of a relevant authority	per application	Category 1—regulatory service	$68.75
Inspecting register of pest	$14.00	Basis for generic register	Inspection of register	per inspection	Category 1—regulatory service	$14.05

control and entry notices		inspection fee				
Apiaries Regulation 1998 (Part 5)						
Registration fee	$14.90	Transitioned without change		per annum	Category 1 — regulatory service	$26.85
Stock Regulation 1998 (Schedule 7)						
Dipping stock for cattle tick at a dip operated by the state						
(a) cattle or horses, for each animal	$0.80	Transitioned without change	cattle or horses, for each animal	per head	Category 1 — regulatory service	$0.90
(a) sheep, calves, goats or deer, for each animal	$0.54	Transitioned without change	sheep, calves, goats or deer, for each animal	per head	Category 1 — regulatory service	$0.60
(a) minimum fee for each consignment	$12.05	Transitioned without change	minimum fee for each consignment	per head	Category 1 — regulatory service	$17.85
For an inspector supervising the treatment of horses for cattle tick using equipment and acaricide supplied by the state						
(a) at the inspector's office, for each horse	$11.00	Transitioned without change	inspector's office, for each horse	per head	Category 1 — regulatory service	$11.80
For an inspector supervising the treatment of alpacas, buffalo, camels, cattle, deer, goats, guanacos, llamas, sheep or vicunas for cattle tick using equipment and acaricide supplied by the state						
(a) at the inspector's office						

(i) for each animal	$4.30	Transitioned without change	for each animal	per head	Category 1 — regulatory service	$10.40
Non-regulatory fees						
Property search fee	$164.46	To be replaced by generic copy fee	Copy of register	per copy/per entry	Category 1 — regulatory service	$42.30
Interstate certification accreditation						
Accreditation	$276.00	To be transitioned as a regulatory fee for all accreditation schemes		per annum	Category 1 — regulatory service	$276.00
Book of assurance certificates	$17.24	Plant Health Assurance certificates will be replaced by Biosecurity Certificates	Book of Biosecurity Certificates	per book (100)	Category 2 — non-regulatory service — without real or potential competitors	$24.65
Auditing	$194.58	ICA auditing fees are to be transitioned to apply to a broader range of auditing applications	Auditing during ordinary business hours	per hour	Category 3 — non-regulatory service — with real or potential competitors	$263.65 **note that these fees are not proposed to increase above full cost recovery until competition emerges.
Travel — single client at same site	$194.58		Travel to or from a site of an audit during ordinary business hours (30% discount for multiple clients)	per hour	Category 3: non-regulatory service—with real or potential competitors	$263.65
Travel—multiple clients at different sites	$136.20					
Out of hours and weekend auditing	$389.16		Out of hours and weekend auditing	per hour	Category 3: non-regulatory service—with real or potential competitors	$379.05
Out of hours and weekend travel—single client at same	$389.16		Out of hours and weekend travel to or from a site of	per hour	Category 3: non-regulatory service—with real or	$379.05

site			an audit (30% discount for multiple clients)		potential competitors	
Out of hours and weekend travel—multiple clients at multiple site	$272.41					
Plant heath inspections						
Inspection	$115.92	Plant health inspection fees are to transition, and will continue to apply for plant health and fire ant inspection services	Inspection during ordinary business hours	per hour	Category 2: non-regulatory service—without real or potential competitors	$180.20
Travel—single client at same site	$115.92		Travel to or from a site of an inspection during ordinary business hours (30% discount for multiple clients)	per hour	Category 2: non-regulatory service—without real or potential competitors	$180.20
Travel—multiple clients at different sites	$81.14					
Out of hours and weekend inspection	$231.84		Out of hours and weekend inspection	per hour	Category 2: non-regulatory service—without real or potential competitors	$311.70
Out of hours and weekend travel—single client at same site	$231.84		Out of hours and weekend travel to or from a site of an inspection (30% discount for multiple clients)	per hour	Category 2: non-regulatory service—without real or potential competitors	$311.70
Out of hours and weekend travel—multiple clients at different sites	$162.29					
Cattle tick inspections						
Standard hourly inspection	$115.76	Cattle tick inspection fees are to transition, and will apply only where services are delivered by DAFF staff	Standard hourly inspection	per hour	Category 2: non-regulatory service—without real or potential competitors	$115.35
Out of hours and weekend inspection	$231.68		Out of hours and weekend inspection	per hour	Category 2—non-regulatory service—without real or potential competitors	$239.10

Yard fees (DAF facilities) for all stock other than sheep, goats and unweaned calves	$1.20		Yard fees (DAF facilities) for all stock other than sheep, goats and unweaned calves	per head	Category 2—non-regulatory service—without real or potential competitors	$1.20
Yard fees (DAF facilities) for sheep and goats	$0.26		Yard fees (DAF facilities) for sheep and goats	per head	Category 2—non-regulatory service—without real or potential competitors	$0.30
Multiple movement permit for competition horses	$26.08		Multiple movement permit for competition horses	per permit	Category 2—non-regulatory service—without real or potential competitors	$29.10
Training for accredited tick control personnel	$105.57	Transitioned without change	Training for accredited tick control personnel	per person	Category 3—non-regulatory service—with real or potential competitors	$198.55
Competition stock owner treatment scheme (CSOTS)	$61.43	Transitioned without change	Competition stock owner treatment scheme (CSOTS)	per person	Category 3—non-regulatory service—with real or potential competitors	$395.55
Western flower thrips Monitoring—trap kits and identification	$88.08	Transitioned without change	Western flower thrips Monitoring—trap kits and identification	per box (5 traps)	Category 2—non-regulatory service—without real or potential competitors	$138.80

In addition, several new regulatory fees have been included for the new services and increased flexibility provided by the Biosecurity Act. The new fees are all category 1 fees, and are detailed below.

Table 17: New regulatory fees

Proposed fee	Unit	Fee level ($)	Comments
Compliance agreements			
Annual application	per agreement	**$120.80**	The duration of a compliance agreement may be up to 5 years under the Act. Pro rata fees may apply for agreements exceeding one year. Compliance audits will be charged separately.
Entity registration			
Application for removal of restricted place from biosecurity register	per application	**$67.70**	Fee based on a previous fee for a request to extend compliance period under a pest control notice—the work involved is broadly comparable.
Approvals			
Application for approval as an auditor	per application	**$136.60**	Fee based on the accreditation process currently in place for the ICA scheme.
Annual auditor approval	per annum	**$352.65**	Fee based on the cost of managing the systems underpinning the ICA scheme.
Transfer of permit	per transfer	**$67.70**	Fee based on a previous fee for a request to extend compliance period under a pest control notice—the work involved is broadly comparable.
Issue of biosecurity certificate	per certificate	**$45.05**	Fee for issue of biosecurity certificates where onsite inspection is not required. Fee is based on 15 minutes of an inspector's time.

Compliance agreement application fee

The new Act provides for co-regulatory arrangements between the state of Queensland and industry in the management of biosecurity risks associated with certain biosecurity activities. Compliance agreements between the chief executive and industry will play a role in

managing risks while reducing administrative and compliance burdens on both industry and the state. These agreements enable industry to self-manage risks associated with their business activities.

Compliance agreements are voluntarily entered into by industry with the state. A compliance agreement must stipulate the procedures required to be undertaken by the person, the records to be kept and the supervision, monitoring and testing of the person's compliance with those procedures.

The procedures required to be undertaken depend upon the type of biosecurity matter or carrier and the activities conducted by the industry. For example, a turf farmer could enter into a compliance agreement that they have addressed the risks associated with fire ants before moving the turf off the farm.

There are auditing requirements under compliance agreements to ensure that the person is complying with the agreement. These audits are undertaken by government or non-government auditors approved by the chief executive to conduct audits. A separate fee applies for auditing services.

As compliance agreements under the Act are new options, there is no existing process to use to determine a fee level. Consequently, the existing labour requirements for Approved Risk Management Plans for fire ants were used, as the process would be broadly similar. However, in addition to calculating a fee, it was also considered appropriate to benchmark the proposed fee against other jurisdictions where similar administration occurs. The fees charged by the federal Department of Agriculture, Fisheries and Forestry, and the Department of Environment and Primary Industries (DEPI) in Victoria are shown below.

Table 18: Benchmarking the compliance auditing fees

Description of fee or charge	Current fee
Plant Biosecurity Act 2010 (Vic.)	
Annual application fee for compliance agreement for a compliance agreement for Fruit Fly Host Produce	**$119.28**
For application fee and for preparing and processing a Compliance Agreement for produce and other produce that are potential hosts of declared pests or diseases other than fruit fly host produce or for fruit fly host produce under special circumstances as approved by the Secretary.	**$59.70**
For preparing and processing a compliance agreement. In office—per quarter hour or part thereof	**$41.80** ($167.20/hour)
For preparing and processing a compliance agreement. On site—per quarter hour or part thereof	**$41.80** ($167.20/hour)
Time to travel to and from the inspector's office, per quarter hour or part thereof.	**$41.80** ($167.20/hour)
Imported Food Control Regulations 1993 (Cwlth)	
Assessment of whether an importer is able to comply with the Act, the Regulations and the conditions in the importer's proposed compliance agreement, including:	**$1300**
(a) an examination of the importer's documented food safety	

and compliance system; and **(b) visiting an importer's place of business to examine whether the importer's document food safety and compliance system is appropriate.**	
Maintenance and administration of a compliance agreement	**$2300** per year
Assessment of whether an importer is complying with the Act, the Regulations and the conditions of the importer's compliance agreement—per quarter hour for each officer performing the service	**$45** (180 per hour)

On average, it is assumed that the labour component for an application for a compliance agreement would be around $42.40. The proposed fee is **$120.80**, which is broadly consistent with the fees charged in Victoria for a similar service.

Fee for removal of restricted place from biosecurity register

A fee is proposed for an application to remove a restricted place from the biosecurity register. This process would require an assessment to verify that steps have been taken to ensure that the place no longer poses a biosecurity risk or other evidence is provided to the same effect. Fees under current Queensland legislation provide an indication of the range of values for benchmarking purposes.

Table 19: Benchmarking for removal of restricted place fee

Description of fee or charge	Current fee
Land Protection (Pest and Stock Route Management) Regulation 2003	
Request to extend compliance period under a pest control notice	**$68.70***
Fisheries Regulation 2008	
For a request to amend a licence if the request is to replace a boat identified in the licence (Act s 63)	**$142.80**
Water Regulation 2002	
Application to change a water allocation	**$113.60**
Application to amend water licence	**$113.60**
Land Regulation 2009	
For a change to a lease –	**$122.10**
(a) if the change is a change of an imposed condition of a lease, licence or permit (Act, s 210)	
Petroleum and Gas (Production and Safety) Regulation 2004	
Application to change the scope of work stated in a gas work authorisation	**$67.10**

*Note that this fee has been indexed to inflation, as it was removed from the *Land Protection (Pest and Stock Route Management) Regulation 2003* in August 2013.

On average, it is assumed that labour component required for the removal of a restricted place from a biosecurity register would be around $23.75. The proposed fee is **$67.70**, which is lower than other fees charged for similar services in Queensland, but reflects the cost to government for providing the service.

Fee for application for approval as an auditor & Annual auditor approval fee

The Act provides for the approval of persons as auditors for the purpose of conducting compliance audits of businesses with their undertakings under compliance agreements and auditing private individual certifiers to ensure the integrity of the assurance schemes.

The chief executive may appoint a person as an auditor if the person has the relevant professional qualifications and experience and the chief executive is satisfied the person would provide an independent report.

It is proposed to introduce two fees in relation to auditors. The first is for an application to become an auditor and the second is an annual approval fee. To accurately determine a level for the fee, an assessment of the labour component was undertaken, extrapolating from existing labour requirements around Interstate Certification Assurance scheme accreditation, which involves broadly similar work. However, given that this is a new fee, it was considered appropriate to benchmark the proposed fee against other legislative arrangements where similar fees are charged. Under Queensland's *Food Act 2006*, the chief executive may appoint a person as an auditor if the person has the relevant professional qualifications and experience and the chief executive is satisfied the person would provide an independent report. This is similar to the purpose under the Act and therefore can be used as to accurately benchmark the fees.

Table 20: Benchmarking for auditor approval fees

Description of fee or charge	Current fee
Food Regulation 2006	
Application fee for approval as auditor (per application)	**$110.75**
Auditor approval fee (per year of the approval)	**$238.55**
Food Production (Safety) Regulation 2012	
Application fee for approval as auditor (per application)	**$141.35**
Auditor approval fee	**$495.10**

On average, it is assumed that the labour component required to assess and process an application to for an auditor would be around $47.90. The proposed fee is **$136.60**, which is consistent with fees charged for similar services in Queensland.

The annual auditor approval fee has been designed to facilitate the ongoing maintenance of third party auditing, and covers the management of the system not directly attributable to the processing of an application. The proposed fee is **$352.65**, which is consistent with fees charged for similar services in Queensland.

Fee for transfer of permit

Transfer of permits is not currently provided for under the legislation repealed by the Biosecurity Act, therefore there is no existing fee for this service. Due to the requirement to undertake an assessment of the suitability of the proposed transferee, the process involved is likely to be more than a simple administrative process.

A fee has been calculated by estimating the labour needed to assess the suitability of a proposed transferee. This has been benchmarked against other Queensland legislation that does provide for the transfer of an authority or permit, to inform the level of the fee.

Table 21: Benchmarking for permit transfer fee

Description of fee or charge	Current fee
Fisheries Regulation 2008	
Application to register transfer of an authority	**$142.80**
Nature Conservation (Administration) Regulation 2006	
Transfer of apiary permit	**$61.45**
Land Regulation 2009	
For approval to transfer a lease, licence or sublease	**$122.10**
Electricity Regulation 2006	
Application for approval of transfer of registration of an item of prescribed electrical equipment	**$63.25**

On average, it is assumed that the labour component required for the transfer of a permit would be around $23.75. The proposed fee is **$67.70**, which is lower than other fees charged for similar services in Queensland, but reflects the cost to government for providing the service.

Fee for issue of biosecurity certificate

The issuing of area freedom certificates and status, along with other biosecurity certification is currently provided by the department free of charge (where an onsite inspection is not required). Given the private benefit derived from these services, it is proposed that a fee equal to 15 minutes of inspection time would be charged. This equates to **$45.05**.

Property registration fee

Background

An up-to-date property registration system is critical for biosecurity management and response capability. Maintenance of a property register is also necessary to meet Queensland's national biosecurity system obligations under the Inter-Governmental Agreement on Biosecurity (IGAB) as well as international trade requirements.

The *Stock Identification Regulation 2005* currently provides for mandatory registration of properties where a threshold number of animals are kept. It applies to properties where there

are one or more buffalo, bison, cattle, deer, goats, members of the camel family (e.g. alpacas, Arabian camels and llamas), members of the family *Equidae* (e.g. horses, ponies, donkeys, mules and zebras), pigs or sheep, or 100 or more captive birds. The *Apiaries Act 1982* requires the registration of anyone who keeps bees.

The Department of Agriculture, Fisheries and Forestry administers the Agricultural Property System (APS), the registration database. Registration under the APS enables allocation of a unique property identification code (PIC) where animals are kept. It complements and links to systems in other Australian states and territories as part of a national system.

The PIC, together with the mandatory National Livestock Identification System (NLIS) provides whole-of-life traceability, particularly of cattle, sheep, goats and pigs from the animal's property of birth to the abattoir or port of export.

Under the Biosecurity Act the regime of registration is continued, with the requirement for a person who owns a threshold number of designated animals to be compulsorily registered as a biosecurity entity.

Renewal of registration every three years will be required to remove obsolete information and ensure the accuracy of each property registration[21]. Accurate information will enable biosecurity responses to be targeted.

It is proposed to introduce a new registration fee in Queensland to help meet the costs associated with renewing registrants every three years.

What is the register used for?

The APS is regularly used for incident assessment purposes as part of the immediate response to animal biosecurity incidents within Queensland. For example, data from the APS regarding the population of susceptible animals on neighbouring properties and surrounding areas helps to assess the likelihood that a disease or parasite outbreak at one location may or may not spread.

In emergencies, registration of properties and animals enables timely traceability of potential infection by providing information on the location of relevant species. Knowing the density of particular animals in certain areas can also assist in developing effective disease prevention and response strategies.

Registration may also assist in surveillance activities, early detection of biosecurity risks and allow quick distribution of material on relevant biosecurity risks to registered persons. Registration data enables production losses due to infection to be limited, reduces the costs of control intervention and eradication and minimises the potential for trade losses.

For example, as part of a response to an outbreak of Hendra virus, the property register is used to identify neighbouring properties where horses are kept. This information then helps focus prevention and response activity to the most susceptible areas and to mitigate risks.

[21] There are currently over 70 000 properties registered with APS, although some of these are believed to no longer contain designated livestock. For example, the Australian Bureau of Statistics puts the number of agricultural businesses in Queensland (who meet the minimum size cut-off of $5000) involved livestock at almost 27 000. (see ABS 7121.0 Agricultural Commodities, Australia, 2012–13—values for Queensland businesses taken from Table 1 Agricultural commodities, Nation and State-2012-13). Note that businesses may be involved in more than one industry, so the total number of agricultural businesses involved in livestock may not represent the total number of property registrations for these industries.

The APS is also vital for disease management strategies and risk mapping. For example, spatial data regarding density of registered properties that include horses can be overlaid with known flying fox colonies to produce a risk map for Hendra virus. This information is then used to direct animal biosecurity prevention and control activities to areas of highest risk.

The response and eradication plan for the equine influenza outbreak in 2007 was hampered by not knowing where horses were located. This was one of the drivers for introducing a registration requirement for properties where horses are kept.

Who benefits from property registration?

Property registration delivers both public and private benefits. Property registration delivers a private benefit for individual producers through:

- the facilitation of timely traceability of, and response to, biosecurity events to minimise the impact of pests or diseases on effected and potentially effected properties
- the ability to retain access to a greater number of markets and, usually a more rapid restoration of any lost market.

The maintenance of market access nationally and internationally provides avenues for product sales and, in a number of instances, certification of health status at property, district, region or State level provides premium prices. Due to these significant market access benefits, the primary private sector beneficiary of property registration within Queensland is the cattle industry. Horse owners and the sheep, goat, pig and poultry industries also benefit through facilitation of trade and minimisation of the impacts of pests or diseases.

Other parties also enjoy benefits from property registration, including exporters, processers and local communities through maintenance of access to interstate and international markets and protection of Queensland and Australia's favourable biosecurity status.

Analysis of cost per registrant

An analysis of the work involved in processing applications for registration informed development of a fee that fully recovered the cost of processing an application. This included analysis of the average time spent processing applications of varying complexity, how often complex applications were received and the materials involved in processing an application. The cost breakdown for processing the average registration application is detailed below:

Table 22: Cost breakdown of registration—per three-year registration period

Labour cost	Overheads	Operating cost	Total cost
$124.27	$229.91	$3.39	$357.55 **$119.20 per year**

Who benefits from registration?

Whilst the public received benefits from flow on effects of Queensland's favourable biosecurity status, the primary beneficiaries are the producers and people who deal directly with the designated animals, engage in related activities and profit directly from the trade of healthy and pest free animals. It is difficult to quantify the exact proportion of benefit derived

by producers and property owners, and the indirect benefits for other industries (e.g. animal transport companies), and the flow-on effects to local communities.

The Emergency Animal Disease Response Agreement (EADRA) recognises cost sharing as an integral part of biosecurity management. Cost sharing under EADRA considers the risk and the beneficiaries, and generally involves a 20% to 80% contribution from industry. A similar model could be applied to a registration fee in Queensland.

An appropriate level for subsidisation would reflect the distribution of public and private benefits from property registration, while not disadvantaging owners of designated animals against their interstate counterparts.

Some owners may derive very little quantifiable or measurable benefit through registration. A fee requirement may discourage these entities from registering their animals, compromising the integrity of the system. It is proposed to set a minimum threshold to define benefits derived from registration. A person who meets the Australian Tax Office ruling of carrying out the business of primary production (TR 97/11) will be required to pay the fee. All other entities will still be required to be registered—thus maintaining the integrity of the system—but will receive full fee subsidisation from government.

Do other states charge a fee?

While property registration (in some form) is a requirement in all Australian states and territories, the terminology, and model for charging for registration (where applicable) varies between jurisdictions. Currently, South Australia, New South Wales and Western Australia charge a fee for issue of a PIC as part of property registration or brand registration process. In all other jurisdictions, a PIC is issued free of charge. The highest fee currently charged is the biennial PIC fee in South Australia. This fee covers approximately three quarters of the costs in managing the South Australian PIC system[22]. Fees in other states are subsidised.

The proposed registration fee has been benchmarked against the fees charged in other Australian jurisdictions.

[22] Biosecurity SA: Animal Health, Livestock property registration—What does this fee fund?' http://www.pir.sa.gov.au/biosecuritysa/animalhealth/pigs/pigs_identification_movement_and_trading_requirements/property_registration/frequently_asked_questions

Table 23: Comparison of interstate property registration requirements

State/Territory	Property registration/PIC issue and renewal fees	Cost per year
South Australia	Property registration is mandatory - properties that run one or more horses, cattle sheep, pigs, goats, deer, alpacas, buffaloes, donkeys, camels, mules and llamas must have a PIC. Commercial poultry properties requiring accreditation under food safety legislation are also required to have a PIC. Registration costs $76 per property for a two-year period.	$38.00 per year
Western Australia	A PIC is part of a brand - it is not a separate entity. A PIC is issued automatically when a brand is registered. Registration is required for ownership of one or more buffalo, cattle, deer, goat, horse, pig, sheep, alpaca or llama. A fee of $69 applies for an application to register as an owner of stock (which results in the issue of a brand and a PIC). Registration is valid for three years.	$23.00 per year
New South Wales	Anyone who keeps cattle, sheep, goats, pigs, bison, buffalo, deer, camelids, horses, donkeys and poultry must have a PIC. Fees vary depending on whether an applicant pays rates with a local land service. Local land service ratepayers who do not have a PIC pay a registration fee of $11.00 and the PIC will remain active as long as the landholder remains a ratepayer. Non-ratepayers must pay a pro-rata fee of $22.00.	$22.00 per year
Other states and territories	Property registration/PIC issue is provided free of charge	$0

As another point of comparison, the Brisbane City Council's 2014–15 annual registration costs for a dog are $128.90, reduced to $44.95 if the dog is desexed or increased to $505.20 if the dog is dangerous or menacing.[23]

[23] Brisbane City Council registration fees 2014, Brisbane City Council, Brisbane, <http://www.brisbane.qld.gov.au/laws-permits/laws-permits-residents/animals-pets/cats-dogs/dog-registration/dog-registration-fees>

Three options for the property registration fee are outlined below.

Table 24: Options for property registration fee

Issue	Continued provision of property registration services without charging a fee	Introduction of a fee for property registration and renewal that recovers the full cost of providing the service	Introduction of a fee for property registration and renewal that is subsidised by the Queensland Government
Maintenance of the property register—which provides significant private benefits—is currently wholly borne by the Queensland Government.	The fee for property registration would be set at **$0**.	The fee for property registration would be set to recover full costs—at **$357.55** (for registration or renewal for up to three years—equates to **$119.20** per annum).	The fee for property registration would be subsidised, recognising that public benefits are derived from property registration. The fee would be set at **$119.20** (for registration or renewal for up to three years—equates to **$39.75** per annum).

A 66 per cent subsidisation recognises that there are both public are private benefits to property registration, and is consistent with other cost sharing approaches. In particular, a 66 per cent subsidy would be consistent with the fees charged in South Australia.

Table 25: Cost and benefits for the property registration fee

Issue	Impact group	Option 1—Continued provision of property registration services without charging a fee	Option 2—Introduction of a fee for property registration and renewal that recovers the full cost of providing the service	Option 3—Introduction of a Government subsidised fee for property registration
Maintenance of the property register—which provides significant private benefits—is currently wholly born by the Queensland Government	***BENEFITS***			
	Industry	Industry would continue to benefit from risk management measures being	Industry could argue that they have fully met the costs associated with	Industry could argue that they have sufficiently contributed to the management of

		met wholly by the government.	managing an animal tracing system.	an animal tracing system that the community also derives benefits from.
	Government	This option would involve minimal development of new systems and processes.	This option would see stakeholders contributing around $1 434 000 to the administration of animal tracing.	This option would see stakeholders contributing around $478 000 to the administration of animal tracing.
	Community	The community derives some benefits out of the animal tracing system.	The community would likely support this option as those receiving the primary benefits from the animal tracing program are paying the full costs.	This option balances the private benefits of property registration with the broader public benefits for Queensland.
	COSTS			
	Industry	This option would result in no direct additional costs to industry; however, it may ultimately reduce the resources available for managing other biosecurity risks.	This option would see the regulatory burden increase for businesses, and involve a substantial annual cost of around $1 434 000.	Preliminary estimates suggest that a subsidised registration fee may cost Queensland businesses as a whole around $478 000 annually.

	Government	This option would not be consistent with government policy on cost recovery, and would undermine the intent of the Act—to share responsibility for risks proportionally. This option would cost the government around $1 434 000 annually.	This option would increase the regulatory burden on people. The option may encourage non-compliance, which would threaten the integrity of the system. There would be some costs associated billing.	This option would cost the Government $956 000 annually.
	Community	The community would likely regard this option as unfair as the primary beneficiaries of the tracing system are not paying any costs.	There are no costs on the community under this option.	This option would require around $1 m public funding.

6. Preferred options outlined in the Consultation RIS

The Consultation RIS evaluated the benefits and costs identified for each issue to establish a preferred option. There is a level of subjectivity associated with the evaluation, as the majority of the benefits and costs are qualitative rather than quantitative, which are more challenging to assess. Consequently this may not represent the preferred industry option.

6.1 Banana biosecurity management

The banana industry is Queensland's biggest single commodity horticultural industry, with a GVP of $550m in 2012–13. It is therefore imperative that any biosecurity risks that may have significant impacts on the banana industry are effectively and appropriately managed. In that regard, the methods for management may include regulatory or non-regulatory approaches as long as they are effective. The RIS proposes that much of the current regulation for banana pests will be either discontinued because provisions are obsolete, duplicative or no longer required under the framework of the Act, or transitioned to the new regulation because they are required under the Act, are effective and proportional to the biosecurity risk or subject to a national agreement. However, the RIS identifies three issues for banana pests where there are alternative viable options to meet the biosecurity objective. Options are presented in the RIS that could meet these biosecurity objectives. A cost–benefit analysis has been presented in the RIS for each option and this section of the RIS evaluates the benefits and costs identified for each banana-pest issue to establish a preferred option.

Biosecurity zones

There are currently six pest quarantine areas (PQAs) for bananas that cover the Torres Strait, Cape York Peninsula and the rest of the coastal and sub coast areas of Queensland to the New South Wales border. The PQAs have been developed over many years to deal with a range of banana pests. It is therefore timely to review whether the continuation of the current PQAs is the most effective and efficient method to deal with banana pests. In that regard, the RIS identifies two options: status quo and more targeted zones.

The benefits of maintaining the current PQAs as biosecurity zones (option 1) are that they provide buffer zones between the major banana-growing region and the areas where the major pests such as black sigatoka and banana bunchy top are currently contained. Other benefits include that both industry and government will be familiar with the rules, and the contiguous zones may reduce the spread of other lower-risk pests. However, the benefits of maintaining the current zones are arguably offset by the costs, as everyone is burdened with the requirement to obtain a biosecurity certificate each time they move a plant or risk item either within the zone, outside the zone or into the zone. These requirements are necessary in the Far Northern zone and the Southern zone, as these requirements reduce the potential for spreading black sigatoka out of the Far Northern zone and banana bunchy top out of the Southern zone. However, given that black sigatoka and banana bunchy top are currently not found outside of the Far Northern and Southern zones respectively, the restrictions serve no purpose in minimising the spread of these pests outside of the far northern and southern zones. While it could be argued that the restrictions in other zones minimise the spread of lower-risk pests, these pests are not able to be quarantined as they are already widely spread. Consequently, these pests are better managed through other arrangements that provide greater flexibility for industry.

Under option 2, the critical zones are maintained, with the Far Northern zone containing black sigatoka and the Southern zone containing banana bunchy top. The other current zones are not maintained as there are no pests in those areas that can be quarantined. A

major concern of industry is the movement of a high-risk pest such as black sigatoka, banana bunchy top, and Panama disease Tropical Race 4 or exotics such as banana freckle into the major banana-growing region of northern Queensland. While these pests are either contained in the Far Northern and Southern zones, or kept out of Queensland through border protection requirements, option 2 provides further protection for the major banana growing region by creating a biosecurity exclusion zone. Under this option restrictions will apply to the movement of plants and risk items into and within the zone.

A person who moves a plant or risk item in other areas of Queensland that are not zoned under option 2 will still be required to be diligent not to spread a pest. Under the GBO, which is enforceable, a person must take action to ensure that they do not spread or exacerbate pests, regardless of whether they are able to be quarantined. Relying on the GBO rather than set legislation provides greater flexibility in addressing risks.

Under option 2, if any major pest such as black sigatoka, banana bunchy top, Tropical race 4 or banana freckle is detected within a place in Queensland not zoned, then emergency provisions under the Act could be implemented immediately. Under these provisions, restrictions could immediately apply on moving plants and risk items as well as requirements to destroy infected matter. Longer-term measures such as a biosecurity program could be also used to maintain surveillance in the region and control of the pest if it is found.

In weighing up option 1 against option 2, it is clear that there are savings to industry, as they would not be required to obtain a biosecurity certificate each time they moved a plant or risk item. In relation to government, under option 1 there is potential to focus on medium–low risk matters to the detriment of high-risk matters. This could lead to a high-risk pest such as bunchy top virus or black sigatoka spreading out of the biosecurity containment zones. An eradication response could cost up to $60m. In addition, the regulatory approach throughout Queensland under option 1 does not provide the desired level of flexibility for industry to meet the ever-changing biosecurity environment. Option 2 provides the necessary regulatory measures for high-risk areas and provides flexibility under the GBO for non-zoned areas.

It was therefore determined in the Consultation RIS that overall, option 2 provides the best outcomes for the community because it strikes an appropriate balance between minimising the impact of the regulatory burden and an appropriate level of regulatory controls to minimise the economic impact of banana pests. Option 2 shifts the responsibility for managing medium–low risk pests to those who are best placed to deal with them without imposing overly burdensome regulation while still managing the risks.

Treatment requirement for yellow sigatoka

Under current regulation, a person must treat their banana plants if they have a prescribed percentage of leaf area infested with yellow sigatoka. Industry and government jointly contribute to the surveillance of commercial banana plantations to detect yellow sigatoka and advise farmers of their regulatory requirements to treat the plants when necessary.

The RIS identifies two options for treating yellow sigatoka: maintain the current prescriptive treatment regulations; or remove the treatment regulations and rely on industry to maintain appropriate treatments under industry best management practices and enforcement under the GBO.

The benefits of maintaining the current treatment requirements (option 1) are primarily associated with easier detection of black sigatoka symptoms when yellow sigatoka is under active control. However, this suggests that under option 2 industry would cease to treat yellow sigatoka on their plants, which is counter intuitive to best management practices.

Industry will generally deal with yellow sigatoka because, if the pest is left uncontrolled, it could have significant impacts on the level of productivity of a banana plant and may affect interstate market access, and it does affect fruit quality.

Under option 2 the costs associated with surveillance (in excess of $440k per annum) can be reduced and the resources provided to higher-risk issues. The GBO will continue to require farmers to deal with yellow sigatoka on their plants if there is a risk of it spreading. Greater resourcing higher-risk matters such as black sigatoka will raise the potential for early detection of incursions and the capacity to quickly eradicate it before it spreads and becomes more costly to manage. There are potential disadvantages under option 2, as industry may perceive that yellow sigatoka is not an important pest to manage. However, resources currently used for surveillance could be used to educate farmers on the advantages of minimising yellow sigatoka on their plants. Resources could also be used for a joint industry/government best management practice program for biosecurity.

It was therefore determined in the Consultation RIS that overall, option 2 provides the best outcomes for the community because it strikes an appropriate balance between minimising the impact of the regulatory burden and an appropriate level of regulatory controls to minimise the economic impact of yellow sigatoka. Option 2 shifts the responsibility for managing medium–low risk pests to those who are best placed to deal with them without imposing overly burdensome regulation, while still managing the risks.

Residential planting restrictions

Under the current regulation a person who wishes to plant banana plants on their property for a non-commercial purpose is restricted by plant number and variety. A person may only plant a maximum of ten banana plants, or 30 pseudostems, and only specified varieties of banana plants may be grown in each of the current PQAs. The benefits and costs of these restrictions have been analysed in the RIS for the Far Northern zone in relation to the numbers restriction, and the Southern zone in relation to both the number and varietal restrictions. It should be noted, however, that both the number and varietal restrictions are proposed to be maintained for the major growing region and the varietal restrictions maintained for the Far Northern zone. In addition, the numbers and varietal restrictions are proposed to be discontinued elsewhere in Queensland (see attachments 3 and 4 for details).

The RIS identifies two options for the plant numbers restriction in the Far Northern and Southern zones and the varietal restriction in the Southern zone: maintain the current restrictions; or remove both varietal and plant number restrictions.

The benefits for option 1, in relation to the numbers restriction, is to reduce the risk of the exotic pests spreading in the Far Northern zone, and bunchy top spreading in the Southern zone, by reducing the number of host plants on which to provide a pathway for establishment and spread. However, there is no scientific evidence that restricting the number of host plants to 10 plants or 30 pseudostems is the appropriate maximum allowable number to mitigate the risk of black sigatoka establishing, nor is there any evidence about the specific number of plants that would provide a suitable host environment. It appears that the original decision was arbitrary in relation to biosecurity and was based on how many bananas would constitute fairness for feeding a family for a year. While it is clear that each banana plant could host a serious pest, there is no evidence that the restriction mitigates the risk of black sigatoka spreading in the Far Northern biosecurity zone or banana bunchy top in the Southern zone, especially given that the challenging growing conditions in the dry monsoonal tropics tends to limits the size of residential plantations anyway.

The benefits for option 1 in relation to the restriction on banana plant varieties in the Southern zone are also unclear. The reason for the varietal restriction is minimise the number of banana plants that are susceptible to black sigatoka. There is a clear benefit from

this restriction in the Far Northern zone; however, the pathway for the entry of black sigatoka is not as strong in the Southern zone and, if it were found, emergency provisions under the Act would be used to contain and eradicate it. Also, there are considerable numbers of lady finger varieties found in southern Queensland that are not black sigatoka resistant, which confounds the existing regulation.

Under option 2, the regulatory burden associated with the restrictions are removed. While it is unlikely that many people will want to exceed 10 banana plants or 30 pseudostems on their properties, those that wish to do so will be unrestricted. Remote communities in the Far Northern zone will gain the greatest (health and economic) benefits, as they will be able grow greater numbers of bananas to sell/exchange within their local areas. The costs are considered negligible as there is no clear reason what benefits are associated with the numbers restriction or the varietal restriction in the Southern zone. Also, it is unlikely that many people will grow more than ten plants.

It was therefore determined in the Consultation RIS that overall, option 2 provides the best outcomes for the community because there are no clear benefits derived from the restrictions, and removing the restrictions will provide some residential growing and community benefits.

6.2 Cattle tick

Primary host species

Given the economic impact caused by cattle tick, it is essential to consider appropriate options for managing their spread into the tick-free area and, more specifically, into the area which is most protected by the current tick line. The methods for management may include regulatory or non-regulatory approaches. Mechanisms such as chemical, genetic and vaccination are available for controlling and eradicating ticks. However, each of these mechanisms presents challenges. Chemical treatments (acaricides) used to treat cattle for ticks may be applied through use of the traditional plunge dips or as pour-on. However, ticks have developed a resistance to some of these chemicals; in particular to those used in plunge dips. Residue problems are associated with the use of chemicals on production animals and there are withholding periods before animals may be slaughtered following treatment with acaricides. Also, acaricides are generally ineffectual on secondary host species such as horses, and present environmental hazards due to contamination of areas around dip sites.

Where a regulatory approach is taken, consideration must be given to the necessity, efficiency and enforceability of the provisions. Any restrictions must also meet the objective for which they are implemented and be assessed against non-regulatory approaches that could be used instead of the regulation.

The RIS provides three alternative approaches to managing cattle tick spread through the movement of primary and secondary host species. In relation to primary host species only, the first option is to maintain the current regulatory regime which has three zones and a complex regulatory framework. The second option would establish two biosecurity zones (tick-free and tick-infested) and movement restrictions between the infected zone and infected properties and the tick-free area for host species infested with ticks.

The third option is to rely on the general biosecurity obligation under the Act. A person would be required to take all reasonable and practical steps to prevent or minimise any adverse effect on any tick-free. Under this option the natural tick line would establish the infested and tick-free areas. Some of the properties in the control area or tick-free area under the current legislation would fall within the tick-infested area under this option. This would mean the

general biosecurity obligation of the owners of properties in these areas would not be to ensure their property was free of ticks but to ensure they did not spread ticks into the free area.

None of these options are completely non-regulatory because of the operation of the general biosecurity obligation within the Act.

Option 1 provides for a complex framework of movement restrictions which rely principally on clearing facilities and treatment with acaracides as the main means for the management of the spread of ticks into the tick-free area. This option restricts the movement of both primary and secondary host species but not native and feral host species. Option 1 also impose burdens through obligations on non-infected properties in the free and control zone by establishing these properties as a buffer between the cattle tick infected properties and the cattle tick free properties. In many cases these properties derive limited or no benefit from undertaking activities for the benefit of the cattle tick free properties.

Compared with option 1, options 2 and 3 provide the greatest benefits to the community in terms of a reduction in regulatory burden and direct savings. However, option 3 may result in greater overall costs and an increase in risk of the spread of ticks in the short to medium term. This is because under the natural tick line, some properties which under the prescribed tick line are in the control or free zones would be considered to be in an infected area under option 3. Therefore, the general biosecurity obligation for those people would not be to take all reasonable precautions to keep their property free of ticks. Instead, their obligation would be to not infect properties in the tick-free area.

The cost of shifting the tick line to align with the natural tick line is difficult to establish, as option 3 does not equate to total deregulation of the tick line. The total costs of deregulation have been estimated previously based on varying responses from industry. If the response was a total reliance on acaracides without converting the herd to tick-resistant cattle breeds, the estimated ongoing costs were determined to be approximately $377m (beef and dairy), with ongoing costs of $35.52 per annum. If 50 per cent of producers converted to tick-resistant cattle breeds it was estimated the costs would be $260m (beef and dairy). If 85 per cent of beef producers converted to tick-resistant cattle breeds it was estimated costs would come down to $80.5m (beef and dairy) with ongoing costs of $32m[24.]

There are clear savings to be gained under options 2 and 3 because of the option to pass through the free zone without stopping at tick clearing centres. This will encourage industry to use more direct routes to abattoirs and feedlots, especially from central Queensland to the south east corner and better utilisation of the train from North West Queensland to the south east corner.

Examples of these cost savings are:

- Tick clearance treatment cost savings of $5–$10 per head for cattle that do not need to be cleared en-route to an abattoir. From 2001–2011, CSIRO modelling based on NLIS data shows that approximately 1.07m cattle would cross the tick line from the direction of the infested zone to the free zone en-route to an abattoir, incurring a tick clearance requirement. At $5 per head this would generate $5.35m savings in tick clearing treatment costs. At $10 per head this would generate $10.7m savings in tick clearing treatment costs.

[24] Chudleigh, Mary Ann Franco-Dixon and Tim Lucas, 2009 *Evaluation of the QPIF investment in cattle tick control and management*, Department of Employment, Economic Development and Innovation. All figures have been adjusted by CPI to bring them to current dollar values.

- Tick clearance treatment cost savings of $5–$10 per head for cattle that do not need to be cleared en-route to a feedlot. From 2001–2011, CSIRO modelling, based on NLIS data, shows that approximately 0.98m cattle would cross the tick line from the direction of the infested zone to the free zone en-route to a feedlot, incurring a tick clearance requirement. At $5 per head this would generate $4.9m savings in tick clearing treatment costs. At $10 per head this would generate $9.8m savings in tick clearing treatment costs.

- Transport efficiency savings of approximately $5 per head for cattle to travel direct to abattoirs through the free zone rather than detouring to avoid crossing the tick line. From 2001–2011, CSIRO modelling, based on NLIS data, shows that approximately one million cattle travelled from a tick-infested zone to an abattoir in a tick-infested zone, where the most direct route would be to travel through a tick-free zone. Normally, such cattle would take a detour around the tick-free areas (e.g. via Bruce Highway), often in smaller vehicle configurations (e.g. B-Double) to avoid tick clearing to pass through the tick-free zone. This adds costs of about $5 per head to the journey time. The savings for using the most direct route through the tick-free zone versus taking a detour around it was approximately $5.4m over 2007–2011 (12% savings) at approximately $5.52 savings per head. About half of these, 458 892 cattle, would have been able to travel on the highways between Clermont and Roma as their most direct route to an abattoir in SEQ.

- Transport efficiency savings of approximately $1.89 per head for cattle to travel direct to feedlots through the free zone rather than detouring to avoid crossing the tick line. CSIRO modelling, based on NLIS data, shows that from 2007–2011 about 277 317 cattle travelled from an enterprise in a tick-infested zone to the feedlot in a tick-infested zone, where the most direct route would pass through a tick-free zone. The savings for using the direct routes rather than the detours would be approximately $524 125 over 5 years (6% savings) at approximately $1.89 savings per head. The transport cost savings are considerably less than that for abattoirs. This is because a large proportion of the SEQ feedlots are close to the tick line (particularly west of Gympie), and the subsequent transport detour around the tick-free zone is quite short.

There is also the potential for indirect cost savings to the community under options 2 and 3 through less wear and tear on major highways such as the Bruce and Burnett Highways, and increased safety and congestion as a result of reduced heavy transport on these routes. The community would also benefit from less government intervention in the management of an endemic species of pest, which is best managed by those who are in the best position to manage the risks. This would mean the finite government resources could be directed at preventing and managing high-risk biosecurity matter. Option 2 would provide certainty without complexity through the clear identification of the tick line but with fewer movement restrictions compared to option 1.

The risk of the spread of ticks and outbreaks of tick in the free zone would be similar under both options 1 and 2. This is because the level of enforcement under option 2 would be similar to the current level of enforcement under option 1, which is minimal. Therefore, the risks created by non-compliance with the current legislation and proposed restrictions under option 2 would be similar. However, under option 2, there would be more opportunities to undertake targeted compliance because, under the Act, biosecurity orders may be used that are not available under the Notice. Biosecurity orders provide that a person who has failed or may fail to discharge their general biosecurity obligation at a place may be given an order that must be directed at ensuring the person discharges their obligation. Under option 2 there would be less government involvement in the management of outbreaks of ticks in the free

zone and no assessment of adjoining properties to determine their level of risk. This would represent significant savings. The person responsible for the risk would manage the risks, and failure to manage the risk would result in enforcement action.

Options 2 and 3 provide a number of benefits to the community through the potential reduction in the use of certain major roads, and reduced reliance and use of chemicals, providing better environmental and human health outcomes, as well as better animal welfare outcomes as a result of not being forced to use clearing facilities. Option 3 provides the greatest benefits in terms of regulatory burden reduction and flexibility to manage the risks. However, under option 3, the current tick line will be moved to align with the natural tick line, causing the natural spread of ticks into previously protected areas, thereby exposing those susceptible properties in the control areas and the protected free area to possible infestation of ticks.

This would have a significant impact on producers in this area and would require greater reliance on acaracides or a need to shift to tick-resistant varieties of cattle. This would result in significant costs to producers in this area in the short to medium term because of the costs associated with converting to tick-resistant varieties of cattle. It would also put greater pressure on acaracide resistance, which may result in the premature loss of acaracides as an effective method of control because of total resistance by ticks to the chemicals. However, there may be longer-term benefits because the industry will transition to tick-resistant breeds of livestock, which will reduce the reliance on acaracides.

It could be argued that option 1 provides the greatest protection for reducing the spread of cattle ticks because it has the most restrictions and checks and balances; however, it also places high levels of cost on industry and does not give flexibility in how producers reduce their risk of spreading ticks. Government resources are best placed to deal with areas of high risk and only provide information on how to deal with endemic pests and diseases. Option 1 would require a significant investment of resources to enforce it at an appropriate level. Finite government funding means that the resources required to appropriately enforce option 1 could only come from either shifting resources from higher-risk areas or from sourcing additional funds.

Option 2 has fewer restrictions and shifts the emphasis onto those who are responsible for managing the risks. Under option 3 there is a total shift of responsibility to those who are best placed to manage the risk. An appropriate level of enforcement requires a significant investment by government in resources. Option 2 provides a balance between shifting the responsibility for the risk to those who are in the best position for managing the risk, and providing some restrictions coupled with regulatory oversight through the use of biosecurity orders. Under option 3, there is a total shift to making those who own the risk responsible for managing the risk. There is minimal regulatory oversight through the use of biosecurity orders. The funding for enforcement for each of these options would be similar and minimal.

It was therefore determined in the Consultation RIS that overall, option 2 provides the best outcomes for the community, because it strikes an appropriate balance between minimising the impact of the regulatory burden and an appropriate level of regulatory controls to minimise the economic impact of cattle ticks. Option 2 also shifts the responsibility for managing ticks to those who are best placed to deal with them, without imposing overly burdensome regulation while still managing the risks. Under option 2 the government's role in intervention will more appropriately be focused on targeting only those who do not address the risks in an appropriate way, leaving those who comply with less scrutiny and fewer restrictions.

Secondary host species

Secondary host species, which include horses, sheep, camelids, mules, donkeys and goats, pose a risk of spreading cattle tick. However, the risk is considered to be low and, in the case of well-groomed horse, the risks are minimal. Therefore the options for these species will be considered separate to the options for primary host species.

In relation to secondary host species, the first option would maintain the current regulatory regime. The second option would establish two biosecurity zones (tick-free and tick-infested) and movement restrictions between the zones and infected properties in the tick-free area. The third option is to rely on the general biosecurity obligation under the Act requiring a person to take all reasonable and practical steps to prevent or minimise a biosecurity risk. Fact sheets would provide ways in which a person may take all reasonable and practical steps to prevent or minimise a biosecurity risk. None of these options are completely non-regulatory because of the operation of the general biosecurity obligation within the Act.

Most of the horses moved across the tick line are moved for the purpose of attending competitions, breeding, racing and other events such as shows. These types of horses are generally of high value, well groomed and are considered as a very low risk of spreading cattle ticks. Therefore the management of these animals in relation to cattle ticks can be considered in a different way to how primary host species should be managed.

There are few benefits overall to the community in maintaining the current restrictions for the movement of horses. Conversely, there are a number of costs and disadvantages imposed by the current regulatory regime. The requirement to have horses inspected prior to moving out of the infected area to the clean area creates a number of logistical problems and imposes costs on horse owners. The majority of competitions occur on weekends, which requires horses to be inspected at clearing facilities on Friday evenings or over the weekend. Often, clearing facilities are closed on Friday evenings and/or on weekends, or will charge penalty rates if they are open. To avoid penalty rates and/or comply with the regulatory requirements, horse owners may have to sacrifice work time to have their animals inspected during business hours.

Clearing facilities present a significant risk of injury to horses, and acaracides are generally ineffective on horses. Any injuries to horses at clearing facilities will incur veterinary costs and render the horse unable to compete or perform at the intended event. Removing the need to have horses inspected at clearing facilities may also allow for a more direct route to be taken if the facility is not situated on the intended route. This will result in savings on transport costs and time taken to get to events. It would also mean there are better animal welfare outcomes, as animals would spend less time being transported.

Options 2 and 3 present the same benefits to industry while still adequately managing the risks. The main difference being option 2 would create regulatory burden and associated compliance costs as it would be embedded in legislation. It was therefore determined in the Consultation RIS that overall option 3 provides the best outcomes for the community because it strikes an appropriate balance between minimising the impact of the regulatory burden and an appropriate level of regulatory controls to minimise the economic impact of cattle ticks through the movement of secondary host species. Option 3 also shifts the responsibility for managing ticks to those best placed to deal with them without imposing regulation while still managing the risks. Under option 3 the government's role in intervention will be focused more appropriately on targeting only those who do not address the risks in an appropriate way, leaving those who comply with less scrutiny and fewer restrictions.

6.3 Mango biosecurity management

Mango leafhoppers (MLH) can cause significant economic impact on the mango industry and it is therefore pertinent to consider methods that will minimise the introduction and spread of these pests throughout Queensland. Those methods may include regulatory or non-regulatory approaches. Where a regulatory approach is taken, consideration must be given to their necessity, efficiency and enforceability. The new regulation must also meet the objective for which they are implemented and be assessed against non-regulatory approaches that could be used instead of the regulation.

The RIS provides two alternative approaches to minimise the spread of MLH through the movement of planting material. The first option is to maintain two biosecurity zones; a Cape York zone and a west of Cairns zone that restricts the movement of mango planting material without a biosecurity certificate. Note that these zones will be expanded from the current pest quarantine areas (PQAs) to cover the further detections of MLH outside the PQAs. The second option is to rely on the general biosecurity obligation under the new Act, requiring a person to take all reasonable and practical steps to prevent or minimise a biosecurity risk.

Under option 1, restrictions apply on moving planting material both out of the biosecurity zone and within the zone. Option 1 does not address other movement vectors for MLH such as movements in vehicles and through weather events. It is highly likely that MLH are moving in vehicles, as they have been detected at public rest areas, camp grounds, caravan parks and council depots. Anyone who moves mango planting material must obtain a biosecurity certificate stating that the planting material is free from MLH. A person may be required to undertake specific treatment of the planting material before a biosecurity certificate is issued.

Despite two PQAs being in place for many years for MLH, recent detentions have been made outside the two PQAs, suggesting that the pests are moving through other vectors and/or that people are not complying with the movement restrictions. It is highly likely that MLH are moving through other vectors as discussed above and, given that the movement restrictions for plant material are extremely difficult to enforce, MLH movements may also be occurring through planting material.

Under option 2, a person has an obligation to take all reasonable and practical steps to prevent or minimise a biosecurity risk. Moving MLH would be constituted as a biosecurity risk as it is likely to spread the pest into areas where it does not occur. Consequently, a person must ensure that, when moving planting material from one place to another, they do not move MLH. It may be necessary for a person to treat their planting material before they move it. Therefore, the costs to treat their planting material would likely equate to the same treatment under option 1. However, a person would not be required to arrange an inspection of the planting material and obtain a biosecurity certificate prior to the movement, which would reduce industry costs. A person would also have an obligation not to move MLH by vehicle and they would need to take steps to prevent the movement of the pest in that manner. Further education and extension will be necessary to ensure people are aware of their obligations and understand the implications associated with the movement of MLH.

It could be argued that option 1 is more easily enforced because it relates to a specific set of requirements, whereas the general biosecurity obligation relies on the establishment of circumstantial evidence that the person has not met their obligation. However, to adequately enforce option 1 would require substantial resources. These resources would need to come from additional funding or a reallocation from higher risks.

In summary, neither option is likely to prevent the further spread of MLH as they are moved in other ways that either cannot be controlled, such as weather, or are difficult to control such as in vehicles. Both options would require significant resources to enforce and it is

questionable why those resources should be applied when other vectors continue to spread the pest. Option 1 provides zones that cover the current extent of the pests and imposes restrictions on moving planting material within and out of the zones. However, these zones may continually need updating as the pests spread beyond the defined zone boundary. Under option 2 the obligation applies throughout Queensland to everyone not to move MLH and therefore no further updates will be required.

It was therefore determined in the Consultation RIS that overall, it is clear that option 2 provides the best outcomes for the community because it meets the necessary biosecurity objectives and it strikes an appropriate balance between minimising the impact of the regulatory burden and an appropriate level of regulatory controls.

6.4 Bee biosecurity management

Asian Honey Bee (AHB) is considered an endemic pest. Its natural ability to move through swarming and absconding and via mechanical vectors creates problems with restricting its spread through static regulatory measures. However, given the potential impact which may be caused as a result of the spread of AHB, consideration needs to be given to the options which may be available for its management.

Where a regulatory approach is taken, consideration must be given to the necessity, efficiency and enforceability of the provisions. Any restrictions must also meet the objective for which they are implemented and be assessed against non-regulatory approaches that could be used instead of regulation.

The RIS provides two alternative approaches to managing the spread of AHB. Option 1 adopts a similar approach to the current restricted area imposed by the *Exotic Diseases in Animals (Asian Honey Bee) Notice 2010*. Under option 1 a biosecurity zone would be established that would cover the area of the State to the extent of the known detections of AHB. Restrictions on the movement of bees, bee products and mechanical vectors out of the restricted area for vectors would be part of the regulatory provisions for the zone. Movement of these items would be reliant on a permit being obtained if certain conditions had been met. The zone would need to be amended to accommodate any new detections of AHB outside of the zone.

Option 2 relies on the general biosecurity obligation. It should be noted that information (fact sheets) would be published by the department explaining how the risks of managing the spread of AHB can best be addressed.

Between the two options, Option 2 provides the greatest benefits to the community in terms of a reduction in regulatory burden and direct savings. Overall, neither option will reduce the spread of AHB through natural spread. In addition, neither option will assist in facilitating the export of queen bees to the USA. This is because the USA has not finalised its import risk analysis and it is unknown what restrictions could support the re-opening of this market.

Arguably, a biosecurity zone may be effective in minimising the spread of AHB through regulating the movement of beekeeping equipment and mechanical vectors. However, the risk of spread of AHB would be similar under both options. This is because the level of enforcement under both options would be similar, as only minimal enforcement exists under the current regulatory provisions. Regardless neither option can halt the natural spread of AHB.

Any new detection outside the biosecurity zone would require an amendment to the area covered by the zone. There would be a delay while a regulatory amendment was completed.

Government resources are best allocated to deal with areas of high risk and only provide information on how to deal with endemic pests and disease. Option 1 would require an investment of resources to enforce it at an appropriate level. These resources could only come from either shifting resources from higher risk areas or from sourcing additional funding.

Option 2 has fewer resources and shifts the emphasis onto those who are responsible for managing the risks including anyone who may operate vehicles or vessels which may act as a vector for AHB. Option 2 would allow the government's finite resources to be better utilised.

It was therefore determined in the Consultation RIS that overall Option 2 provides the best outcome for the community because it strikes an appropriate balance between minimising the regulatory burden without a commensurate increase in the risk of the spread of AHB.

Preferred option for property registration fee

Given the integral role played by property registration in enabling and facilitating the continued integrity of the biosecurity system in Queensland, and the distribution of benefits provided by registration, it is necessary to consider sustainable approaches for funding the property registration system that will ensure ongoing maintenance, and protect primary producers.

The RIS provides three alternative approaches that weigh the public and private benefits of the property registration system. The first option is for the continued provision of the property registration system with no fee—where the service is wholly subsidised by the Queensland taxpayer. The second option is for the introduction of a fee for property registration and renewal that recovers the full cost of providing the service. The third option is for the introduction of a fee for property registration and renewal that is subsidised by the Queensland Government—recognising both the public and private benefits provided by the continued maintenance of the system.

Under option one, the status quo is maintained and an additional financial burden is not applied to primary producers. However, it does not meet the requirement that all relevant parties that benefit from the provision of risk management measures should contribute in proportion to the risks created and benefits gained. Under option two, primary producers cover the full cost of a system that they largely benefit from. However, it does not recognise the indirect public benefits to the Queensland economy from the maintenance of Queensland's favourable biosecurity status.

Under option three, the costs of maintaining the integrity of the biosecurity system in Queensland are shared by those who create and benefit from the risk, acknowledging that property registration delivers both direct benefits to property owners and producers, and indirect benefits to the people of Queensland.

It could be argued that option one is the most appropriate, as a fee may encourage some registrants to lapse—compromising the integrity of the entire register. Equally, it could be argued that the full recovery of the cost of the service is appropriate, given the majority of the benefits conveyed by the system accrue to businesses of primary production, and are only marginally and indirectly felt by the population at large. However, if due consideration is given to both the private and public benefits provided by the ongoing maintenance of the property registration system, neither of these arguments is entirely compelling. Option three, which balances the benefits derived directly from the trade by producers and property owners against the indirect benefits for other industries, represents a fairer and more appropriate fee model.

In summary, while none of the options is likely to strike the exact balance between public and private benefits, option three, which recognises the compromise between the two, and proposes the cost for managing biosecurity be co-managed by the risk creators and the government delivers the best and most equitable outcome, and is was therefore highlighted in the Consultation RIS as the best option to apply for industry, government and the community at large.

7. Consistency with other policies and regulation

7.1 Competition principles agreement

The proposed legislation is generally consistent with Clause 5 of the Competition Principles Agreement.

Regulations in the proposed legislation are rules-based, apply equally to all industry entities and do not favour any specific segment.

The fee component of the Consultation RIS will be presented seperately and is therefore not discussed in this Decision RIS.

7.2 Fundamental legislative principles

The fundamental legislative principles (FLPs) under the *Legislative Standards Act 1992* have been considered in the policy development for the biosecurity regulation review, and are consistent with the proposed approach. The proposed policy aims to avoid the creation of inconsistencies with maintenance of 'the rights and liberties of individuals, and the institution of parliament' as laid out in the FLPs. This will be considered in further detail during the drafting of the relevant legislation.

8. Consultation

Consulation RIS

The Consultation RIS was released on 16 October 2014 and closed on 21 November 2014. However, extensions were provided to several individuals and key industry groups until 5 December 2014.

The RIS was made available online at www.daf.qld.gov.au and an online questionnaire was available on www.getinvolved.qld.gov.au

The Consultation RIS covered a range of issues that potentially impact on many individuals and groups throughout Queensland. Reaching such an extensive and diversive audience was challenging and required a multi-platform approach including social media. The following details the type and extent of the media used to communicate the Consultation RIS.

Media

During the time the RIS was open for comment the Department of Agriculture & Fisheries (DAF) distributed three media releases:

- Have your say on Queensland's biosecurity regulations from Minister McVeigh (15 October 2014)
- Register now to learn more about proposed biosecurity regulation changes (21 October 2014 - promoting webinars)
- Time is running out: have your say on proposed biosecurity regulations (7 November 2014)

DAF has also responded to several media requests:

- Cattle tick consultation and treatment – to Queensland Country Life (20 October 2014)
- Proposed changes to cattle tick, banana and mango regulations – to APN (various regional newspapers including Daily Mercury in Mackay, The Morning Bulletin in Rockhampton, Queensland Times in Ipswich, The Chronicle in Toowoomba and other publications – 30 October 2014)
- Proposed property registration fee – to APN (various regional newspapers including Daily Mercury in Mackay, The Morning Bulletin in Rockhampton, Queensland Times in Ipswich, The Chronicle in Toowoomba and other publications – 7 November 2014)
- Response to a Letter to the Editor originally published in Queensland Country Life on 6 November 2014, to clarify information on the proposed property registration fee (10 November 2014)
- Various questions about the cattle tick options – to Queensland Country Life (18 November 2014)
- Outcomes and next steps on the review – to Queensland Country Life (2 December 2014)

A Biosecurity Queensland spokesperson was interviewed by:

- Southern Cross radio (various regional and western Queensland programs (28 October 2014)
- Mareeba Advertiser (28 October 2014)
- ABC Country Hour (aired 10 November 2014)

An analysis of media coverage about the Consultation RIS showed that 51 media coverage items were published or broadcast between 27 October 2014 and 24 November 2014 reaching a cumulative audience of 557,775 people.

DAF Website

DAF received 1380 unique page views on the department's Consultation RIS webpage from 15 October 2014 - 28 November 2014. The DAF webpage on the RIS promoted:

- A video about the *Biosecurity Act 2014* and the regulation review
- The Consultation RIS being open
- encouraging feedback on the individual topics (mangoes, bananas, cattle ticks, bees, fees)
- participation in webinars on each topic
- encouraging people to have their say before the closing date.

Social media

DAF undertook a social media campaign to promote the Consultation RIS and support the objectives of the public consultation. The campaign included a schedule of Facebook and Twitter messages as well as paid advertising. The number of times the advertisements and messages were shown totalled 390,405 and a total of 108,169 people saw them.

Direct marketing

DAF distributed five e-newsletters to promote the regulation review. On 15 October 2014 the "Have your say on proposed biosecurity regulations" media statement was sent to 104 legislation update subscribers (71 messages opened) and 235 Biosecurity Queensland contacts (85 messages opened). The 24 key stakeholders who form the Biosecurity Legislation Reference Group were also notified directly of the Consultation RIS release.

On 11 November 2014 DAF, advised by email to 112 legislation update subscribers (52 messages opened) that time was running out to respond to the Consultation RIS and on 1 December 2014 advised the same people that consultation on the RIS has now closed (63 messages opened).

Industry communication

DAF developed a network of Communications and Media contacts with the relevant industry organisations.

Results of consultation

A total of 625 submissions to the Consultation RIS were received (these are available on the DAF website). 86 responses were by mail and email, 413 through the online survey, and a further 126 were received as part of an online petition. 44 participants took part in webinars, and 300 had watched the recordings on YouTube. During the consultation period 34 calls were made to the Customer Service Centre specifically about the Consultation RIS, and 419 comments were received on social media posts.

The responses were from individuals, groups or from major industries or peak bodies. In their responses the respondees indicated if they supported the preferred option or not that was identified in the Consultation RIS. In addition many respondees provided useful comments why they did or did not support the prefered option.

A diverse range of stakeholders provided feedback, as shown in Table 8.

Table 26: Summary of feedback collection method and stakeholder interest

	Online Survey	Written Submissions	Petition	Total
Agricultural transporter	1			1
Conservationist	1			1
Farmer (Grower)	12	1		13
Farmer (Livestock)	160	33	126	319
Gardener / Retail nursery	1			1
Hobbyist	166	11		177
Local government	3	1		4
Marketer	1			1
Other (please specify)	63	16		79
Peak industry body	5	24		29
Total	413	86	126	*625*

Table 27: Summary of feedback issues by collection method

	Online Survey	Written Submissions	Petition	Total
Cattle Tick: Primary Host Species	208	22		230
Cattle Tick: Secondary Host Species	198	4		202
Banana: Pest Quarantine Areas	22	4		26
Banana: Treatment Requirements for Yellow Sigatoka	20	4		24
Banana: Residential Planting Restrictions	18	4		22
Management of Mango Leaf Hopper	14	3		17
Management of Asian Honey Bee	37	4		41
Options for Registration Fee	228	37	126	391
Category 1	56	8	0	64
Category 2	53	8	0	61
Other	3	15	0	18
Total[25]	413	86	126	

Outcomes from the Consultation RIS

Section 2 of the Decision RIS explains that the current biosecurity regulations were categorised as follows:

- Category 1: Regulations proposed to be discontinued because they are obsolete, duplicative, are no longer required under the framework of the Act or cannot be justified in context of reducing regulatory burden.
- Category 2: Regulations proposed to be maintained because they are required under the framework of the Act, they are required to meet a national agreement or they are effective and proportional to the biosecurity risk.
- Category 3: Regulations that need further consideration as there are several options to achieve the objectives.

Category 3 matters were primarily discussed in the Consultation RIS and therefore the outcomes of consultation on Category 3 matters are presented first below. The outcomes from RIS consultation on Category 1 and Category 2 are also presented following Category 3.

Category 3

Banana PQA

1. Currently there are six pest quarantine areas (PQAs) for bananas that cover the Torres Strait and Cape York Peninsula area, and the entire east coast of Queensland. There are two options for future management considered in the RIS:
    - Option 1 is to maintain the six areas.

[25] Note, some submissions and survey responses covered multiple issues. As a result, a total of the response columns will not reflect the total number of responses received in that medium.

- Option 2 is to maintain the northern and southern areas only and introduce a pest protection area around the main banana-growing region from approximately Cooktown to Townsville.

2. Option 2 was identified in the RIS as the preferred option and comment was sought on whether the respondent supported option 2 or not. In addition the respondent was requested to provide comments why they either supported or did not support the preferred option.

3. **Table 28:** Consultation outcome for Banana PQAs

Count of PQAs - Option 2	Column Labels		
Row Labels	No	Yes	Grand Total
Farmer (Grower)	1	1	2
Farmer (Livestock)	2	2	4
Hobbyist		7	7
Marketer		1	1
Other (please specify)	3	5	8
Written Responses	1	3	4
Grand Total	**7**	**19**	**26**

The following comments were provided in relation to the proposals for banana PQAs:

- 2 respondents' indicated that it was preferable to place resources on ensuring pests are not brought in on imports rather than placing resources around unnecessary pest quarantine areas.

- 2 respondents' suggested that it would be better to keep the current six PQAs to ensure that any pests currently in each of the areas can be contained.

- 1 respondent supported the reduction in PQAs as it reduces red tape for industry.

- 1 respondent supported option 2 as it provides greater protection for the main banana growing region.

- 1 respondent indicated that there is greater risk to the main banana growing region from private planes bringing disease in from other countries

The following positions were provided by the peak industry bodies:

- The Australian Banana Growers Association (ABGC) supported option 2 but request further consultation on the positioning of the three areas and the restrictions proposed for the main banana growing region biosecurity zone.

- Nursery & Garden Industry Queensland (NGIQ), Growcom and the Queensland Farmers Federation (QFF) all support option 2.

- The Cassowary Coast Banana Growers Association (CCBGA) has recommended that four biosecurity zones be implemented covering the whole East Coast of Queensland and Cape York. The current far northern and southern zones as well as a main industry zone and a Bundaberg zone.

Banana Treatment Requirement

1. Currently, if a person has yellow sigatoka or leaf speckle on their banana plants above prescribed levels, they must treat the plants in the way provided by the Regulation. Two options were outlined in the RIS:

    - Option 1 is to maintain the regulatory treatment requirement.

    - Option 2 is to remove the requirement and rely on the obligation to treat plants under the General Biosecurity Obligation.

2. Option 2 was identified in the RIS as the preferred option and comment was sought on whether the respondent supported option 2 or not. In addition the respondent was requested to provide comments why they either supported or did not support the preferred option.

    Table 29: Consultation outcome for Banana Treatment Requirement

Count of Treatment Req - Option 2	Column Labels		
Row Labels	**No**	**Yes**	**Grand Total**
Farmer (Grower)		1	1
Farmer (Livestock)	3	1	4
Hobbyist	2	4	6
Marketer		1	1
Other (please specify)	6	1	7
Written Responses	1	4	5
Grand Total	**12**	**12**	**24**

3. The following comments were provided in relation to the proposals for the banana treatment requirement for yellow sigatoka or leaf speckle on their banana plants above prescribed levels:

    - 8 respondents' indicated that in their view people will not treat infected plants under option 2 as there would be no clear requirement as there would be under regulation.

    - 1 respondent raised concerns that fewer resources would be applied under option 2 to enforce the general biosecurity obligation.

    - 1 respondent indicated that the necessary resources to educate residential growers on the need to treat their banana plants that have above prescribed levels yellow sigatoka or leaf speckle would unlikely be made available.

4. The following positions were provided by the peak industry bodies:

    - ABGC strongly opposes the removal of the treatment requirement for yellow sigatoka or leaf speckle on their banana plants above prescribed levels. However, ABGC indicated that they would support the treatment method being removed from regulation and alternatively prescribed elsewhere including on the departments website. Growcom supports the view of ABGC.

    - NGIQ supports option 2.

- CCBGA strongly opposes the removal of the treatment requirement for yellow sigatoka or leaf speckle on their banana plants above prescribed levels and requests that both the 5% prescribed level and the prescribed treatment remain in regulation.

Banana Residential Planting Restrictions

1. Currently, restrictions apply on the number and species of banana plants that may be grown residentially in the far northern and southern biosecurity zones. Two options were outlined in the RIS:

   - Option 1 is to maintain these restrictions.

   - Option 2 is to remove the restrictions in the southern biosecurity zones and maintain only the restrictions on the species that may be grown in the far northern biosecurity zone.

2. Option 2 was identified in the RIS as the preferred option and comment was sought on whether the respondent supported option 2 or not. In addition the respondent was requested to provide comments why they either supported or did not support the preferred option.

   Table 30: Consultation outcome for Residential Planting Restrictions

Count of Residential Planting Restrictions - Option 2	Column Labels		
Row Labels	No	Yes	Grand Total
Farmer (Grower)	1		1
Farmer (Livestock)	3	1	4
Hobbyist	2	4	6
Marketer		1	1
Other (please specify)	4	2	6
Written Responses	1	3	4
Grand Total	**11**	**11**	**22**

3. The following comments were provided in relation to the restrictions that apply on the number and species of banana plants that may be grown residentially in the far northern and southern biosecurity zones:

   - Concerned that residential and community growers do not look after their plants and manage disease

   - 1 respondent acknowledged that the current restrictions that apply on the number and species of banana plants that may be grown residentially are too difficult to enforce.

   - Provides residential and community growers with fair access to bananas

   - 1 respondent indicated that unlimited banana plants for residential growers would open up opportunities for them to sell bananas at the detriment of industry.

4. The following positions were provided by the peak industry bodies:

   - The Australian Banana Growers Association (ABGC) and Growcom support option 2.

- NGIQ supported option 2 but wanted clarity that there would continue to be restrictions on the movement of banana plants within the biosecurity zones

- While CCBGA does not support option 2 there is no rationale provided to support their position.

Cattle Tick Primary Host Species

To reduce infestations of cattle tick in Queensland, current legislation establishes zones (infected, controlled and free) and prescribes how stock may be moved between the zones. In most cases, stock must be treated with acaracides and inspected before they are moved. These requirements have been in place for many years. The Consultation RIS provided an opportunity to review them to establish whether they are still needed or if they could be removed in line with the regulatory reform process.

The Consultation RIS identified and analysed three options for dealing with the primary hosts in relation to cattle ticks.

- Option 1: Maintain the current regulatory provisions.

- Option 2: Establish two biosecurity zones (free and infested) and prohibit the movement of host species which have ticks from the infested zone and infected properties.

- Option 3: Rely on the general biosecurity obligation, and provide fact sheets for helping people to discharge their obligations.

Option 2 was identified in the Consultation RIS as the preferred option and comment was sought on whether the respondent supported option 2 or not. In addition the respondent was requested to provide comments why they either supported or did not support the preferred option.

Table 31 Consultation outcome for cattle ticks primary hosts

Do you support Option 2?			
	No	**Yes**	**Grand Total**
Agricultural transporter		1	1
Conservationist	1		1
Farmer (Grower)	3	2	5
Farmer (Livestock)	62	31	93
Hobbyist	46	29	75
Local government	1	1	2
Marketer	1		1
Other (please specify)	16	13	29
Peak industry body		1	1
Written Responses	11	11	22
Grand Total	**141**	**89**	**230**

The following comments were provided in relation to the proposals for cattle tick in relation to primary host species:

- 67 respondents considered that the current system worked well, needed further resourcing, to be enforced better and/or other carriers such as feral and native animals needed to be controlled.
- 4 respondents supported the current system because it would be too costly to introduce a new system.
- 10 respondents supported Option 1 but with greater regulation and enforcement
- 72 respondents supported Option 2 because it presented a better balance and was more cost effective
- 7 respondents preferred Option 3
- 2 respondents considered eradication of ticks was the best option
- 3 respondents suggested the tick line needed to be moved.

The following positions were provided by the peak industry bodies:

- AgForce and the Australian Livestock & Property Agents Association Ltd supported Option 2 for Primary host species.
- The Queensland Dairy farmers' Organisation gave conditional support to Option 2 for primary host species

Cattle Tick Secondary Host Species

Three options were also identified for secondary host species (horses, goats, sheep, mules and camelids).

- Option 1: Maintain the current regulatory provisions.
- Option 2: Only animals which are tick-free may move.
- Option 3: Rely on the general biosecurity obligation, and provide fact sheets for helping people to discharge their obligations.

Option 3 was identified in the Consultation RIS as the preferred option and comment was sought on whether the respondent supported option 3 or not. In addition the respondent was requested to provide comments why they either supported or did not support the preferred option.

Table 32: Consultation outcome for cattle ticks secondary hosts

Do you support Option 3?	No	Yes	Grand Total
Agricultural transporter	1		1
Conservationist	1		1
Farmer (Grower)	5		5
Farmer (Livestock)	56	34	90
Hobbyist	35	35	70
Local government	1	1	2
Marketer		1	1
Other (please specify)	16	11	27
Peak industry body		1	1
Written Responses	1	3	4
Grand Total	**116**	**86**	**202**

The following comments were provided in relation to the proposals for cattle tick in relation to secondary host species:

- 63 respondents supported Option 1 as they considered the current system worked well.
- 24 respondents supported Option 3 as it allowed owners to take more responsibility and offered greater flexibility
- 42 respondents supported Option 3 as it seemed the most cost effective and practical option
- 14 respondents indicated support for Option 2
- 11 respondents indicated support for Option 1
- 17 respondents did not support Option 3 as it either did not provide sufficient detail, or it was considered that secondary host species were not spreading ticks or provided no detailed explanation or it would be costly to adopt a new system
- 5 respondents did not support Option 3 because they considered those in the tick infested areas should pay or people would be too irresponsible to comply or eradication was the best way to control cattle ticks

The following positions were provided by the peak industry bodies:

- AgForce and the Australian Livestock & Property Agents Association Ltd supported Option 2 for Primary host species.
- The Queensland Dairy farmers' Organisation gave conditional support to Option 2 for primary host species
- The Queensland Horse Industry Alliance Inc and Queensland Horse Council supported Option 2 for secondary species.

- The Thoroughbred Breeders Queensland Association supported Option 1 for secondary species.

Mango Pests

Currently there are two pest quarantine areas (PQAs) for mangoes in relation to mango leafhopper. Those areas cover the Cape York Peninsula and a region west of Cairns.

The basis of a PQA is to contain a pest and stop it spreading outside of the PQA by applying restrictions on the movement of risk items. Mango leaf hoppers have been detected outside of both zones and it is highly likely that they are moving in ways that are currently not controlled. Consideration is therefore being given in the Decision RIS whether the PQAs should be maintained as biosecurity zones. Two options were been identified in the Consultation RIS:

- Option 1 is to maintain the two areas
- Option 2 is to discontinue the two areas and instead manage mango leafhoppers under the general biosecurity obligation.

Option 2 was identified in the Consultation RIS as the preferred option and comment was sought on whether the respondent supported option 2 or not. In addition the respondent was requested to provide comments why they either supported or did not support the preferred option.

Table 33: Consultation outcome for Mango Leaf Hopper

Do you support Option 2?	No	Yes	Grand Total
Farmer (Livestock)		1	1
Hobbyist	3	4	7
Marketer		1	1
Other (please specify)	3	2	5
Written Responses		3	3
Grand Total	**6**	**11**	**17**

The following comments were provided in relation to the PQAs for mango leafhopper:

- Concern that no biosecurity zone would lead to people being less vigilent about disease management
- 1 respondent indicated that the PQA's should remain and more enforcement should be applied to ensuring that people comply with the PQA requirements.

The following positions were provided by the peak industry bodies:

- The Australian Mango Industry Association (AMIA) and Growcom supports option 2 on the proviso that government implements an ongoing communication program for travelers and industry in relation to mango leaf hoppers.

- NGIQ supports option 2.

Asian Honey Bee

The Exotic Diseases in Animals (Asian Honey Bee) Notice 2010 (the Notice) establishes a restricted area for Asian Honey Bee (AHB). The restricted area is made up of the localities and suburbs prescribed under section 5, and listed in the Schedule to the Notice. The movement of a bee into the restricted area, and moving a bee, bee product or mechanical vector within or out of the restricted area is restricted. Permits may be issued for the movement of bees, bee products or mechanical vectors. Asian honey bee has been detected outside of the restricted area and, as such, the restricted area is no longer fit for purpose. Two options were outlined in the Consultation RIS:

- Option 1 is to implement a biosecurity zone north of a line that extends west of Kennedy and prohibits the movement of bees, bee products or mechanical vectors outside of the restricted area without a permit.

- Option 2 is to rely on the General Biosecurity Obligation for minimising the risks associated with the spread of Asian honey bee.

Option 2 was identified in the Consultation RIS as the preferred option and comment was sought on whether the respondent supported option 2 or not. In addition the respondent was requested to provide comments why they either supported or did not support the preferred option.

Table 34: Consultation outcome for Asian Honey Bee

Do you support Option 2?	**No**	**Yes**	**Grand Total**
Farmer (Grower)	1		1
Farmer (Livestock)	2	2	4
Hobbyist	16	5	21
Marketer		1	1
Other (please specify)	7	3	10
Written Responses	3	1	4
Grand Total	**29**	**12**	**41**

The following comments were provided in relation to the restricted zone for Asian Honey Bee:

- 17 respondents raised their concern that the removal of the restricted area would exacerbate the spread of Asian Honey Bee.

- 3 respondents supported option 2 on the basis that it minimises burden on industry.

- 3 respondents supported option 1 on the basis that it would ensure the continuation of the export market for Queen Bees.

- 1 respondent indicated that the restricted area should remain and more enforcement should be applied to ensuring that people comply with the restricted area requirements.

- 1 respondent indicated that better border controls are necessary and that an eradication program for Asian Honey Bee in the restricted area should be implemented.

The following positions were provided by the peak industry bodies:

- The Queensland Beekeepers Association Incorporated (QBAI) and the Australian Honey Bee Industry Council (AHBIC) supports maintaining and expanding the restricted area as it would minimise the spread of Asian Honey Bee.

- QBAI is concerned that research indicates that Asian Honey Bees can successfully mate with European Honey Bees and the impact could be devastating to the bee industry as well as the horticulture industry. QBAI request that the restriction on moving hives within the restricted area be removed.

- AHBIC indicates that the USA would not open up a live bee export market from Australia unless a restricted zone for Asian Honey Bee was implemented.

- AHBIC suggests that the regulatory burden impacts on operators in the restricted zone are minimal.

Full Cost Recovery

The *Biosecurity Act 2014* establishes a new fee framework that provides efficiency and an effective structure for industry and the community to contribute to the management of biosecurity matters. Under this framework, current fees can be rationalised and joined together into a simpler system so that fewer fees are required. The RIS proposed a reduction in overall fees from 87 to 36.

Restructuring of fees in line with the new Act provides an opportunity to consider the appropriateness of each fee level. The levels of the current fees have not been assessed for many years and are not aligned with the Queensland Government Principles for Fees and Charges. In accordance with those principles, a full cost-recovery model has generally been applied in determining the level of fees for biosecurity.

The RIS requested comment on whether the respondent supported full cost recovery or not. In addition the respondent was requested to provide comments why they either supported or did not support full cost recovery.

Table 35: Consultation outcome for Full Cost Recovery

Count of Cost Recovery	Column Labels		
Row Labels	**No**	**Yes (please indicate the specific fee and why)**	**Grand Total**
Agricultural transporter		1	1
Conservationist		1	1
Farmer (Grower)	1	4	5
Farmer (Livestock)	21	87	108
Hobbyist	35	54	89
Marketer	1		1
Other (please specify)	9	20	29
Peak industry body	1	1	2
Grand Total	**68**	**168**	**236**

The following comments were provided in relation to full cost recovery:

- 30 respondents advised that any further increased government costs would threaten the viability of a rural enterprise.
- 17 respondents expressed their view that they already pay sufficient taxes and should not be required to pay further government fees.
- 12 respondents believed that it was unfair for industry to pay full cost recovery when there are clear public benefits associated with biosecurity.
- 11 respondents said that it is unfair to expect full cost recovery from producers and exempt hobby farmers from paying anything for property registration.
- 9 respondents did not support full cost recovery on the basis that government wastes revenue and does not provide a good service.
- 7 respondents indicated that the property registration fee is excessive under a cost recovery model.
- 5 respondents indicated that producers already contribute sufficiently through the NLIS requirements.
- 5 respondents expressed the view that full cost recovery is not good policy for Australia as impacts disadvantage producers against international counterparts.
- 2 respondents believe that there are significant operational inefficiencies and if these were addressed full cost recovery would be far less.
- 1 respondent suggested that the full cost recovery model should apply to cattle ticks but only for those in the tick free area.
- 1 respondent indicated that the cattle tick fees are excessive.

- 1 respondent supported full cost recovery provided that more investment was put into front line services in rural areas.

The following positions were provided by the peak industry bodies:

- ABGC, Growcom, AMIA and NGIQ acknowledge the proposition of cost recovery, however, they are all concerned about the inequity between plant and animal fees proposed in relation to inspection services.

Registration Fee

Given the integral role played by property registration in enabling and facilitating the continued integrity of the biosecurity system in Queensland, and the distribution of benefits provided by registration, it is necessary to consider sustainable approaches for funding the property registration system that will ensure ongoing maintenance and protect primary producers.

The RIS provided three alternative approaches that weighed up the public and private benefits of the property registration system.

- Option 1: Continued provision of the property registration system with no fee.
- Option 2: Introduce a fee for property registration and renewal that recovers the full cost of providing the service.
- Option 3: Introduce a fee for property registration and renewal that is two-thirds subsidised by the Queensland Government.

The RIS indicated that any proposed fees would be paid every three years and would not apply to hobby farmers.

The RIS requested comment on which option the respondent supported. In addition the respondent was requested to provide comments why they supported the option they selected.

Table 36: Consultation outcome for a Property Registration Fee

Count of Property Registration	Column Labels			
Row Labels	Option 1—No fee (status quo)	Option 2—Fee based on full cost recovery ($119.20 per year)	Option 3—Fee based on one-third of full cost recovery ($39.75 per year)	Grand Total
Agricultural transporter	1			1
Conservationist	1			1
Farmer (Grower)	5			5
Farmer (Livestock)	90	2	12	104
Hobbyist	75	1	10	86
Marketer	1			1
Other (please specify)	26		3	29
Peak industry body	2			2
Written Responses	30		6	36
Petition	126			
Grand Total	**357**	**3**	**31**	**391**

The following comments were provided in relation to the options presented in the RIS for a property registration fee:

- 57 respondents expressed the view that they already pay sufficient fees and believe that the property registration scheme is the government's responsibility.
- 43 respondents indicated that due to the extreme pressure that farmers are under due to the drought any new fee would be unaffordable.
- 25 respondents held the view that the service provided under the property registration scheme does not justify the proposed fee.
- 22 respondents claimed that the fee would be a disincentive for people to register and this would impact on biosecurity in Queensland.
- 19 respondents supported some fee level but indicated that it should not be full cost recovery as there is a large public benefit from the property registration scheme.
- 19 respondents did not support hobby farmers receiving a fee exemption they create more risk and therefore unfair to those that pay the fee.
- 9 respondents support hobby farmers receiving a fee exemption as they do not derive commercial benefits from the scheme.

- 5 respondents indicated that they would support a fee only if everyone with a designated animal pays the fee.

- 3 respondents did not support a fee because it would increase in red tape.

- 2 respondents indicated that they already contribute sufficiently to biosecurity through other fees and charges.

- 1 respondent claimed that the fee will increase the cost of production and therefore there will be flow on impacts.

- 1 respondent suggested that show societies, veterinarians and those taking part in market assurance schemes should be exempt from the registration fee.

The following positions were provided by the peak industry bodies:

- QFF, Australian Pork and the Chicken Meat Industry supports option 3 on the basis that it provides fairness and equity and recognises the public and private benefits derived from traceability.

- The Australian Veterinary Association Ltd supports option 1 or alternatively exempt veterinary clinics from the registration fee as they are clearly competent in disease control and management.

- The Australian Livestock & Property Agents Association Ltd supports option 1 on the basis that everyone derives benefits from the registration scheme and a fee is considered unnecessary red tape.

- The Queensland Horse Council and the Thoroughbred Breeders Queensland Association supports option 1 on the basis that any fee imposed would likely result in people not registering their properties.

- Agforce supports option 1. However should a fee be applied Agforce suggests that it should apply to everyone equally. The rationale for no fee includes the public benefits derived from the scheme, it would increase red tape and it would be unfair for industry alone to fund the scheme.

Category 1

- Canegrowers, Sugar Research Australia, the Australian Cane Farmers Association and the Australian Sugar Milling Council all support the proposed category 1 issues in the Consultation RIS relating to sugarcane pests.

- NGIQ supports all of the proposed category 1 issues that relate to plants.

- The Animal Health Committee does not support removing the requirement to use specified diagnostic test kits as it is an agreed national approach and there could be very serious ramifications from a test kit providing a false negative, the test not been properly conducted and other inappropriate actions from users.

- One respondent supported the reduction of regulation because they are obsolete, duplicative or are no longer required under the framework of the act. However the respondent did not support regulatory reduction where it was important to maintain for biosecurity reasons.

- Five respondents supported simplification and regulatory burden reduction objectives.

Category 2

- Canegrowers, Sugar Research Australia, the Australian Cane Farmers Association and the Australian Sugar Milling Council all support the proposed category 2 issues in the Consultation RIS relating to sugarcane pests.

- AMIA supports the proposed category 2 issues in the Consultation RIS relating to mango pests.

- NGIQ supports the proposed category 2 issues in the Consultation RIS relating to plants with the exception of the proposal to maintain a biosecurity zone for papaya ring spot virus that includes restrictions on cucurbit movements. NGIQ considers that there is no basis on which to restrict the movement of cucurbit seedlings and to do so would be unnecessary regulatory burden.

Other issues raised

- Under the *Biosecurity Act 2014* (the Act) the feeding of animal matter to designated animals is prohibited as it is a known pathway of transmitting disease. Captive birds are designated animals under the Act and are therefore captured under the feeding prohibition. The Act provides for a regulation to prescribe ways in which animal matter may be fed to designated animals. The Queensland Council of Bird Societies, the National Finch and Softbill Association and a range of other respondents to the Consultation RIS indicated that there are a range of circumstances where feeding animal matter, such as insects and worms, to captive birds represents a negligible risk of disease transmission. The respondents have requested that a regulation provide a lawful way to allow their captive birds to be fed animal matter that does not pose a biosecurity risk.

9. Recommendations following consultation

Banana Pests - Biosecurity Zones

The Consultation RIS explains that there are several pests of bananas found in Queensland which impact on the viability of the industry. Some of these pests are containable as they are found only in one part of Queensland. Currently there are six pest quarantine areas (PQAs) for banana pests that cover the Torres Strait and Cape York Peninsula area, and the entire east coast of Queensland. The objective of a PQA is to contain a specified pest or pests from spreading elsewhere, or to prevent the entry of pests to a geographical area. While there are two important PQAs, one in Far Northern Queensland that contains black Sigatoka and one in South-east Queensland that contains banana bunchytop virus, the other four areas do not function as pest quaratine areas as any pest or disease contained in these areas are more widely spread. The Consultation RIS therefore proposed two options in relation to PQA's:

Option 1 (six zones) is to maintain the six areas as Biosecurity Zones.

Option 2 (three zones) is to maintain the far northern and southern areas only and introduce a new zone around the main banana-growing region from approximately Cooktown to Townsville to protect the area against pests moving into it.

The three zone option was identified in the Consultation RIS as the preferred option and comment was sought on whether respondees supported three zones or not. In addition respondees were requested to provide comments why they supported or did not support the three zone option.

A total of 26 reponses were received in relation to the implementation of Biosecurity Zones for banana pests. Seven respondees indicated that they supported the six zone option and 19 indicated that they supported the three zone option 2. There was no sound rationale provided by respondents as to why six zones should be maintained other than the perception that there might be benefits associated with minimising the movement of pests within the zone such as Panama sub-tropical race 4 and some other endemic strains of Panama. However, the pests of bananas, other than black Sigatoka and banana bunchytop, are not contained in one area and therefore would not benefit to any extent from quarantine restrictions.

Several respondees suggested that government resources would be better placed dealing with high risk matters such as border protection rather than enforcing the restrictions of six zones when most of those zones achieve little biosecurity benefits for the investment made.

Several respondees supported greater protection for the main banana growing region under Option 2 and understood the benefits from protecting an area from pests in addition to implementing areas to contain pests.

The Australian Banana Growers Council (ABGC), the Nursery & Garden Industry Queensland (NGIQ), Growcom and the Queensland Farmers Federation (QFF) all support option 2.

The Cassowary Coast Banana Growers Association (CCBGA) recommended that four biosecurity zones be implemented covering the whole East Coast of Queensland and Cape York: the current far northern zone, current southern zone, a main industry zone and a Bundaberg zone. The CCBGA did not provide any rationale for implementing a fourth zone covering the Bundaberg Region.

Following the Consultation RIS the department consulted further with ABGC about the proposed far northern biosecurity zone. It was acknowledged that a range of pests and diseases had been detected north of the Jardine River but those same pests and diseases had not been detected between Coen and the Jardine River. Concerns were raised about the capacity to prevent the movement of banana pests and carriers from north to south of the Jardine River. Consequently, it was suggested that the best way to minimise the spread from north to south of the Jardine River was to implement a zone north of the Jardine River (far northern zone 1) and a zone south of the Jardine River (far northern zone 2). It was acknowledged that far northern zone 2 would act as an important buffer zone protecting the rest of Queensland in case a pest or disease was dectected in far northern zone 1.

There was also further discussion with ABGC regarding the establishment of a northern banana biosecurity zone, around the main banana production region, given the detection of Panama disease tropical race 4 in Tully. The ABGC has supported the retention of this third zone, for the purposes of preventing movements into the zone that would potentially introduce new exotic incursions. Similarly, the zone will assist in the management strategy for Panama disease tropical race 4, by preventing the spread of this serious disease out of the zone into othr banana production areas.

Summary

The Consultation RIS proposed that the three zone option provided the best outcome for the community because it strikes an appropriate balance between minimising the impact of the regulatory burden and an appropriate level of regulatory controls to minimise the economic impact of banana pests and diseases.

The majority of respondees supported three zones including the Australian Banana Growers Council (ABGC), the Nursery & Garden Industry Queensland (NGIQ), Growcom and the Queensland Farmers Federation (QFF).

While there was some support for six zones, there was no additional evidence provided on which the cost benefit analysis provided in the Consultation RIS could be revised.

The Cassowary Coast Banana Growers Association proposed that the remainder of the East Coast not covered by the Northern, Southern or Main industry area be made into a fourth Biosecurity Zone. However, there was no rationale provided for introducing a new zone other than it could provide some protection for the Bundaberg banana growing region. However, the type and level of protection was not clarified.

The three zone option adequately quarantines the rest of the State from black Sigatoka and banana bunchytop and Panama disease tropical race 4 as well as protecting the main banana growing region from banana pests that are not already in that region. Three zones also removes unnessesary burden associated with restrictions on movement of plants and risk items from those areas that do not have a significant biosecurity risk. Notably the majority of respondees supported the three zone option including the key stakeholder groups.

Further consultation in relation to the proposed far northern zone recognised the benefit of splitting the zone into two, one above the Jardine River (far northern zone 1) and one from Coen to the Jardine River (far northern zone 2) as more pests and diseases are identified further north in the proposed zone and the Jardine River can be used as a natural barrier between the two zones.

It was considered that restrictions should apply on movement of biosecurity matter (plants, plant pests, soils, organic matter) and appliances from the far northern zone 1 into the far northern zone 2 and from the far northern zone 2 into the rest of Queensland.

Recommendation

It is recommended that four biosecurity zones be implemented to quarantine the rest of the State from black Sigatoka, banana bunchytop and Panama disease tropical race 4 as well as protecting the main banana growing region from pests moving into it.

- Far northern biosecurity zone 1 - Cape York Peninsula and Torres Strait north of latitude 11 degrees, 45 minutes south (Jardine River).
- Far northern biosecurity zone 2 - Cape York Peninsula from latitude 11 degrees, 45 minutes south to latitude 13 degrees, 45 minutes south to align (around Coen).
- Southern banana biosecurity zone - same boundaries as the current Southern Pest Quarantine Area.
- Northern banana biosecurity zone - Queensland's banana production area covering the Tully, Innisfail and Mareeba growing districts and extending to the Lakeland region, where banana production is now undertaken.

This is a slight amendment to option 2 in the Consultation RIS that proposed 3 zones. In effect the only change is that the Far Northern Zone has been split into two to recognise the benefits of having a pest buffer zone at the Jardine River. It is recommended that the following restrictions apply in relation to the banana biosecurity zones:

Far northern banana biosecurity zone 1 and zone 2

- Restrictions on movement of biosecurity matter (plants, plant pests, soils, organic matter) and appliances that have been in contact with biosecurity matter out of zone 1 into zone 2 and out of zone 2 into the rest of Queensland.
- A biosecurity instrument permit will be required for movements out of the two zones provided specific risk mitigation measures are met.

Southern banana biosecurity zone

- Restrictions on movement of biosecurity matter (plants, plant pests, soils, organic matter) and appliances that have been in contact with biosecurity matter out of the zone into the rest of Queensland.
- A biosecurity certificate will be required for movements out of the zone, provided specific risk mitigation measures are met.

Northern banana biosecurity zone

- Moving planting material out of a zone, without a biosecurity certificate provided specific risk mitigation measures are met.
- Restrictions on moving planting material and other risk items into the zone, without a biosecurity certificate provided specific risk mitigation measures are met.
- Restrictions on moving risk items, including soils out thezone without a biosecurity certificate provided specific risk mitigation measures are met .

No movement restrictions are proposed within each zone. This approach to movement restrictions greatly reduces the regulatory burden on the community, because no other movement restrictions within the zones need to be applied to prevent the spread of serious pests out of the zone. The restrictions proposed in the Consultation RIS to apply to the

biosecurity zones were generic and the specific details provided in the decision RIS have been developed through further consultation with industry.

Banana Pests – Treatment requirement for Yellow Sigatoka

The Consultation RIS informs that if a person currently has yellow sigatoka or leaf speckle on their banana plants above prescribed levels, they must treat the plants in the way provided by the Regulation. The Consultation RIS provided two options for consideration:

Option 1 is to maintain the regulatory treatment requirement.

Option 2 is to remove the requirement and rely on the obligation to treat plants under the General Biosecurity Obligation (GBO).

Using the GBO was identified in the Consultation RIS as the preferred option and comment was sought on whether the respondent supported option 2 or not. In addition the respondent was requested to provide comments as to why they either supported or did not support the preferred option.

A total of 24 reponses were received in relation to the treatment requirement for yellow Sigatoka. Twelve respondees indicated that they supported maintaining the regulatory treament requirement and twelve indicated that they supported removing the requirement and instead using the GBO.

During the consultation period Biosecurity Queensland staff met with both the ABGC and the CCBGA in relation to the proposals for dealing with banana pests. The proposal to remove the regulatory treatment requirement for yellow sigatoka or leaf speckle was of greatest concern to both groups. The CCBGA supports the continuation of the current regulatory provisions for both the 5% prescribed level and the prescribed treatment method. However, ABGC indicated that they would support maintaining only the 5% prescribed level and removing the treatment method from regulation and alternatively prescribing it elsewhere such as on the departments website. Growcom supports the view of ABGC and NGIQ supports both the 5% prescribed level and the prescribed treatment method being removed from regulation.

Several respondees were sceptical that people would treat their infected plants without clear regulatory requirements. Concerns were also raised that fewer government resources would be applied to enforcing the GBO. Some respondees were concerned that sufficient resources would be made available to educate residential growers on the need to treat their banana plants that have above prescribed levels yellow sigatoka or leaf speckle.

Following the Consultation RIS, in early 2015 the very serious disease of the tropical race 4 strain of Panama was detected prompting a reconsideration of priorities in relation to the use of regulation for banana pests. Further consultation occurred with the Australian Banana Growers Council (ABGC) on how banana pests should be managed in light of the Panama Race 4 detection.

Summary

The Consultation RIS proposed that the option to deregulate the requirement to treat banana plants that have above specified levels of yellow sigatoka or leaf speckle, provides the best community outcome. The reasons that deregulation provides the best community outcome is that it strikes an appropriate balance between minimising the impact of the regulatory burden and an appropriate level of regulatory control required to minimise the economic impact of yellow sigatoka.

Significant concerns were raised by the banana growers about moving away from the current regulatory provisions for treating yellow sigatoka. While industry acknowledged that growers would continue to be required to treat yellow sigatoka on their plants under the general biosecurity obligation there was concerns about the rigor of compliance and enforcement under the deregulation option.

Industry was advised through the Consultation RIS that moving the treatment method out of regulation would provide greater flexibility. The CCBGA did not support the removal of the treatment method from regulation and supported maintaining the full regulatory treatment provisions. The ABGC saw merit in deregulating the treatment method to allow for flexibility. Growcom supports the view of ABGC and NGIQ supports full deregulation.

Panama disease tropical race 4 was detected in early 2015 and the banana industry agreed after further significant consultation that any regulatory measures should be based on the protection of the industry from serious banana diseases or those that could be quarantined.

Based on a pest risk analysis process, yellow Sigatoka is not classified as a quarantine pest of bananas. As such, strict regulatory controls are not justified, and would represent an inconsistent approach for other pests and diseases across plant industries in Queensland.

Growers, as part of their GBO , will have a responsibility to take reasonable and practical measures to prevent or minimise the biosecurity risk posed by yellow sigatoka. This obligation is enforceable, however, it is proposed that this obligation be formalised under a guideline, as provided for under the Act. Under section 107 of the Act, the chief executive may make a guideline to provide guidance about how a grower can discharge their general biosecurity obligation.

Recommendation

Given that yellow sigatoka is not a quarantine pest and is not considered a major threat to industry it is proposed that the current regulatory restrictions be discontinued. However, it is proposed that a banana industry guideline be developed, to detail how growers could meet their GBO with respect to the management of yellow sigatoka risks. It is proposed that the treatment methods contained in the guideline will be similar to the current requirements in the Regulation. However, it is not a compulsory requirement to follow the guideline as long as it can be demonstrated that another method achieves the necessary biosecurity outcome to meet a persons general biosecurity obligation. This will allow industry innovate. The guideline is proposed to commence with the Regulations on 1 July 2016. Industry supports these recommendations.

Banana Pests – Residential planting restrictions

The Consultation RIS explains that current regulatory restrictions apply on the number and species of banana plants that may be grown residentially throughout the current PQA's. The Consultation RIS proposes to maintain the current number and species restriction in the proposed biosecurity zone for the main banana-growing region and the species restriction in the far northern biosecurity zone. The Decision RIS proposes that there be no restrictions outside of the three proposed biosecurity zones. The Decision RIS also provides two options for the number restrictions in the far northern zone and the number and species restrictions in the southern zone. Those options are:

Option 1 is to maintain the numbers and species restrictions.

Option 2 is to remove the numbers and species restrictions.

The option of removing the numbers and species restrictions was identified in the Consultation RIS as the preferred option and comment was sought on whether the respondent supported removing the restrictions or not. In addition the respondent was requested to provide comments why they either supported or did not support removing the restrictions.

A total of 22 reponses were received in relation to the residential planting restrictions for banana plants. Eleven respondees indicated that they supported maintaining the restrictions and eleven indicated that they supported discontinuing the restrictions.

Those that supported maintaining the restrictions were concerned that removing residential numbers and species restrictions would result in greater disease potential as many residential growers would not treat pests and diseases on their plants. Concerns were also expressed that unlimited banana plants for residential growers would open up opportunities for them to sell bananas at the detriment of industry.

Those that supported removing the restrictions acknowledged that there were significant enforcement challenges associated with compliance of the restrictions throughout the State. Views were expressed that the resources utilised to enforce these restrictions could be better utilised for high risk matters to gain higher returns for investment. In addition it was suggested that removing the restrictions provides residential and community growers with fairer access to bananas.

The Australian Banana Growers Association (ABGC), the Nursery & Garden Industry Queensland (NGIQ) and Growcom support removing the restrictions.

The Cassowary Coast Banana Growers Association (CCBGA) supported maintaining the residential restrictions.

Following the Consultation RIS, in early 2015 the very serious disease of Panama disease tropical race 4 was detected prompting a reconsideration of priorities in relation to the use of regulation for banana pests. Further consultation occurred with the Australian Banana Growers Council (ABGC) on how banana pests should be managed in light of the Panama disease detection.

It was recocognised through the further consultation that the two key pests of concern to industry that could be exacerbated by residential plants are black sigatoka and banana bunchy top. Consequently discussion wirth industry centred on the benefits of maintaining or removing residential planting in relation to these two pests. Industry recognised that black sigatoka is a very serious threat to the banana industry and could cause catastrophic impacts on industry viablility if it was introduced into the Queensland major growing region. Black sigatoka is currently not found on the Queensland mainland and industry supports mitigation methods to minimise the potential for it to move onto the Queensland mainland and spread. It was also recognised that compared with the higher population areas of Queensland there are few residential banana plants in the proposed far northern biosecurity zones.

Conversely, banana bunchy top is prevelent in south-east Queensland and there is a significant number of current residential plants which suggests that there are no clear benefits from applying residential restrictions in that Zone. It was also noted that the enforcement of residential restrictions in south-east Queensland was overly challenging and would require significant resources with minimal benefits.

Summary

The Consultation RIS indicated that removing the restrictions provides the best outcomes for the community because there are no clear benefits derived from the restrictions, and removing the restrictions will provide some residential growing and community benefits. 50% of the respondees supported this view including the acknowledgment of the challenge associated with, and extended resources required, to effectively enforce the restrictions.

50% of the respondees supported maintaining the restrictions as they held the view that it would reduce the risk of the exotic pests (black sigatoka) spreading in the Far Northern Biosecurity zone, and bunchy top spreading in the Southern zone, by reducing the number of host plants on which to provide a pathway for establishment and spread.

Following the detection of Panama disease tropical race 4 industry recognised the need to protect the major banana growing region from serious pests of bananas such as black sigatoka. On that basis it was determined that there were clear benefits from maintaining the restrictions on both the residential number of plants and the varieties.

The greatest risk of black sigatoka and other serious pests being introduced into Queensland is through Torres Strait into far northern Queensland. Once these pests are introduced they can more easily spread with pathways of host plants. Consequently, there are clear benefits from minimising the host plants including the provision of restrictions on the types on banana plants that may be planted (only black sigatoka resistent) and the number of plants a residential grower may plant in the Far Northern Biosecurity Zones.

Given that banana bunchy top virus is prevalent in south-east Queensland there are no clear benefits from restricting the number of plants a residential grower may plant in the southern zone.

Recommendation

Given the risks posed by serious pests being introduced into the Far Northern Biosecurity Zones it is recommended that restrictions apply in regulation requiring that only black sigatoka resistent varieites of banana plants may be planted in the Far Northern Biosecurity Zones. Likewise it is recommended that a residential grower of banana plants in the Far Northern Biosecurity Zones may only plant or cultivate no more than 10 plants or 30 psuedostems.

This results in the following for the biosecurity zones:

- For Far northern biosecurity zones 1 & 2– Residential growers may grow no more than 10 plants or 30 psuedostems and must grow only black sigatoka resistant species. (note that the recommendation in the Consultation RIS was to maintain the species restrictions but remove the numbers restriction)
- For the Southern banana biosecurity zone – No restrictions (note that this is consistent with the recommendation in the Consultation RIS)
- For the Northern banana biosecurity zone – No restrictions (note that the recommendation in the Consultation RIS was to maintain both restrictions)

Cattle ticks – Primary & Secondary hosts

The Consultation RIS recognised that cattle tick is a major external parasite of a range of animal host species and has a significant economic impact on animal industries in Queensland.

The Consultation RIS also acknowledged that different host species posed varying risks of spreading cattle tick:

- Primary host species such as cattle, bison and deer were considered as a high risk of spreading cattle tick.
- Secondary host species such as horses, sheep, goats and alpacas were considered as a lower risk of spreading ticks.
- Horses which graze with cattle in tick infested areas present a higher risk. Horses that are stabbled or well groomed, such as race horses present a very low risk.

Given the risk spectrum presented by the different host species, three options for primary and secondary host species were outlined separately in the Consultation RIS. The three options for each host species had similar proposals but the options for secondary host species provided for less regulatory burden given the lower risk profile of these species.

Option 1 for both primary and secondary host species proposed to maintain the current regulatory regime.

Option 2 for primary host species proposed two tick zones (infested and clean) and a prohibition on the movement of infested animals from the infested to the clean zone. The disinfestation of animals was to be at the discretion of the person moving the animals. Some exemptions were proposed for the direct movement of animals to abattoirs and feed lots in this option.

Option 2 for secondary host species proposed movement restrictions for infested animals between the infested and free zones. However, animals which were well groomed, competition or race horses could move without the need for chemical treatment as long as they were tick free.

Option 3 for both groups of host species proposed no zones and reliance only on the general biosecurity obligation to provide restrictions. This option did not provide for a prescribed tick line.

A total of 165 and 176 responses were received from individuals in relation to primary and secondary host species respectively. In relation to the options for primary host species, Option 1, to maintain the current regulatory regime, was supported by a marginal majority (81) of the respondents. However 10 of the 81 respondents considered that there should be greater regulation than currently exists and four respondents supported maintaining the current regulatory regime because they considered introducing a new system would be too costly.

Option 2 of an infested and clean zone was the preferred option of 72 of the respondents because they considered this option provided a better balance and was more cost effective than maintaining the current regulatory approach.

Only 7 respondents supported Option 3 to rely solely on the general biosecurity obligation. Two respondents considered that the eradication of ticks was the best way in which to address the issue. Three comments were received about the location of the tick line. However, the location for the tick line was not considered in the Consultation RIS because Option 3 of relying solely on the GBO would have resulted in no tick line. Consultation on the location of the tick line can be undertaken once the preferred option is decided.

The comments for the options for secondary host species were assessed based on whether people supported relying solely on the GBO. Sixty-six respondents supported this option as it allowed owners to take more responsibility, offered greater flexibility, was more cost effective and practical. Sixty-three respondents supported maintaining the current regulatory approach because it was considered that the current system worked well. There were fourteen respondents who supported Option 2 for movement restrictions for infested animals. Five

respondents considered that relying solely on the GBO was not a suitable option as people were generally irresponsible and would not comply with their obligations.

Several submissions were received from peak bodies which represent hundreds of members. In particular AgForce and the Australian Livestock and Property Agents Association Ltd supported option 2 of an infested and clean zone in relation to primary host species and the Queensland Dairy Famers Organisation (QDO) gave conditional support for the same.

AgForce considered that an infested and clean zone would deliver the most appropriate, safe and effective risk management option for the cattle industry. AgForce did not consider that maintaining the current system or moving to option 3 would deliver overall improved biosecurity outcomes or create a better business environment for the cattle industry. AgForce considered that an infested and clean zone provided a robust biosecurity system that lessened the impact to businesses and communities through reduced input costs for road transport and improved community safety through reduction of wear and tear on roads.

The QDO supported a two zone system if there is scope for the tick free zone to expand and the tick line is maintained and any regulations are enforced. The QDO indicated the support for an infested and clean zone was also conditional on demonstrating that the two zone system would result in the risks being appropriately managed. Efficiency in providing for the movement of animals over the tick line was also a major consideration for the QDO. In particular, the QDO supported the enhancement of an on farm clearance system for dairy cattle which could be provided under an infested and clean zone.

The Queensland Horse Industry Alliance (QHIA) and Queensland Horse Council supported an infested and clean zone for secondary host species. However, the Thoroughbred Breeders Queensland Association supported maintaining the current regulatory approach in relation to secondary host species because they considered the current system was adequate and was working effectively.

The QHIA did not support the continuation of the current system for secondary host species. The reasons provided by the QHIA for not supporting the current system included:

- the movement of most horses is low risk;
- treating horses with acaracides is ineffective;
- inspection and dip facilities are unsafe for horses; and
- adverse reactions suffered by horses sprayed with acaracides results in poor performance.

Summary

The Consultation RIS proposed that in relation to primary host species a two zone system provided the best outcome for the community because it strikes an appropriate balance between minimising the impact of the regulatory burden and an appropriate level of regulatory controls to minimise the economic impact of cattle ticks. In relation to secondary host species, it was proposed that both the two zone system and relying solely on the GBO provided the same benefits to industry while still adequately managing the risks. Marginally it was considered that relying solely on the GBO was a better overall outcome for the community because it reduced regulatory burden more than the two zone system.

Whilst marginally there was greater support to maintain the current regulatory regime in respect of both primary and secondary host species, none of the submissions provided persuasive arguments that would change the recommendations made in the Consultation RIS. The majority of the submissions which favoured retention of the current system relied on an argument that it works well and doesn't need to be changed.

However, the benefits and costs outlined in the Consultation RIS for the options indicated there were benefits to be gained by moving from a regulatory regime provided under the current regulatory regime to a reduced regulatory burden under a two zone system. These benefits included costs savings per head for taking more direct routes to abattoirs and feedlots with reduced treatment requirements, a reduction in the complexity of legislation, removal of unnecessary treatment for secondary host species and a reduction in the adverse impact on the health, welfare and vigour of animals caused by the use of clearing facilities. Therefore, while there may be a perception that the current system works well, the evidence suggests that the current system can be improved.

No submissions which supported maintaining the current regulatory regime for either of the host species provided any counter arguments to the negative impacts outlined above or why the benefits outlined under a two zone system could not be achieved. Furthermore, the major cattle stakeholder groups of AgForce and QDO recognised a two zone system could provide greater flexibility and savings for each of their respective industry groups as long as the risks were appropriately managed.

Recommendation

Overall it can be argued that no submissions in relation to primary host species provided sufficient evidence that could justify a different recommendation than those provided in the Consultation RIS. However, a number of submissions provided evidence and support as to why the recommended two zone system should be supported. Therefore, the two zone system for primary host species is recommended.

In relation to secondary host species, the Consultation RIS recommended sole reliance on the GBO as the preferred option because it marginally reduced the regulatory burden compared with Option 2. However, the Consultation RIS , recognised that, other than a reduction in regulatory burden , there was little difference between sole reliance on the GBO and the two zone system proposed under Option 2. Several of the main horse industry groups supported the two zone system over the GBO option as it provided more clarity in addressing the risks and enforceability of requirements with limited change in regulatory burden.

Arguably, the burden on the responsible person moving horses under options 2 and 3 would be similar because the required actions under each option would be the same with the only real difference between the two options is the prescribing of a tick line under Option 2. If the tick line was established through acceptance of Option 2 for primary species, then the increase in regulatory burden under option 2 for the responbsible person in relation to secondary host species would be negilgible.

Option 2 would also provide some comfort to those producers who are involved in primary host species that the issues relating to ticks in secondary host species is being addressed at an acceptable level.

In view of the response from stakeholders, coupled with the fact there would be no real increase in reguatory burden under Option 2, it is recommended that the two zone system outlined in Option 2, in relation to secondary host species, be implemented instead of the

preferred option to rely solely on the GBO under Option 3 as proposed in the Consultation RIS.

Mango Pests – Mango leaf hoppers

The Consultation RIS identified that mango leafhoppers can cause significant economic impact on the mango industry. However, the current pest quarantine areas are not preventing leafhoppers from spreading as they are being moved in ways that either cannot be controlled, such as weather, or are difficult to control such as in vehicles. The Consultation RIS presented two options for the future management of mango leafhoppers;

Option 1 is to maintain the two quarantine areas as Biosecurity Zones.

Option 2 is to discontinue the quarantine areas and instead relying on the general biosecurity obligation.

The Consultation RIS identified that discontinuing the quarantine areas was the preferable community outcome as it provides an appropriate balance between minimising the impact of the regulatory burden and an appropriate level of regulatory controls.

A total of 17 responses were received in relation to mango leafhoppers. Six respondees indicated that they supported maintaining the two quarantine areas and 11 indicated that they supported discontinuing the two quarantine areas.

Both the Australian Mango Industry Association and Growcom supported discontinuing the two quarantine areas. However they did so on the proviso that government implements an ongoing communication program for travellers and industry in relation to mango leaf hoppers.

One respondent expressed concern that discontinuing with the quarantine areas would lead to people being less vigilant about disease management. However, this is best managed through education rather than imposing unnecessary burden on the community.

Summary

The majority of respondees supported option 2 including the Australian Mango Industry Association and Growcom. The six respondees that did not support option 2 did not provide any additional information that required the cost benefit analysis to be updated or amended.

Recommendation

Given that there was no further evidence provided on which to reassess the cost/benefit analysis provided in the Consultation RIS, removing the pest quarantine areas remains the preferred option as it removes an unnecessary regulatory burden while maintaining biosecurity objectives.

Bee Pests – Asian Honey Bees

The Consultation RIS explained that the *Exotic Diseases in Animals (Asian Honey Bee) Notice 2010* (the Notice) establishes a restricted area for Asian Honey Bee (AHB) in Northern Queensland. The movement of a bee into the restricted area, and moving a bee, bee product or mechanical vector within or out of the restricted area is restricted.

The Consultation RIS highlights that Asian honey bee has been detected outside of the restricted area and, as such, the restricted area is no longer fit for purpose. The Consultation RIS provided two options for consideration:

Option 1 is to implement a biosecurity zone north of a line that extends west of Kennedy and prohibits the movement of bees, bee products or mechanical vectors outside of the restricted area without a permit.

Option 2 is to discontinue with the restricted area and instead rely on the General Biosecurity Obligation for minimising the risks associated with the spread of Asian honey bee.

The Consultation RIS identified that discontinuing the restricted area was the preferred option based on the outcomes of a cost/benefit analysis and sought comment on whether respondents supported that option or not. In addition respondents were requested to provide comments why they either supported or did not support the preferred option.

A total of 41 responses were received in relation to the Asian Honey Bee restricted area. 29 respondees indicated that they supported maintaining a proposed extended restricted area and 12 indicated that they supported discontinuing the restricted area. While the majority of respondees supported maintaining the restricted area they were unable to articulate the benefits that it would derive. The concerns mainly centred around views that removing the restricted area would exacerbate the spread of Asian Honey Bee. There was no evidence provided to support those views. Several respondees commented that the restricted area should remain as the export of live bees could be contingent upon it. Likewise there was no evidence provided to support the comment.

The views of those that supported the discontinuation of the restricted area were mainly centered around minimising industry burden.

Summary

The majority of respondees supported option 1 which is to maintain a restricted area for Asian Honey bee. However, those respondees that supported option 1 were unable to provide any further information or evidence on which to update the cost/benefit analysis. These respondees had views that the restricted area had some influence in slowing down the incursion of Asian Honey. However, again, no evidence was provided to support the views.

It is clear, however, that the current restricted area has not prevented incursions of Asian Honey bee out of the restricted area and a larger area has been proposed under option 1 to address that situation. The proposal under option 1 is to maintain similar restrictions to those that currently apply but increase the restricted area for containment. However, restricting the movement of hives and risk items is unlikely to prevent the movement of Asian Honey bee.

Also, areas of pest freedom such as the AHB restricted area, are put in place primarily to provide a level of confidence of pest absence for domestic and/or international trade. When a jurisdiction makes a claim of pest freedom, it must be substantiated with evidence of the systems in place to establish area freedom. Given that the restricted area is not working such a level of confidence could not be provided.

On 26 August 2015 the bee working group that had been established to discuss the consultation RIS met to further discuss the RIS outcomes. Again, the group was not in favour of the removal of the Asian honey bee restricted area but could not provide any new information to justify that position.

Recommendation

It is recommended that the prefered option in the Consultation RIS to discontinue the restricted area be maintained as there are no clear benefits from maintaining a restricted area but there are obvious benefits from removing unnecessary regulatory burden.

It should be noted, however, that given the Asian Honey Bee Notice could no longer be justified, and that it was imposing an unnecessary burden on government and industry, it was removed late 2015.

Proposed new fees

Full Cost Recovery

The consultation RIS proposed a new schedule of fees for biosecurity (see section 5b of this Decision RIS). The fee structure proposes fees prescribed under the Act and other fees to be prescribed under a regulation or made by the Chief Executive in relation to services delivered within the scope of the Act.

With the exception of entity registration for livestock, the quantum of each proposed fee is based on generating full cost recovery and proportioning costs across the community so that the major users and beneficiaries contribute more proportionately to costs.

Where a biosecurity service could be provided by the private sector, competitive neutrality principles are applied. For example, the proposed auditor's fee is based on cost recovery plus 11.5% for profit margin to ensure that government faced the same market disciplines as their private sector competitors.

A total of 236 responses were received to the question in the consultation RIS on whether the person supports or does not support a fee structure based on full cost recovery. Of the responses 168 indicated that they supported full cost recovery and 68 indicated that they did not.

Those that did not support full cost recovery were mainly concerned about:

- the future viability of rural enterprises given the increasing costs in their industry;
- that the benefits of biosecurity are shared throughout the community and therefore the fees should be apportioned accordingly;
- that the service provided for the fee was insufficient.

Many of those who responded to the Consultation RIS indicated that it was unfair to pay full cost recovery when there is a 'clear public benefit' associated with biosecurity. These comments, however, related primarily to the proposed fee for an entity registration. In that regard, it is proposed that a fee of one third full cost recovery be implemented.

The peak industry bodies who responded to the consultation RIS (ABGC, Growcom, AMIA and NGIQ) acknowledged the proposition of cost recovery and that the money raised was necessary to fund a number of core services such as plant health inspection and certification, cattle tick inspection and the proposed entity registration fee that underpins disease tracing activities.. However, they raised concerns about the inequity between plant and animal fees proposed in relation to inspection services.

Biosecurity Queensland explained to the peak bodies that the plant biosecurity inspection fee is based on the services provided to book the inspection, travel to the site and do the

inspection, invoicing and receipting whereas the animal biosecurity inspection fee is based only on the inspection. The basis of involve inspection of stock on department and private premises, invoicing and receipting. The identified fee is based on the cost multiplier applied to the inspecting officer's time only.

During 2015, Biosecurity Queensland undertook a review of it's capability and developed a report indicating potential improvements. The Report considered cost recovery programs and alternative business models for biosecurity activities. The report recommended that a systematic review be undertaken of activities where a less regulatory and less costly approach could be developed under the new legislative framework and appropriate risk creator contribution mechanisms be built into the system where there is a need for ongoing intervention. Peak bodies were advised that the differential between the plant and animal inspection services could be considered under such a review.

Recommendation

Based on the responses provided to the consultation RIS supporting full cost recovery, and the need to fund core biosecurity services, it is recommended that the new fee structure under the Biosecurity Act be based on the principle of recovering full costs for the services provided (see attachment 6 for a comprehensive list of the proposed new fees).

In relation to the concerns raised about the differences in inspection fee rates between animal and plant services it is recommended that the hourly inspection fees proceed on the basis of the consultation RIS figures, However, it is recommended that a further review of animal and plant inspection fees and charges be undertaken as part of the implementation of the biosecurity capability report by 1 July 2017. In that regard, if the review suggests an alternative fee it could only be proposed and implemented after 1 July 2017.

Entity Registration

The Act provides an option to establish a fee for livestock entity registration. For livestock the RIS indicated that such a fee would be paid every three years on the basis that renewal of registration every three years will be required to remove obsolete information and ensure the accuracy of each property registration. Policy consideration will be given to the desirability of collecting the fee in yearly instalments, for both grower cash flow and department income smoothing purposes.

Three options were canvassed in the RIS:

- Option 1: Provision of the livestock entity registration system with no fee.
- Option 2: Establish a fee for registration and renewal that recovers the full cost of providing the service.
- Option 3: Establish a fee for registration and renewal that is two-thirds subsidised by the Queensland Government.

There were 391 submissions in relation to the livestock entity registration fee of which 357 considered no fee should apply, 3 supported a fee based on full cost recovery ($119.20 a year) and 31 supported a fee based on one-third cost recovery ($39.75 a year).

The Queensland Farmers Federation, Australian Pork and the Chicken Meat Industry support the subsidised fee proposal.

The Queensland Horse Council and the Australian Livestock and Property Agents Association are opposed to any fee.

Agforce is opposed to a livestock entity registration fee. They consider that if a fee is introduced, no exemptions should be available. This position is based on the fact that a non-commercial entity under the ATO ruling can still sell animals into food producing markets for private benefit and present a potential biosecurity risk.

The Australian Veterinary Association opposes the fee unless veterinarians are exempt.

Some of those who responded to the Consultation RIS indicated that they already paid fees associated with the NLIS system. While that is the case it is a separate system to the entity registration. The proposed fee will help cover some costs associated with registering and maintaining a database of holders of livestock. This is extremely important in the case of a disease outbreak to enable the contacting of those livestock owners. While the fee is an additional burden on some people the fee proposed at one third cost recovery is very low (less than $45 per year).

In the Queensland biosecurity capability review undertaken in 2015 it was found that the administration of property registration has been subject to considerable funding pressure owing to a tightening fiscal environment and the data in the current PIC registration system is slowly degrading owing to inadequate resourcing.

The report highlighted that it is important to resolve sustainable funding through cost recovery to ensure its effectiveness. It was noted there have been a number of attempts in the past in Queensland to introduce an annual or triennial property registration fee so that the system could be properly resourced. It was also noted that in some states there is an annual fee attached to registration and registration renewal, consistent with beneficiary pays principles.

Property registration (in some form) is a requirement in all Australian states and territories. Currently, South Australia, New South Wales and Western Australia charge a fee for issue of a Property Identification Code (PIC) as part of property or brand registration processes. In all other jurisdictions, a PIC is issued free of charge. The highest fee, a $78.00 biennial PIC fee in South Australia was introduced to cover approximately 75 per cent of the costs in managing the South Australian PIC system. Application and renewal fees for PICs in New South Wales differ based on whether the applicant is a Livestock Health and Pest Authority (LHPA) ratepayer ($11 fee), a local land services ratepayer ($66 for 3 years registration) or a Stock or Station Agent ($33 for 2 years).

The Panel report noted that the current system is very labour intensive, mainly utilising regional departmental staff and there are significant opportunities for technology enhancements to reduce the cost of registering properties and create a holistic, integrated biosecurity system. Linked elements could include on-farm biosecurity information, surveillance data relating to individual properties as well as district and regional summary data, pest and disease identification support.

Some of those who responded to the Consultation RIS indicated that the department is inefficient and therefore do not believe they should pay full cost recovery. Through the capability review systems such as the proposed registered biosecurity entity will be reviewed to assess whether efficiencies can be gained.

Fee exemption for entity registration by livestock pet owners and hobby farmers

The RIS identified that some livestock owners, such as hobby farmers and properties with livestock pets, derive no, or very limited, commercial benefit from registration and a fee requirement may discourage these entities from registering and compromising the integrity of the system. The RIS included a proposal for a registration fee exemption where a person

meets the Australian Tax Office (ATO) ruling of not carrying out a primary production business.

There was little support for a fee exemtion provided in response to the RIS. However, it is likely that the lack of support for the exemtion was on the basis that the respondees had already indicated that they did not support a fee for any situations.

The RIS indicated that commercial enterprises were far more likely to create biosecurity risks than hobby farmers. Similarly, commercial enterprises stood to gain more from an animal registration system than would hobby farmers. There were no responses to the RIS that provided any information to counteract these statements.

Fee exemption for entity registration by hobby beekeepers

Under the Apiaries Regulation 1998 beekeepers have been required since 1998 to pay a registration fee (current fee of $15.30 proposed to be increased to $26.85) to keep hives. Historically, no exemption has been available and the RIS did not propose an exemption.

While the issue of an exemption for hobby beekeepers consideration could be given to extending a similar exemption for entity registration fees for non-commercial bee-keepers on the grounds of consistency as livestock entities and beekeepers are both registrable biosecurity entities.

Subsequent consultation has confirmed that the Queensland Beekeepers Association had no objection to an exemption for non-commercial beekeepers.

Recommendation

It is recommended that Option 3 be adopted and a livestock entity registration fee be established for entities that derive a commercial benefit from livestock production, at a subsidised rate of one third of the full cost recovery fee and paid triennially. This is on the basis that, in addition to the private benefits, livestock entity registration delivers public benefits and flow-on benefits to other industries, partial cost recovery towards the cost of maintaining the database required for disease tracing. The indexed fee of $127.70 is based on a two thirds government subsidisation rate and equates to $42.56 per year for a three-year registration period.

It is recommended that the exemption to the fee for hobby farmers be extended to beekeepers.

Category 1 – Proposed regulations to be removed

Diagnostic test kits

The *Stock Regulation 1988* provides restrictions on the use of diagnostic test kits and approved methods of using the kit. The main reason for regulating test kits and the methods to be used is to mitigate against sub-optimal kits failing to detect a positive result and/or returning a false negative and, as a result, the presence of a notifiable disease not being reported.

The Consultation RIS explained that under section 47 of the Biosecurity Act a person who becomes aware of the presence of something they believe or ought reasonably believe is prohibited or category 1 or 2 restricted matter they must report it to an inspector. In addition any notifiable incident must be reported including, for example, where they suspect their animal has contracted a disease that may have a significant adverse effect on the economy,

human health, the environment or social amenity (regardless of whether they have tested the animal for a specific disease). Given these requirements the Consultation RIS proposed to discontinue the regulatory requirement to use diagnostic test kits as the rationale for requiring the use of a them would no longer exist.

The Animal Health Committee does not support removing the requirement to use specified diagnostic test kits and that the agreed national approach should be maintained.

AHC acknowledge the requirement to notify where symtoms may indicate a disease that impacts on a biosecurity consideration. However, diagnostic test kits are also used during routine surveillance activities and the use of uncontrolled kits could lead to a false negative result from either an inferior kit or the test not been properly conducted.

Recommendation

Given the demonstrated need for people to use specified diagnostic test kits it is recommended that the current regulation requiring the use of the test kits be maintained and not removed as outlined as the preferred option in the Consultation RIS. .

Category 2 – Proposed regulations to be maintained

Biosecurity zone for papaya ring spot virus

The *Plant Protection Regulation 2002* declares an area for south-east Queensland as a Pest Quarantine Area (PQA) to contain papaya ringspot virus type P (PRSV-P) from moving out of it to the rest of Queensland. Restrictions apply on moving host (papaya, cucumber, melon, pumpkin or squash) plants out of the PQA without an inspector's approval.

The Consultation RIS proposed that the restrictions associated the PQA be maintained by implementing a Biosecurity Zone covering the same area. The movement of plants would be restricted unless the plant was accompanied with a biosecurity certificate stating that it was free from PSRV-P.

The Nursery & Garden Industry Queensland (NGIQ) supports the maintenance of a biosecurity zone for PSRV-P. However NGIQ does not support any restrictions in relation to cucurbit movements. NGIQ indicates that in 2012 the department surveyed 225,190 cucurbit seedlings without detecting one case of PSRV-P. Therefore it would suggest that the risk of cucurbits being a host for PSRV movements would be negligible. On that basis NGIQ considers that any movement restrictions on cucurbit seedlings would be unnecessary regulatory burden.

Biosecurity Queensland does not support the discontinuation of restrictions on the movement of cucurbits as they are considered a natural host of PSRV and there has not been any new research done in this area since the 1990s to prove otherwise. Furthermore the current risk mitigation method can be improved upon and BQ is working with industry to develop a more robust risk mitigation method, while reducing regulatory burden.

Biosecurity Queensland has estimated that the unrestricted risk of PRSV-P spreading is LOW. It should be noted that Biosecurity Queensland requires an acceptable level of protection (ALOP) for Queensland of VERY LOW. Therefore pest risk management methods, including restrictions on cucurbit hosts are required to reach this ALOP. Australia's ALOP is currently expressed as providing a high level of sanitary or phytosanitary protection aimed at reducing risk to a very low level, but not to zero.

Recommendation

It is recommended that the restrictions on moving papaya and cucurbits out of the proposed south-eastern Queensland Biosecurity Zone for PSRV-P be maintained as proposed in the Consultation RIS. However, the restrictions on cucurbits will be minimised to apply to only those cucurbits grown in areas of high pest prevalence. This means that most of the commerical cucurbit growing region will not be subject to movement restrictions out of the zone. This adequately mitigates the risk whilst minimising the burden on industry and the community.

Other issues raised

Feeding animal matter to birds

The Biosecurity Act 2014 (the Act) provides for a regulation to prescribe ways in which animal matter may be fed to designated animals without the risk of transmitting disease. Several submissions to the Consultation RIS requested the implementation of a regulation prescribing the feeding of insects and worms to captive birds. Other submissions requested that birds be exempt from the animal matter feeding requirement under the Act. Biosecurity Queensland considers that there is a low risk of transmitting a disease through feeding animal matter to captive birds unless that material consists of other bird matter. In addition Biosecurity Queensland considers the risk of transmitting disease through feeding animal matter is far higher in relation to poultry.

Recommendation

It is recommended that a regulation be developed that prescribes ways in which captive birds may be fed animal matter. The animal matter permitted to be fed to captive birds should not consist of any avian matter. Also the reference to captive birds in this proposal should not include galliformes (fowl).

10. Implementation, evaluation and compliance support strategy

Implementation of the biosecurity regulation is expected to commence with the new Biosecurity Act before 1 July 2016. The Regulation will include the new fee schedule which will also commence on 1 July2016.

Implementation strategy

1. Current clients advised of the changes.

2. Media campaign to advise clients and potential clients of what has changed.

3. Provide lead-in time for implementation.

4. Website designed for ease of navigation by clients.

5. Clients will be advised of the transitional arrangements and what will be required under the new legislation.

   Where a person was affected by the removal of a Category 1 provision, they would be advised of its removal and of their obligations under the new legislation. Generally this would require observance of the general biosecurity obligation, for which substantial guidance material will be prepared.

   Where a person was affected by the transition of a Category 2 provision, they would be advised of its transition and of their obligations under the new legislation. Generally the obligations will remain the same, however their wording and form will change.

   Where a person was affected by the implementation of the preferred option for a Category 3 provision, they would be advised of the changes and of their obligations under the new legislation. Given the involvement of the relevant industries in Category 3 matters, industry literacy of the potential changes is quite high.

6. Clients will be informed about the new fee structure, including the new fees and amended fees before 1 July 2016. Clients will also be informed about the rationale for the new fee structure and that a review of the difference between the plant and animal inspection service fees will occur before 1 July 2017

7. Information will be provided to clients before 1 July 2016 advising them of the new guideline in relation to banana pests and ways to meet a persons general biosecurity obligation. Also clients will be advised of the biosecurity manual that will replace the current requirements under inspectors approvals and how it relates to biosecurity zones, biosecurity certificates and movement restrictions.

8. The drafting of Biosecurity Regulations will require some further policy consideration. The Department will consult with relevant industry groups to ensure that any policy development is robust, effective and inclusive.

Evaluation strategy

The proposed legislation would be reviewed within five years of commencement. Performance indicators would be developed to evaluate the effectiveness of the legislation and might include how the regulatory measures have dealt with minimising the impacts of pests and diseases on Queensland agricultural industries, the number of compliance deficiencies identified and recovery of regulatory costs. How regulatory measures have dealt with minimising the impacts of pests and diseases could be measured by the number of incursions or incidents occurring where regulatory practice was adhered to, compared to where it was not. The number of compliance deficiencies could be measured by the number of biosecurity orders given. The recovery of costs could be measured by comparing regulatory service costs with regulatory service revenue.

Compliance support strategy

A compliance strategy would be developed based on risk and the potential for a biosecurity matter to have an economic, environmental or social impact. Monitoring of compliance could be proactive, such as through industry surveillance or reactive to complaints received from the public. Biosecurity Queensland would initially take an educational approach to informing clients about their obligations under the new legislation and the requirement to comply with standards. Except for gross breaches of obligations, enforcement action would be deferred until a client had been given reasonable opportunity to comply with the requirements.

Attachment 1 Details on the regulations to be transitioned as outlined in the Consultation RIS

Issue	Details
Maximum required annual payments by local governments into the land protection fund	The Minister may request a local government to make a payment to the land protection fund. However, a local government cannot be requested to make a payment that is greater than the annual amount of general rates levied; that is, averaged over three years and multiplied by the relevant percentage for each local government as follows: (a) a very large urban local government whose area is entirely or partly in the rabbit district or benefited by a declared pest fence—0.4 per cent; (b) a very large urban local government whose area is not entirely or partly in the rabbit district or benefited by a declared pest fence—0.2 per cent; (c) a large urban local government whose area is entirely or partly in the rabbit district or benefited by a declared pest fence—1.3 per cent; (d) a large urban local government whose area is not entirely or partly in the rabbit district or benefited by a declared pest fence—0.3 per cent; (e) a small urban local government whose area is entirely or partly in the rabbit district or benefited by a declared pest fence—4 per cent; (f) a small urban local government whose area is not entirely or partly in the rabbit district or benefited by a declared pest fence—1 per cent; (g) a rural local government whose area is entirely or partly in the rabbit district or benefited by a declared pest fence—15 per cent; (h) a rural local government whose area is not entirely or partly in the rabbit district or benefited by a declared pest fence —8 per cent. A large urban local government means a local government that has a population of more than 70 000 but fewer than 200 001. A very large urban local government means a local government that has a population of at least 200 001. A small urban local government means a local government that has a population of more than 20 000 but fewer than 70 001. A rural local government means a local government means a local government of not more than 20 000.
Measures for dealing with fire ants and carriers of fire ants.	Fire ants are a category 1 restricted biosecurity matter under the Act and must be reported if found and all reasonable steps taken to minimise the risk of them spreading. The movement of live fire ants anywhere will be prohibited unless a person has a biosecurity instrument permit. Currently, the whole of Queensland is a pest quarantine area but this will no longer apply and, instead, a fire ant biosecurity zone will be established. The following local government areas will be included in the zone: • Brisbane City Council—currently infested

	• Logan City Council—currently infested • Redland City Council—currently infested • Ipswich City Council—currently infested • Scenic Rim Regional Council—currently infested • Lockyer Valley Regional Council—currently infested • Somerset Regional Council—at risk of being infested • Gladstone Regional Council—currently infested Restrictions on the movement of carriers of fire ant (currently referred to as risk items) within and out of the zone will be prescribed. Carriers of fire ants will be prescribed and include: (a) soil or anything that has soil attached; (b) material that is a product or by-product of quarrying or mining; (c) material that is a product or by-product of the processing or manufacturing of an animal, a plant, anything that comes from an animal or plant, baled hay or straw or anything an inspector decides is a movement risk. Movement of carriers by anyone off land within the zone will be prohibited unless the person has a biosecurity instrument permit or a prescribed exemption applies. Prescribed exemptions will include direct movement to a waste facility and risk-mitigation activities for people who conduct commercial activities which involve the movement of carriers. The risk-mitigation activities may mirror and replace those activities which are contained in existing risk management plans. The risk-mitigation activities will include monitoring by owners within the commercial business for fire ants, ensuring staff are trained in detecting fire ants, keeping machinery clean, due diligence in the purchase of carriers and record keeping of any surveillance and treatment activities undertaken within the business. Sections of a local government area (LGA) that do not have the same risks as other sections will be given lesser controls through a chief executive declaration. In addition to the biosecurity zone, a prevention and control program will be established for fire ants. This will deliver further provisions to help prevent the spread of fire ants, the capacity for surveillance and support work for eradication. Outside of the zone, the requirement for notification of detection of fire ants will apply as well as the general biosecurity obligation.
Measures for dealing with potato cyst nematode	Golden potato cyst nematode (*Globodera rostochiensis* (Wollenweber) Behrens) (GPCN) and white potato cyst nematode (*Globodera pallida* (Stone) Behrens) (WPCN) are prescribed as prohibited matter under the Act. As such a person must report the matter and must not do anything to move it or increase the risk of it spreading. It is proposed that a code of practice will be implemented to regulate

	the movement of potatoes and carriers of GPCN and WPCN into Queensland. The code of practice will prescribe: • how a person may bring potatoes and soil on potatoes into Queensland based on the current inspectors approvals; • how a person may bring ware potatoes (used for human consumption) into Queensland based on the current inspectors approvals; • how a person is to discharge their biosecurity obligation when bringing seed potatoes into Queensland.
Newcastle disease	The current arrangements directed at prevention and control of Newcastle disease will be continued. However, instead of putting the requirements into the regulation, it is proposed this will be achieved through reliance on the general biosecurity obligation and fact sheets which outline how a commercial poultry producer may meet their general biosecurity obligation in respect of the vaccination and surveillance programs for Newcastle disease. This will provide the greatest flexibility for managing the vaccination and surveillance program into the future.
Fertiliser labelling requirements	It is proposed that requirements to label fertilisers will be contained in the regulations. To ensure it is clear what constitutes a fertiliser and what is required on the label, definitions will be provided in the regulations for: • what is a fertiliser? • what is not a fertiliser? • what is a harmful ingredient? • what are impurities? • what are nutrients? • what are trace elements? The labelling of fertilisers will only apply to fertilisers manufactured for sale except where the fertiliser is sold to a person for manufacturing other fertiliser for trade or commerce. The labelling of fertiliser will be compulsory and must be attached to containers or accompany fertilisers sold in bulk. Where the label relates to fertilisers sold in bulk, the label must be provided as part of each sales transaction. The label on fertiliser containing lime must state the lime's neutralising value, as this is a measure of its quality. A fertiliser label must contain a distinctive name and the name and principle place of business of its manufacturer or seller. The label is to contain the name of the elements it contains including information about them. Restrictions on labelling of fertiliser are to apply to the level of nitrogen, phosphorous, potassium or sulphur which are contained in the fertiliser. The fertilisers must not exceed specified levels of cadmium, chloride,

	lead or mercury as these are potentially harmful ingredients.
A biosecurity zone for grape phylloxera	It is proposed that two biosecurity zones be implemented for grape phylloxera. These are a phylloxera exclusion biosecurity zone (PEZ) for part of the state and a phylloxera restricted biosecurity zone (PRZ) for the rest of the state. The PEZ will cover the following local government areas: - Central Highlands Regional Council - Woorabinda Aboriginal Shire - Banana Shire - North Burnett Regional Council (West of the Burnett Highway) - Western Downs Regional Council (West of Dalby–Jandowae Road) - Maranoa Regional Council - Balonne Shire - Paroo Shire. There are PRZs in other states. The national phylloxera management protocol also provides for phylloxera-infested zones (PIZ). Movement restrictions will apply on regulated biosecurity matter, including grapes, unfiltered juice and crushed grape, grape vines and cuttings, vineyard soil, and equipment and packaging. The movement of carriers of grape phylloxera into Queensland will be prohibited without a biosecurity certificate. However, the prohibition will not apply to the movement of carriers into Queensland in the following cases: - Table grapes packed in a fresh state for human consumption sourced from a PEZ - Whole wine grapes sourced from a PEZ - Marc, must and unfiltered juice of the genus vitus sourced from a PEZ or free area - Diagnostic samples of the genus vitus from PEZ & PRZ - vineyard soil from a PEZ - Vineyard machinery, equipment and secondhand packaging material sourced from a PEZ - Clothing, footwear and packaging material from PEZ. There will be specific restrictions on moving: - table grapes sourced from a PIZ or a PRZ into Queensland - wine grapes sourced from a PIZ or a PRZ into Queensland - must or unfiltered juice sourced from a PIZ or a PRZ into Queensland - marc sourced from a PIZ or a PRZ into Queensland

	- potted grapevines sourced from a PEZ into Queensland - grapevine cuttings sourced from a PRZ or a PEZ into Queensland - grape rootlings sourced from a PRZ or a PEZ into Queensland - germplasm establishment cuttings sourced from a PIZ or a PRZ into Queensland - diagnostic samples (including vineyard soil) sourced from a PIZ into Queensland - vineyard machinery and equipment sourced from a PIZ or a PRZ into Queensland - clothing, footwear and packaging material sourced from a PIZ or a PRZ into Queensland.
Mediterranean fruit fly	Mediterranean fruit fly (MFF) is listed as prohibited matter under the Biosecurity Act. It is not present in Queensland, and to introduce it would be a breach of the general biosecurity obligation. A code of practice is proposed to describe how an individual may meet their general biosecurity obligation to not introduce MFF. Option 1: list all of the carriers of MFF that may be moved into Queensland on certain conditions if they have been grown at or come from a place within 7.5 km of a MFF infestation. Option 2: require that any fruit grown at or come from a place within 7.5 km of a MFF infestation to undergo treatment before entry into Queensland. The treatments must be supervised by an interstate government inspector, or carried out under an interstate certification assurance (ICA) arrangement. The code of practice will list the treatments that can be used: - Methyl bromide fumigation (all carriers listed above) - Fenthion dipping (tropical and sub-tropical fruit with inedible peel (including watermelons)) - Fenthion flood spraying (tropical and sub-tropical fruit with inedible peel (including watermelons)) and hollow-fruit chillies (excluding capsicum). - Nationally approved systems approaches - Cold treatment including but not limited to apple, citrus, pear, nashi, grape, kiwifruit and stonefruit. - Heat treatment using hot water dipping, high temperature forced air or vapour heat (mango only) - Gamma Irradiation (host fruit in Schedule 1 approved by Food Standards Australia New Zealand for irradiation). Queensland recognises entry of nationally approved MFF hosts in an approved condition (hard, hard green, mature green, unborken skin).

Stock food	***Maximum residue limits*** It is proposed that the regulation will adopt the provisions contained in Table 4 of the National MRL Standard — Maximum Residue Limits in Food and Animal Feedstuff MRL that will restrict the maximum permissible levels of agricultural and veterinary chemicals and associated substances that may be contained in stock food. There will also need to be controls over contaminants previously prescribed in the *Agricultural Standards Regulations*. The contaminants on which controls will occur will be derived from the Australian Feed Standard for Food Producing Animals which is currently being developed through a national program. As an interim measure contaminant standards will be prescribed in the biosecurity regulations. Contaminant standard will be set for substances which may have an adverse impact on market access for Australian agricultural commodities including veterinary chemicals (other than where included as a medication), plant toxins, mycotoxins, organochlorine compounds). It should be noted that the MRL Standard residue limits only apply to primary feed commodities not manufactured feed, dioxins and dioxin like PCB's, heavy metals and radionuclides. ***Labelling of manufactured feeds*** It is proposed that the regulation will require the labelling of manufactured feed that is sold. The labelling requirement will also apply to documentation that accompanies bulk manufactured feed. However, the following feeds will be exempt from the labelling requirements: - whole, cracked or rolled single or mixed grain products - chaff, hay and silage - vegetable and animal protein meals - molasses. The regulation will require labels to be clear, consistent and in a legible format, and presented on the outside face of the packaging or container or, if sold in bulk, the label may form part of the invoice or delivery docket. The labelling will require information about the species for which the feed is intended, whether the feed is a complete feed or only provides supplementation, clear relevant feeding directions, expiry date and manufacturing details. ***Labelling of medicated feed (veterinary prescription)*** The regulation will require that, where the feed is medicated, it must be labelled as 'medicated feed prepared under veterinary surgeons instructions'. ***Labelling of manufactured feed containing ruminant animal matter*** The regulation will require that any stock feed that contains ruminant animal matter (RAM) must be labelled accordingly, including a ruminant feed warning statement. The regulation will also require

	stock food to be labelled, indicating if the food does not contain RAM. The regulation will make it an offence to re-use bags that have contained stock feed with RAM in it for stock feed that does not contain RAM. The regulation will also prohibit the removal of a label prior to sale of the manufactured feed. ***General feeding requirements*** The regulation will prohibit manure and industrial waste being included in feeds and will restrict the feeding of cannabis to animals unless the cannabis is processed. The regulation will require that any veterinary chemical product included in an animal feed must be a registered veterinary chemical product. ***Feeding animal matter to ruminants*** Exemptions for feeding animal matter and animal contaminated matter to designated animals will be provided in the regulation. An exemption will apply to used cooking oil and fat that contains or may contain animal matter or animal contaminated matter if it is treated in the following way: Heating to at least 70 °C for at least 30 minutes and while the matter is at least 70 °C, removing water and solids (including floatable solids) by both filtration or screening, and settling or centrifugation, then draining off the water and solids. If the stock to which the matter is to be fed is a ruminant, there is a requirement the matter must be processed so that the moisture and insoluble impurities content is not more than 2 per cent w/w of the matter. All meal must also be treated in this manner. A provision will also be included to allow for the chief veterinary officer to approve another treatment process if the chief veterinary officer is satisfied the process will reduce the risk of transmitting an animal disease to a level equivalent to that which can be achieved by the treatment outlined above. The treatment process will at least involves treating the animal or animal contaminated material to at least 70 °C. A definition of RAM will be included. Ruminant Animal Matter will be defined as any material taken from a vertebrate animal, other than tallow, gelatine, milk products or oils. It includes rendered products such as blood meal, meat meal, meat and bone meal, fish meal, poultry meal, feather meal and compounded feeds made from these products. A definition of meal will be included. Meal will be defined as defatted and dried solid product of rendering after milling.
National Livestock Identification Scheme (NLIS)	The NLIS, which was introduced in 2005, is a national system designed to provide traceability of animals in the event of an animal emergency disease outbreak. It is crucial that the integrity of this system is maintained to ensure that livestock are easily traced in the event of an animal disease outbreak. The *Stock Identification Regulation 2005* provides the statutory basis for the NLIS scheme.

	Division 2 Part 2 and Part 3 and parts 4–7 of that regulation were translated into the Act. Section 174 of the Act defines an approved device as a tag or other identifying devices or mark that may be fitted to a special designated animal for use in distinguishing the animal from other animals. It also provides the device must comply with the technical requirements decided by the chief executive as applying to tags or other identifying devices or marks to be fitted to special designated animals. Section 176 provides the chief executive may approve different devices for different animals or circumstances. Division 3 of Chapter 7 provides for requirements in relation to receiving special designated animals and providing the NLIS administrator with prescribed information. Section 186 provides for information to be provided to the NLIS administrator in relation to special designated animals being delivered to meat processing faculties. The prescribed information, which will be required, will be translated from the relevant provision in the *Stock Identification Regulation*. Section 187 provides a receiver taking delivery of animals at a saleyard or live export holding must provide within 48 hours after taking delivery of the animal information which is to be prescribed. The prescribed information, which will be required, will be translated from the relevant provision in the *Stock Identification Regulation*. Section 188 contains requirements relevant to animals fitted with an approved device, which includes a microchip being received at a restricted agricultural show. The receiver must provide the NLIS administrator with the prescribed information. The prescribed information, which will be required, will be translated from the relevant provision in the *Stock Identification Regulation*. Similarly, section 189 provides for prescribed information to be provided to the NLIS administrator in relation to animals fitted with an approved device, which includes a microchip being move from a restricted agricultural show. The prescribed information, which will be required, will be translated from the relevant provision in the *Stock Identification Regulation*. Section 190 provides for other circumstances where special designated animals are delivered to another place. If the receiver is not an owner-occupier of the placed that is a place where the animals are to be agisted or a drover or conveyor, the person must give the NLIS administrator the prescribed information within 48 hours of taking delivery. Otherwise the responsible person must provide the prescribed information within 48 hours of taking delivery. Section 194 of the Act makes it compulsory for a person who is a registrable biosecurity entity to keep records about the movement of a designated animal. The movement must be recorded in the appropriate form. Under section 195, the movement record must contain the information that is outlined in that section, including any other information that is prescribed under a **regulation**. Section 195(2) provides for documents that may be acceptable as movement records in the appropriate form, including a document

	prescribed by regulation. Section 198 of the Act provides for record keeping for a person who receives a designated animal. Where a person receives a designated animal and the relevant person under the movement record requirement is not required to ensure that the drover or conveyor of the animal is required to have a copy of the movement record, the person who receives a designated animal must create a record of the movement. Section 198(6) prescribes what the record of the movement must show, including anything prescribed by regulation. Section 202(3) of the Act makes it an offence to remove an approved device that is fitted to a designated animal unless one of the exemptions under section 202(2) applies. Section 202(2)(f) provides the removal of the device may be authorised under a regulation. Where relevant the prescribed information, which will be required, will be translated from the corresponding provisions in the *Stock Identification Regulation 2005.*
Category 3 restricted matter	Category 3 restricted matter should only be released into the environment in circumstances where: • the place or area where it is to be released already contains the same restricted matter as that which is to be released or disposed (e.g. a rabbit infected with calcivirus may be released into or near an occupied rabbit warren) • a carrier of the restricted matter has been released in the same area on a previous occasion (e.g. grain containing or suspected of containing the seeds of plants that are listed in schedule 2 as restricted matter) • the restricted matter has been treated to render it non-viable or dead, such as through chemical treatment, composting, burning or burial (e.g. a weed treated with a chemical such as glyphosate or composted or mulched may be disposed of in a dump site).
Category 7 Restricted matter	It is proposed that the regulation includes a provision that Category 7 restricted matter (i.e. fish) must be disposed of as soon as reasonably practicable after they have been caught and killed. Disposal must be by burying or placing in a waste disposal receptacle. Where burying is the chosen method of disposal, the fish must be buried in the ground above the high water mark to prevent the fish and any offspring from entering the water. The fish must not be filleted prior to disposal. The entire fish must be buried. Burying must only be undertaken in areas where it is permissible to dispose of waste in this manner.
Bees	The regulation will maintain the requirement to regulate the distance between apiaries to prevent the spread of biosecurity matter. Apiary sites with greater than 40 hives for honey production or pollination services must not be placed within a .8 km radius of each other. There will be no restrictions on distance between apiary sites where there are fewer than 40 hives in one or both of the sites.

	Also, hives must not be placed within 2 km of hives used for queen bee production. The Biosecurity Act will require that anyone who has a bee hive must be registered and allocated a hive identification number (HIN). The HIN must be marked on the hive and the regulation will prescribe the details on that marking. Note that not all hives need to be marked. For example, for each group of 50 hives, only one must be marked or branded with the HIN.
Compliance agreement details	The regulation will require that an applicant for a compliance agreement under the Act must provide the following details: a. the applicant's name b. the applicants business name if applicable c. the applicants address or business address.
Appointing an authorised person	Under emergency situations it will be extremely important to have the capacity to appoint people as inspectors expediently. Therefore, it is proposed that the regulation will state several classes of person that could be appointed immediately. For example, a class of person included could be a person employed by the department to undertake a role that involves matters relating to biosecurity.
Power to stop vehicles	To ensure that inspectors under the Act have the necessary powers to stop vehicles during a biosecurity emergency, the regulation will specify the ways in which an inspector may require a person in control of a vehicle to stop the vehicle. In that regard, inspectors who are also police officers or authorised transport officers may require a person in control of a motor vehicle to stop the vehicle: • by signalling in a way stated in a schedule to the regulation, or • by a sign displayed by the inspector or on or in the vicinity of the road. To help attract the attention of a person in control of a motor vehicle to the inspector's signal or sign, the inspector may display flashing coloured lights or operate a horn. The colour of the flashing lights will be detailed in the regulation.

Attachment 2: Industry context

Cattle

Queensland is the largest beef-producing state or territory in Australia, with 12.2m head, representing almost 50 per cent of Australia's total beef gross value of production each year. The majority (85%) of available land in Queensland is used for cattle and calf production, with sales in 2013–14 worth an estimated $3.259b. Around 4.5m cattle transactions are undertaken in Queensland each year.

In 2012, Queensland feedlots had capacity for over 600 000 cattle to be fed at a time, and turned off 1.5m cattle during 2012 (ALFA/MLA 2013). Utilisation rates have been between 73 per cent and 86 per cent over 2012/13.

Queensland exported over 635 000 tonnes of beef in 2012/13 to 78 countries, accounting for over 60 per cent of Australia's beef exports. Important markets are Japan, the USA, Russia, Taiwan and South Korea. However, demand is growing from emerging markets in Asia and the Middle East; in particular, Indonesia, China, Saudi Arabia and the United Arab Emirates (MLA 2014).

Queensland's chicken meat industry

Queensland produces about 17 per cent of Australia's chicken meat, contributing $438m to the state's economy in 2012–13. There are 101 farms located in the south-east corner of the state, with ten farms located in the north on the Atherton Tableland.

Poultry meat has the highest per capita consumption of all the meat proteins. The poultry meat industry has grown at a rate of around 7 per cent per annum over the past ten years. This rate of growth is predicted to continue over the next ten years, based on continued population growth and consumer preference.

Eggs

The gross value of Queensland egg production was $138m in 2012–13. There are approximately 50 egg farms, which are mainly in south-east Queensland supporting around 3 520 000 chickens.

Pork

Queensland is the leading pig-producing state in Australia, with a gross value of $204m in 2012–13. There are approximately 251 piggeries producing 565 000 pigs, or 26.5 per cent of the Australian pig population. Most pig meat products supply the domestic market, though some are exported primarily to Singapore and New Zealand.

Pig production is located close to grain-growing areas. The Darling Downs has approximately 39 per cent of the state's herds, with approximately 54 per cent of Queensland's pigs. The Wide Bay-Burnett district contains a further 36 per cent of the pig herds, with 38 per cent of Queensland's pigs.

Dairy

The dairy industry in Queensland, along with the north coast dairy region of New South Wales, forms what is known as the subtropical dairy region. The subtropical dairy region extends from the Atherton Tablelands in far north Queensland to Kempsey in Northern New South Wales. There are 482 accredited dairy farms in Queensland, which contributed $245m in gross value of production to the Queensland economy 2012–13.

Mango

About 7000 ha of mangoes are grown in Queensland, predominantly in the Mareeba area, which accounts for more than 40 per cent of Queensland's mango production. A further 39 per cent of production occurs in the neighbouring Burdekin, Bowen, and Townsville areas with the balance in south east Queensland. The season begins in north Queensland in late October and ends in early April in southern areas.

The two main varieties grown are Kensington Pride, which is the most common (70%), and B74 (marketed under the registered trademark CALYPSO®) (8%), while other varieties, such as R2E2 (6%), Keitt, Kent, Palmer, Brooks, Keow Savoey and Nam Doc Mai, are grown on a limited scale either to extend the seasonal availability of mangoes or supply niche domestic or export markets.

Most of the fruit (80 %) is sold fresh in the main domestic markets of Brisbane, Sydney, Melbourne and Adelaide, with only 5–10 per cent exported. A small percentage of production is processed into canned mango, mango juice and a wide range of mango-flavoured products.

GVP for 2012–13 was $77m, 17 per cent greater than the average for the past five years.

Grape

Queensland table grape production occurs in the Emerald, Mundubbera and St George districts. Queensland table grapes are early season, with 90 per cent harvested between October and December. The main varieties are Menindee Seedless, Flame Seedless and Red Globe. The GVP for table grapes is forecast to be $50m for 2013–14 and 57 per cent greater than the average for the past five years.

Queensland wine grape production is relatively small, with around 1300 tonnes produced annually, with an estimated value of $5.5m. However, the estimated value of Queensland wine production is $40m.

Sugar

Queensland accounts for about 95 per cent of Australia's raw sugar production, and New South Wales around 5 per cent. Cane is grown all the way down the east coast of Queensland from Mossman in north Queensland to Rocky Point on the border with New South Wales. Queensland sugarcane is primarily processed at local mills into raw sugar which is sold directly to refineries. Cane growing and sugar production underpins the economic stability of many coastal communities.

Queensland exports 80 per cent of cane produced, and Australia normally ranks as the second or third largest exporter of raw sugar, after Brazil. Key markets include East Asia, China, Indonesia, Japan, Korea, Malaysia, Taiwan, the USA and New Zealand.

The GVP for Queensland's sugar cane in 2013–14 (i.e. from the 2013 harvest) is forecast to be $1.01b, which is 9 per cent lower than the average for the past five years. Total revenue from the 2013 crop from Queensland, in raw-sugar equivalent, is expected to be $1.563b.

Papaya

Papayas are predominately grown in the warmer tropical climates of northern Queensland, with 98 per cent of industry based in Innisfail and Atherton Tableland/Dimbulah regions. Papaya is grown all year round, and over supply can occur in April/May.

Most papayas grown in Queensland are hybrid varieties or inbred lines. The industry aims to breed elite varietal lines that raise the eating quality for consumers and reduce skin blemish. The most popular yellow-fleshed papaya varieties for north Queensland production are Hybrid 1B and Hybrid 13, while the most popular red-fleshed varieties are Hybrid RB1, Sunrise Solo, Linda Solo and Sunset Solo.

In north Queensland, production was adversely affected by Tropical Cyclone Larry in the period 2006/2007 with the destruction of coastal papaya production areas in the Innisfail region. Similar damage occurred to coastal north Queensland following Tropical Cyclone Yasi in February 2011 and production has since recovered. The majority of industry expansion has occurred in the Atherton Tableland/Dimbulah as new blocks planted during 2011 came into production in 2012.

Industry experienced low returns over the last summer due to high volumes reaching the market with 2013 GVP $26m. Export is minimal and very little fruit is imported due to Australia's quarantine laws.

Potato

The Queensland potato industry is relatively static, producing approximately 120 000 t annually, worth an estimated $65m on a farm-gate basis. Potatoes are produced all year round in Queensland due to the climatic and geographical diversity of the growing districts. The key areas for potato production are the Lockyer Valley, Eastern Darling Downs and Killarney regions in inland South East Queensland; Bundaberg on coastal South East Queensland; and the Atherton Tableland in North Queensland. The Atherton Tableland remains a major production area for fresh brushed market potatoes. In the Lockyer Valley, production is mostly for washed and processing use.

The Queensland industry concentrates mostly on the production of potatoes for the fresh and crisping markets. The significant investment in infrastructure required, high growing costs and volatile markets for fresh potatoes have limited potato production in Queensland.

Attachment 3 Category 1: Existing regulation to be removed

Seed labelling

Under the *Agricultural Standards Regulation 1997* seed that is sold must be labelled in specified ways. For example, the regulation states that seeds sold in large quantities should be labelled with the common name, its minimum germination percentage by count, its minimum pure seed percentage by weight, whether the seeds have been chemically treated, its maximum other seed percentage by weight and its lot number. These are not biosecurity matters and are not proposed to be addressed in the *Biosecurity Regulation*. Industry can self-manage labelling of seed and there are relevant safeguards under the Australian Consumer Law and the *National Measurement Act 1960*.

The regulation also states that the seeds should not contain any live insects or weed seeds. Under the Biosecurity Act these matters are addressed by the general biosecurity obligation that requires that a person must take reasonable steps to minimise biosecurity risks, and there are specific restrictions on the distribution of some prohibited insects and weeds, and restricted matter. Again, there is no proposal to address these in the *Biosecurity Regulation*.

Stock warranties

The warranty under the *Stock Regulation 1988* that animals are disease-free upon sale is proposed to be discontinued under the Biosecurity Act. Currently, the legislation provides a seven-day warranty for persons buying cattle, deer, goats, horses, pigs, poultry and sheep that they are disease-free. However, providing warranties is not sufficient evidence that an animal is disease-free and is not the most appropriate way of preventing the introduction of diseased stock into a herd, as evidenced by recent experience with BJD in Queensland. Under the Act, both the person selling and the person buying stock will be required by the general biosecurity obligation to take reasonable steps to minimise the risk of disease spread. Section 28 of the Biosecurity Act provides a defence of due diligence for an offence against the general biosecurity obligation, including where a person proves they relied on information supplied by another person.

Tuberculosis protection

Under the *Stock Regulation 1988* there are a range of provisions relating to the protection of Queensland stock from bovine tuberculosis. Given the eradication of bovine tuberculosis from Australia, there is no further need for these provisions. In the event that bovine tuberculosis is reintroduced into Australia there are sufficient powers under the Act to manage the protection of Queensland stock from the disease.

Examination of brands

The *Stock Regulation 1988* contains a provision for the examination of brands whereby inspectors and police officers are permitted to clip hair around the brand of an animal for the purpose of identifying the animal.

These provisions are redundant because there are other legislative provisions that allow inspectors and police officers to do what is reasonably required to identify the ownership of an animal. For example, the Biosecurity Act allows an inspector who has entered a place

under the Act to examine, sample and place an identifying mark on a thing. Powers for a search warrant under provisions in the *Police Powers and Responsibilities Act 2000* (PPRA) provide police officers with broad powers to seize and examine any evidence related to a suspected crime on a property including stock.

Labelling of plants

Under the *Plant Protection Regulation 2002* any plant introduced into Queensland must be labelled to identify the place where it was grown or dispatched from and, if in a package, a description of its content. Identification of plants is not proposed to be addressed in the biosecurity regulation. The nursery industry has published a comprehensive *National plant labelling guideline* on the labelling of plants which can provide a useful guideline for labelling of plants. There are also relevant safeguards under the Australian Consumer Law and the *National Measurement Regulation 1999*.

Graft union

Under the *Plant Protection Regulation 2002* a person must not sell a grafted citrus plant unless it is of upright growth with a stock-scion union at least 100 mm above the point where the first lateral root branches from the stem. While it is not clear why this was originally regulated, it is reasonable to assume that the requirement was probably enacted to mandate a minimum quality standard or perhaps for minimising the risk of infection of the graft union by prescribing the graft union height. Regardless of the original rationale, it is not considered necessary to maintain this provision and therefore it is proposed to be discontinued.

Fertiliser labelling and composition

Under the *Plant Protection Regulation 2002* a person must not sell a grafted citrus plant unless it is of upright growth with a stock-scion union at least 100 mm above the point where the first lateral root branches from the stem. This provision was transitioned from the *Diseases in Plants Regulations 1987* to the *Plant Proctection Regulations 1990* and is current today. While it is unclear why it was orgininally regulated it is reasonable to assume that the requirement was probably enacted to mandate a minimum quality standard prior to the introduction of the national citirus clean budwood scheme and to minimise the risk of infection of the graft union by soil-bornepathogens, by prescribing the graft union height. Regardless of the original rationale, it is not considered necessary to maintain this provision and therefore it is proposed to be discontinued.

Fire blight

Under the *Plant Protection Regulation 2002* the whole of the state is a pest quarantine area for fire blight. Restrictions are applied to the movement of the pest or risk items that can carry the pests from one place to another. Fire blight is listed as prohibited matter in the new Act, which means a person cannot deal with these pests including if the prohibited matter is on carriers of these pests. If a person becomes aware of prohibited matter, they must immediately report the presence of prohibited matter to an inspector and must not take any action that would exacerbate the risk associated with them.

The general biosecurity obligation will require those who bring risk items into Queensland to take reasonable steps to minimise the risk of spreading fire blight. Given the prohibited matter listing and general biosecurity obligation will already address the risk that fire blight poses, it is proposed to discontinue specific quarantine provisions.

Electric ant

The *Plant Protection Regulation 2002* declares a pest quarantine area for electric ant. It provides for surveillance and treatment within the quarantine area and restricts movements of high-risk items within or out of more localised restricted areas declared by the chief executive. The eradication program for electric ants is due for completion in September 2015. However, this may be dependent on further detections of electric ants. The Act provides several tools such as biosecurity orders and biosecurity programs that could be used to manage electric ants if necessary following September 2015. Consequently, it is proposed to discontinue the PQA for electric ants and, if required, use biosecurity orders or declare a biosecurity program to deal with further incursions.

Asian sugarcane planthopper provisions

The *Plant Protection Regulation 2002* declares the whole of Queensland as a pest quarantine area to prevent the movement of Asian sugarcane planthopper from moving into Queensland. Asian sugarcane planthopper is listed as a prohibited matter under the Biosecurity Act and therefore a person must not introduce the pest into Queensland. Also, no sugarcane plants can be moved into Queensland without being certified that they are free of pests. It is also proposed to provide a general provision in regulation that machinery and soil associated with sugarcane must also be certified to be free of pests before movement into Queensland. These measures are considered to be sufficiently preventative to minimise the risk of introducing Asian sugarcane planthopper into Queensland and therefore it proposed not to maintain the current provisions in the *Plant Protection Regulation 2002*.

Restrictions on planting and cultivating a non-approved sugarcane variety

The *Plant Protection Regulation 2002* restricts the planting and cultivation of sugarcane to those varieties declared by the chief executive. The *Plant Protection (Approved Sugarcane Varieties) Declaration 2003* (the Declaration) prescribes varieties of sugarcane that can grown in each of the quarantine areas. Generally, the decision to approve varieties to be included in the Declaration is based on their resistance to disease. The list of varieties is reviewed each year and any changes in the permitted varieties requires amendments to be made to the Declaration.

It is intended that these provisions not be maintained in regulation or declaration, as industry is in a better position to manage the sugarcane varieties through an industry agreement. The growing and milling sectors could also work together to determine the varieties that should be produced in each area. Contracts between growers and mills could be used state wide or at a regional level.

Restrictions on planting and cultivating sugarcane plants

The *Plant Protection Regulation 2002* restricts the planting and cultivation of plants infested with a sugarcane pest. Any person who plants or cultivates a sugarcane plant infested with a pest is exacerbating, or is likely to be exacerbating, a biosecurity risk. Under the Biosecurity Act a person dealing with a biosecurity matter has a general biosecurity obligation to take all reasonable steps to prevent or minimise a biosecurity risk. Consequently, a person who plants or cultivates a sugarcane plant that is infested with a pest would not be meeting their general biosecurity obligation. It is an offence under the Biosecurity Act for a person not to meet their general biosecurity obligation. Given these requirements under the Biosecurity

Act, it is not proposed that the restrictions relating to the planting and cultivation of plants that are infested with a sugarcane pest be maintained in regulation.

Attachment 4 Category 2: Existing regulation to be transferred across without changes

Diagnostic test kits

The *Stock Regulation 1988* provides restrictions on the use of diagnostic test kits and approved methods of using the kit. The main reason for regulating test kits and the methods to be used is to mitigate against sub-optimal kits failing to detect a positive result and/or returning a false negative and, as a result, the presence of a notifiable disease not being reported.

Under section 47 of the Biosecurity Act a person who becomes aware of the presence of something they believe or ought reasonably believe is prohibited or category 1 or 2 restricted matter must report it to an inspector, but in any case a person must also report a notifiable incident including, for example, where they suspect their animal has contracted a disease that may have a significant adverse effect on the economy, human health, the environment or social amenity (regardless of whether they have tested the animal for a specific disease). The rationale for requiring the use of a specified diagnostic test kit will no longer exist, given that the notification requirement will no longer be contingent on identification of the disease.

Fire ants

The *Plant Protection Regulation 2002* declares a pest quarantine area for fire ants and restricts the movement of soil and potential carriers of fire ants within and out of parts of the zone.

Fire ants are dangerous imported pests that could spread to large areas of Australia, severely damaging the environment, our outdoor lifestyle, and the agriculture and tourism industries. Given the nature of the risk, it is proposed that the current restrictions for fire ants be transitioned into the proposed biosecurity regulation.

It is proposed that a biosecurity zone will be established in areas of Queensland that are infested, or are at risk of being infested, with fire ants. This will replace the current pest quarantine area that covers the whole of Queensland. The movement restrictions similar to the current restrictions will apply within the biosecurity zone. In certain circumstances, a biosecurity instrument permit may be granted for the movement of live fire ants and risk items within and between the areas. Current provisions contained in management plans may be incorporated into the zone provisions as exemptions to the requirement for a biosecurity instrument permit if prescribed conditions are met. Sections of a local government area that are less of a risk than other areas will have lesser restrictions applied via a chief executive declaration. Also, a prevention and control program will be established for surveillance, treatment and eradication of fire ants to replace the existing surveillance program.

Wild dogs

Wild dogs are a significant pest in rural and urban areas. Under the *Land Protection (Pest and Stock Route Management) Act 2002* wild dogs are class 2 declared pests. This requires landholders to take reasonable steps to keep the land free of wild dogs. Reasonable steps include baiting, trapping, shooting and exclusion fencing. Under the biosecurity regulation,

the current requirements will be translated into regulatory provisions which will include a wild dog biosecurity zone.

Movement of plants and risk items that may carry pests or diseases

There are a range plants, fruits, vegetables and other risk items that have a potential of spreading a serious pest or disease if moved from one place to another. These are referred to as regulated risk items and it is proposed to maintain movement restrictions on these regulated risk items to minimise the potential of them introducing or exacerbating a pest or disease.

Under current regulations, a person may move a regulated risk item if an inspector's approval to do so is given. An inspector would give an approval to move a regulated risk item if the person has met certain requirements to mitigate the risk of the item. It is proposed to maintain the capacity to move regulated risk items where specified risks are mitigated. However, inspector's approvals are not provided for under the Biosecurity Act. Instead, the new Act will permit a person to move a thing if it meets certain requirements and this will be evidenced by an acceptable biosecurity certificate.

A biosecurity certificate may be issued by an authorised officer under the Biosecurity Act or a private person under an appropriate accreditation. A biosecurity certificate could, for example, state that the movement item is free of the relevant pest or disease, that the item has been subject to a stated treatment or it meets a required standard stated in an accreditation arrangement.

Sugarcane pest provisions

The *Plant Protection Regulation 2002* (the regulation) restricts the movement of sugarcane or an appliance or soil that has been in contact with sugarcane into Queensland without an inspector's approval. It is proposed to maintain these restrictions unless the plant, soil or appliance is accompanied with a biosecurity certificate stating that it is free from sugarcane pests.

The regulation declares eight Pest Quarantine Areas (PQA) that cover the whole of Queensland. The PQA system was established to reduce the risk of pests of sugarcane and Cape York targeted pests being introduced and to prevent or control their spread in the rest of the state. Restrictions apply on the movement of sugarcane plants and machinery in and out of these areas.

It is proposed to maintain a full Queensland coverage of quarantine areas and declare them in regulation as biosecurity zones. However, it is proposed to reduce the zones to seven and amend the boundaries as follows:

- Far Northern
- Coen to Townsville
- Townsville to Abbotts Point
- Abbotts Point to Rockhampton
- Rockhampton to Victoria Point
- Victoria Point to New South Wales border
- Woodford special PQA.

The previous eight zones have been reduced to six as the Cardwell to Townsville area was introduced to deal with sugarcane smut but it is no longer relevant. Overall the boundaries of these areas have been determined based on the presence of sugarcane pets in an area, natural boundaries where sugarcane is grown and minimising the burden on industry. It is

proposed to restrict the movement of sugarcane or an appliance or soil that has been in contact with sugarcane out of a biosecurity zone. There are no movement restrictions within a zone as it would provide significant burden on sugarcane growers when planting and moving harvested cane to mills.

Mango pest provisions

The *Plant Protection Regulation 2002* restricts the movement of mango plants into Queensland that have been dispatched from another state or territory in which mango leafhopper is found. Also, to protect Queensland from further incursions of mango malformation disease, a person must not bring a mango plant into Queensland without an inspector's approval. It is important to maintain these provisions to minimise the risk of mango pests entering Queensland. Consequently, it is proposed to maintain a provision under the new regulation that a person must not bring a mango plant into Queensland without a biosecurity certificate. The biosecurity certificate would attest that the plant is free of mango pests, including mango malformation disease and mango leafhopper. It is also proposed that mango malformation disease be listed as a prohibited species, as the pest is not established in Queensland and, if found, would be the subject of an eradication program.

It is proposed that the pest quarantine areas for mango pests, including red banded mango caterpillar mango leaf gall midge, and mango leafhopper on Cape York be maintained and transitioned into a biosecurity zone (see Cape York targeted pests quarantine area below).

Papaya pest provisions

The *Plant Protection Regulation 2002* declares an area in south-east Queensland as a PQA to prevent PRSV-P from moving out of it into other areas of Queensland. Restrictions apply on moving papaya, cucumber, melon, pumpkin or squash host plants out of the PQA without an inspector's approval.

It is important to maintain restrictions that mitigate the risk of spreading PRSv-P into other areas of Queensland as this could have significant economic impacts on production of of papaya. Consequently, it is proposed that a biosecurity zone covering the same area as the current PQA be implemented with the same restricts applying, unless the plant is accompanied with a biosecurity certificate stating that it is free fromPRSV-P.

Grape pest provisions

The *Plant Protection Regulation 2002* declares the whole of Queensland as a PQA for grape phylloxera and separates the state into two zones: a phylloxera risk zone and a phylloxera exclusion zone. The phylloxera exclusion zone covers the main grape-growing area in Queensland and the phylloxera risk zone covers the rest of the state. There are restrictions on moving grape plants, grape products, soil associated with grape plants and other risk items into the phylloxera risk zone and the phylloxera exclusion zone.

It is important to maintain restrictions that reduce the risk of introducing grape phylloxera into Queensland, as it could have significant impacts on the table grape and wine industries. Consequently, it is proposed that restrictions will continue to apply on moving grape plants, grape products, soil associated with grape plants and other risk items into Queensland unless they are accompanied with a biosecurity certificate stating that they are free from grape phylloxera. It is also proposed to maintain the phylloxera exclusion zone as a biosecurity zone. Similar restrictions will apply on moving risk items into the phylloxera exclusion zone as into Queensland.

Cape York Peninsula targeted pests quarantine zone

The current Cape York targeted pests quarantine area (north of the latitude 13°45' south) will be maintained as a biosecurity zone. However, the pests that it covers will be extended to include all pests currently covered under other PQAs that cover the same area as the Cape York targeted pests PQA. For example, the *Plant Protection Regulation 2002* (the regulation) provides a pest quarantine area for red banded mango caterpillar that is identical to the Cape York Peninsula targeted pests area. Likewise, the same applies to sugar pests, mango pests and banana pests. It is therefore proposed that all of these provisions will be covered under a single Cape York biosecurity zone.

It is important to maintain a biosecurity zone for Cape York as there are a range of pests and diseases that can be spread south without restrictions on the movement of specific carriers. Many of these pests and diseases have been introduced into Cape York from Australia's closest neighbours and the zone minimises the risk that these pests will spread further into Queensland.

It is proposed to maintain the list of animal and plant pests under Schedule 12 of the *Plant Protection Regulation 2002* that must not be moved outside of the Cape York biosecurity zone. It is also proposed to continue the current practices in relation to the prevention of fruit and carriers out of the PQA. Under the new regulation, a person may only move a risk item out of the Cape York biosecurity zone if they meet specified requirements to minimise risk associated with the item and they acquire a biosecurity certificate.

Pest quarantine areas covering the whole of Queensland

Under the *Plant Protection Regulation 2002* several pest quarantine areas are declared for the whole state as a mechanism to restrict the movement of pests into Queensland from another state or territory. It is important to maintain these movement restrictions to protect Queensland from these serious pests. Consequently, it is proposed to maintain the following provisions unless the plant, soil or appliance in question is accompanied with a biosecurity certificate stating that it is free from the pest:

- restrictions on moving potatoes, soil, plants of the Solanaceae family or other risk items into Queensland, from a place in another state that has had a detection of potato cyst nematode (PCN) or is linked to a property that has had a detection of PCN.

- restrictions on moving into Queensland branched broomrape and moving, from a place in another state that is within 50 km of an infestation of branched broomrape, plants, soil, appliances or domestic animals, which could carry branched broomrape.

- restrictions on moving into Queensland Mediterranean fruit fly or a plant infested with Mediterranean fruit fly.

Newcastle disease

Newcastle disease is a highly contagious viral disease of domestic poultry, cage and aviary birds, and wild birds. It is characterised by digestive, respiratory and/or nervous signs. The disease has a number of strains that differ in the severity of their clinical signs, ranging from a mild infection to a rapidly fatal condition. An outbreak of virulent Newcastle disease in Queensland could cause significant economic losses in the Queensland poultry industry.

A compulsory vaccination program for commercial flocks of poultry was introduced in Queensland in 2002. The *Stock Regulation 1988* contains provisions for the compulsory vaccination program. The current arrangements directed at prevention and control of Newcastle disease will be continued under the new regulation. It is proposed this will be achieved through reliance on the general biosecurity obligation and fact sheets which outline how a commercial poultry producer may meet their general biosecurity obligation in respect of Newcastle disease.

Surveillance information has demonstrated the risk of Newcastle disease incursion is low in Queensland and no outbreaks of virulent Newcastle disease have occurred since compulsory vaccination commenced. As a result producers may opt out of vaccinating their flocks of meat chickens if they participate in a surveillance program. The aim of the surveillance program is to assess the epidemiology of Newcastle virus in unvaccinated flocks. Allowing meat chicken producers to opt out of compulsory vaccination has resulted in significant savings for producers while still managing the risk of Newcastle disease. Compulsory vaccination will still apply to all other commercial flocks.

Fertiliser labelling

The *Agricultural Standards Regulation 1997* contains restrictions about the harmful ingredients permitted in fertilisers. For example the maximum level of cadmium permitted to be contained in a fertiliser.

A national approach has been agreed for maximum permitted levels of harmful ingredients in fertilisers to ensure that it is safe to use fertiliser products generated in any state or Territory in any area throughout Australia. It is therefore proposed to transition the current restrictions into the new Regulation to ensure consistency with national approach.

Feeding animal matter to ruminants —regulation for which the Act provides

The *Stock Regulation 1988* prohibits feeding animal and animal contaminated matter to ruminants and swill to stock, subject to certain exemptions. This is necessary to minimise the risk of spread of diseases such as foot and mouth disease, bovine spongiform encephalopathy (mad cow disease) and scrapie should they enter Queensland.

The ban on feeding animal matter to ruminants and swill feeding restrictions, including some exemptions, has generally been implemented by section 46 of the Act. However, the Biosecurity Act provides a further exemption where animal matter is fed to a designated animal in a way prescribed under regulation. It is proposed to transition the details of the remaining current exemptions to the swill feeding restrictions, such as temperature treatment and filtration for used cooking oil contaminated with animal matter, into the new biosecurity regulation.

It is also proposed to include in the regulation a new requirement consistent with national agreements for manufacturers of animal feed to state on the label that the feed does not contain ruminant animal matter.

National livestock identification scheme —regulation for which the Act provides

The National Livestock Identification Scheme (NLIS) is currently implemented by the *Stock Identification Regulation 2005.* Essentially, the NLIS requires those responsible for certain

animals, such as cattle, to identify them and advise their movements to a database. Most of the current provisions implementing the NLIS are reflected in Chapter 7 of the Biosecurity Act. However, the Act provides for regulations to be made about the details that must be contained in reports to the database and certain other matters.

Restricted matter —regulation for which the Act provides

The Biosecurity Act lists certain pests and diseases that are endemic to Queensland as 'restricted matter'. Restrictions and obligations are placed on each thing that is restricted matter according to the category number(s) it is assigned. A person must not distribute or dispose of category 3 restricted matter except in a way prescribed under a regulation. A person must kill any category 7 restricted matter that they come across. However, they must also dispose of it in a way prescribed under a regulation. Consequently, it is proposed that the regulation will describe the circumstances under which a person may distribute or dispose of category 3 restricted matter and ways a person must dispose of category 7 restricted matter.

The restrictions on category 3 restricted matter approximate current restrictions on the relevant class 2 and 3 pests under the *Land Protection (Pest and Stock Route Management) Act 2002*. The disposal methods will include a mix of registered chemical treatment, incineration, burial and/or mechanical processing of the restricted matter to ensure the matter is incapable of continued independent life or reproduction.

The obligation to dispose of category 7 restricted matter that has been killed approximates the requirement for these noxious fish under the *Fisheries Act 1994,* which includes a requirement to dispose of the dead fish through burial or to a waste disposal facility.

Local government payments

The Biosecurity Act requires local government to ensure that invasive plants and animals are managed within their area in accordance with the Act and the principles of pest management. However, the Queensland Government does help in managing invasive plants and animals in local government areas. Consequently, the Biosecurity Act provides that the Minister may request that a local government pay an amount for services that help that local government manage invasive animals and invasive plants in that local government's area.

However, as a safeguard for local governments, the current *Land Protection (Pest and Stock Route Management) Regulation 2003* states the formula for the calculation of the maximum amount a local government is required to pay for a financial year into the land protection fund. It is proposed that this formula be transitioned into the new regulation without change.

Marking of hives

It is intended to adopt the provisions currently contained within the apiaries regulation which require:

- for a registered beekeeper—the beekeeper's registered mark or brand number; or
- for a beekeeper who holds a permit—the permit number.

The particulars must be written in block letters and figures at least 25 mm high as per the current requirements.

Distance between apiary sites

Queensland is currently the only jurisdiction to regulate a required distance between apiaries.

The QBA has argued strongly for retaining a legislated required distance between apiary sites, which Biosecurity Queensland has agreed to. We do, however, seek to simplify and streamline the requirements by removing the previous categories and reducing the required distances as below:

- Distance between Queen Bee Breeder apiary sites (nucleus colony) with more than 100 hives to be 2.0 km
- Distance between apiary sites with more than 40 hives to be 0.8 km
- No distance specified between apiary sites where there are fewer than 40 hives.

Attachment 5: Consultation Groups

Biosecurity Legislation Reference Group

Andrew Barger	Queensland Resources Council
Andrew Drysdale	Regional NRM Groups Collective
Brendan Stewart	CaneGrowers
Bruce Wilson	Queensland Conservation Council
Darren Condon	Racing Queensland
Dorean Erhart	Local Government Association of Queensland
Gary Sansom	Queensland Farmers Federation
Jay Anderson / Michelle McKinlay	Australian Banana Growers Council
Jodie Redcliffe	Queensland Chicken Growers Association
John Coward	Pork Queensland
John McDonald	Nursery Garden Industry Queensland
Kent Wells	Queensland Horse Industry Alliance
Michael Alpass	AgForce
Michael Gardner	Queensland Seafood Industry Alliance
Michael Murray	Cotton Australia
Nicola Stokes	North Queensland Bulk Ports
Rachel McKenzie	Growcom
Robert Kerslake	Queensland Horse Council
Scott Braund	Mort & Co and Australian Lot Feeders Association
Steve Martin	Powerlink
Pat Bell	General Manager, DAF
Mark Lightowler	Principal Policy Officer, DAF
Fiona Ferguson	Principal Policy Officer, DAF
James Boyle	Policy Officer, DAF

Banana Working Group

Kathy Grice	Agri-Science Queensland, DAF
Suzy Perry	Principal Scientist, DAF
Mark Lightowler	Principal Policy Officer, DAF
Gary Artlett	Principal Policy Officer, DAF
Jay Anderson	Australian Banana growers Council (ABGC)*
Juliane Henderson	QAAFI
John Thomas (delegate Kathy Parmenter DAF, ASQ)	QAAFI
David Putland	Principal Policy Officer, DAF
Sarah Corcoran (DAF-BQ)	A/GM PB&PI, PQ DAF
Stewart Lindsay	Agri-Science Queensland, DAF

Cattle Tick Working Group

Andrew Sanger	Department of Primary Industries, New South Wales
Kent Wells	Queensland Horse Industry Alliance
Paul Wright	Cattle Tick Management Qld
Michael McTaggart	Cattle Tick Management Qld (Agforce)
Scott Braund	Australian Lot Feeders Association
Andrea Lethbridge	Australian Livestock & Property Agents Association Ltd
Ian Lovegrove	Australian Livestock Markets Assn.
Geoff Kingston	The North Australian Pastoral Company Pty Limited (NAPCO)
Fiona Ferguson	Principal Policy Officer, DAF
Carly Waide	Principal Policy Officer, Animal Industries, DAF
Glen Sibson	Principal Biosecurity Officer, Biosecurity Qld
Allison Crook	General Manager, ABW

Mango Working Group

Sarah Corcoran	a/GM, PB&PI, BQ DAF
Gary Artlett	Principal Policy Officer, DAF
Dr Suzy Perry	Principal Scientist, DAF
Mark Lightowler	Principal Policy Officer, DAF
David Putland	Principal Policy Officer, DAF
Peter Trevorrow	Agri-Science Queensland, DAF
Ian Newton	Agri-Science Queensland, DAF
Trevor Dunmall	Australian Mango Industry Association
Greg Johnson	Horticulture 4 Development (mango industry technical consultant)

Bee Working Group

Trevor Weatherhead	Executive Director, Australian Honey Bee Industry Council Inc
Robert Dewar	President, Queensland Beekeepers Association Inc
Peter Warhurst	Queensland Beekeepers Association Inc.
Dr John Roberts	Postdoctoral Fellow, CSIRO
John Zigtermann	Apiary Officer, DAF
Nicole Brizuela	Principal Policy Officer, DAF
Mark Lightowler	Principal Policy Officer, DAF
Fiona Ferguson	Principal Policy Officer, DAF
Rosalie Anderson	Plant Health Scientist, DAF

Sugarcane Working Group

Mark Panitz (Sarah Corcoran A/GM delegate)	GM, PB&PI, BQ DAF
Gary Artlett	Principal Policy Officer, DAF
Dr Suzy Perry	Principal Scientist, DAF
Mark Lightowler	Principal Policy Officer, DAF
Peter Allsopp	Sugar Research Australia (SRA)
James Ogden-Brown	SRA
Barry Croft	SRA
Jim Crane	Australian Sugar Milling Council (ASMC)
Cheryl Daley	ASMC
Greg Shannon	Cane Productivity Services representative
Matt Kealley	CANEGROWERS
Burn Ashburner	CANEGROWERS
Anthony Young	NSW Sugar
Stephen Ryan	Australian Canefarmers Association
Nicole Thompson	SRA

Attachment 6: Proposed fee schedule (indexed)

FEES FOR ADDITIONAL REGULATORY TOOLS, ENTITY REGISTRATION AND BIOSECURITY CERTIFICATES

Fees for additional regulatory tools and biosecurity certificates

Fee Description	Unit	Biosecurity Act Fee – Indexed to 2016/17 (GST exempt)	Comments
Compliance agreements			
Annual application fee for a compliance agreement	per agreement	$129.40	Duration of compliance agreements may be up to 5 years – pro rata fees may apply for agreements exceeding 1 year.
Entity (Property) registration			
Application for registration of a registrable biosecurity entity	per registration	$127.70 ($42.56 p.a.)	Fee based on 66.66% government subsidisation.
Application for removal of restricted place from biosecurity register	per application	$70.50	Fee based on current fee for request to extend compliance period under a pest control notice
Auditors and other approvals			
Application for approval as an auditor	per application	$146.35	Fee based on equivalent fees under the *Food Regulation 2006* and *Food Production (Safety) Regulation 2002.*
Auditor approval fee	per year	$377.75	
Transfer of permit	per transfer	$70.50	Fee based on previous fees under Queensland legislation.
Issue of biosecurity certificates (by authorised officers)	per certificate	$48.25	For issue of biosecurity certificates where onsite inspection is not required. Fee based on 15 minutes of inspector's time.
Total regulatory fees			7

The above fees relate to the payment of charges for the provision, retention or amendment of a permission, exemption, authority or licence under an Australian law. This meets the criteria for exemption from GST under the amended Division 81 of the *A New Tax System (Goods and Services Tax) Act 1999* (Cwlth).

Existing fees to be transitioned under the Act, with some change to fee description and/or classification –

Current fee (description)	Current Fee (indexed to 2016/17)	Transition details	Biosecurity Act Fee (description)	Unit	Biosecurity Act Fee (indexed from RIS to 2016/17)	Change $ (%)
Land Protection (Pest and Stock Route Management) Regulation 2003 (Schedule 5)		Current permit fees are to be replaced by prohibited and restricted matter permit fees (broader application under the Act). Only one fee per permit (application and permit fee have been combined). Fee waiver may be granted.	Prohibited and Restricted Matter Permits			
1 Declared pest permit (Act, s 58(2)(b)(i))— (a) for a purpose mentioned in schedule 3, part 1, 4 or 5—						
(i) application fee	$305.85*		Issue or renewal of a permit for the use of restricted matter, for the purpose of biological control, commercial use or scientific research for a period of up to 3 years	per permit	$391.25*	n/a
(ii) permit fee	$229.30*					
(b) for another purpose mentioned in schedule 3—						
(i) application fee	$45.70*					
(ii) permit fee	$91.85*		Issue or renewal of a permit for the use of prohibited matter, for the purpose of scientific research for a period of up to 3 years	per permit	$391.25*	$253.90 (184%)
Request to extend compliance period under a pest control notice~ note that this fee has since been discontinued, the cost of providing the service remains the same.	$72.50*	Basis for generic fee for amendment of relevant authorities	Amendment of conditions of a relevant authority	per application	$72.50*	n/a
Inspecting register of pest control and entry	$15.05*	Basis for generic register inspection	Registers (biosecurity register, register of biosecurity orders, permit register) Inspection of register	per inspection/ per hour	$15.05*	n/a

Current fee (description)	Current Fee (indexed to 2016/17)	Transition details	Biosecurity Act Fee (description)	Unit	Biosecurity Act Fee (indexed from RIS to 2016/17)	Change $ (%)
notices (Act, s 86(3))		fee				
NON-REGULATORY FEES		To be replaced with generic copy and extract fees	Copy of register	per copy/ per entry	$45.30*	n/a
Property Search Fees	$176.15					
Interstate Certification Assurance		Accreditation fee (regulatory fee) for all accreditation schemes	Accreditation			
Accreditation	$295.65		Accreditation	per annum	$295.65	Nil
The fees listed below are not specifically provided for under the Act, however, are anticipated to be either prescribed under a regulation or made by the chief executive under the *Financial Accountability Act 2009* to continue current arrangements.						
Assurance Certificates	$18.45	Plant Health Assurance Certificates to be replaced with Biosecurity Certificates (regulatory fee) which may apply to a range of applications	Biosecurity Certificates	per book (100)	$26.40	$7.95 (43%)
Plant Health Inspections		Plant health inspection fees are to transition to regulatory fees under the Act and will continue to apply to plant health and fire ant	Inspection fees (Plant Health)			
Inspection	$124.20		Inspection during ordinary business hours	per hour	$193.05	$68.85 (55%)
Travel - Single client at same site	$124.20		Travel to or from the site of an inspection during ordinary business hours (30% discount for multiple clients)	per hour	$193.05	$68.85 (55%)
Travel - Multiple clients at different sites	$86.95					
Out of hours and	$248.40		Out of hours and weekend Inspection	per hour	$333.90	$85.50

Current fee (description)	Current Fee (indexed to 2016/17)	Transition details	Biosecurity Act Fee (description)	Unit	Biosecurity Act Fee (indexed from RIS to 2016/17)	Change $ (%)
weekend Inspection		inspection services.				(34%)
Out of hours and weekend Travel - Single client at same site	$248.40		Out of hours and weekend travel to or from the site of an inspection (30% discount for multiple clients)	per hour	$333.90	$85.50 (34%)
Out of hours and weekend Travel - Multiple clients at different sites	$173.90					
Cattle Tick Inspection fees		Cattle tick inspection fees will transition to regulatory fees under the Act and will apply only where services are delivered by DAF staff.	Inspection fees (Cattle Tick)			
Standard Hourly Inspection fee	$124.00		Standard hourly inspection fee	per hour	$123.55	-$0.45 (-0.4%)
Out of hours and weekend Inspection fee	$248.20		Out of hours and weekend inspection fee	per hour	$256.15	$7.95 (3.2%)
Yard fees (DAF facilities) for all stock other than sheep, goats and unweaned calves	$1.30		Yard fees (DAF facilities) for all stock other than sheep, goats and unweaned calves	per head	$1.30	Nil
Yard fees (DAF facilities) for Sheep and Goats	$0.25		Yard fees (DAF facilities) for Sheep and Goats	per head	$0.30	$0.05 (20%)
Multiple Movement Permit for Competition Horses	$27.95		Multiple Movement Permit for Competition Horses	each	$31.15	$3.20 (11.5%)
Interstate Certification Assurance		ICA auditing fees (currently controlled revenue) are to apply to a broader range of	Auditing			
Auditing	$209.05		Auditing during ordinary business hours	per hour	$282.45	$73.35 (35%)
Travel - Single client at same site	$209.05		Travel to or from the site of an audit during ordinary business hours (30% discount for multiple clients)	per hour	$282.45	$73.35 (35%)
Travel - Multiple	$146.35					

Current fee (description)	Current Fee (indexed to 2016/17)	Transition details	Biosecurity Act Fee (description)	Unit	Biosecurity Act Fee (indexed from RIS to 2016/17)	Change $ (%)
clients at different sites		auditing applications (across all industries).				
Out of hours and weekend Auditing	$406.05		Out of hours and weekend Auditing	per hour	$406.05	Nil
Out of hours and weekend Travel - Single client at same site	$406.05		Out of hours and weekend travel to or from the site of an audit (30% discount for multiple clients)	per hour	$406.05	Nil
Out of hours and weekend Travel - Multiple clients at different sites	$291.95					
Number of existing fees	26		Number of fees		21	

*Does not include GST (Division 81 GST exemption applies). All other fees listed in this table include GST.

Fee or Charge (effective from 1 July 2015)	Unit	Current Fee (indexed to 2016/17)	Biosecurity Act Fee (indexed from RIS to 2016/17)	Change $ / (%)
APIARIES REGULATION 1998				
Part 5 Miscellaneous				
25 Registration fee				
The fee for an application for, or renewal of, registration as a registered bee keeper (now a registrable biosecurity entity)	per annum	$15.85*	$28.75*	$12.90 (82%)
STOCK REGULATION 1988				
Schedule 7 Fees Section 68				
1 Dipping stock for cattle tick at a dip operated by the State—				
(a) cattle or horses, for each animal	per head	$0.85	$0.95	$0.10 (12%)
(b) sheep, calves, goats or deer, for each animal	per head	$0.55	$0.65	$0.10 (18%)
(c) minimum fee for each consignment		$12.90	$19.10	$6.20 (48%)
2 For an inspector supervising the treatment of horses for cattle tick using equipment and acaricide supplied by the State—				
(a) at the inspector's office, for each horse	per head	$11.80	$12.65	$0.85 (7.2%)
3 For an inspector supervising the treatment of alpacas, buffalo, camels, cattle, deer, goats, guanacos, llamas, sheep or vicunas for cattle tick using equipment and acaricide supplied by the State—				
(a) at the inspector's office—				
(i) for each animal	per head	$4.55	$11.15	$6.60 (145%)
Total regulatory fees to be retained		6		

NON-REGULATORY (Category 3) FEES AND CHARGES

OTHER CATTLE TICK FEES				
Training of accredited Tick Control Personnel (4hr course)	per person	$113.05	$212.70	$99.65 (88%)
Competition Stock Owner Treatment Scheme (CSOTS) Instruction and awareness	per person	$65.85	$423.70	$357.85 (543%)
Western Flower Thrips Monitoring Trap Kits and Identification	box (5 traps)	$94.40	$148.70	$54.30 (58%)
Total non-regulatory fees to be retained		3		
*Fees for beekeeper registration do not include GST (Division 81 GST exemption applies). All other fees listed in this table include GST.				


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