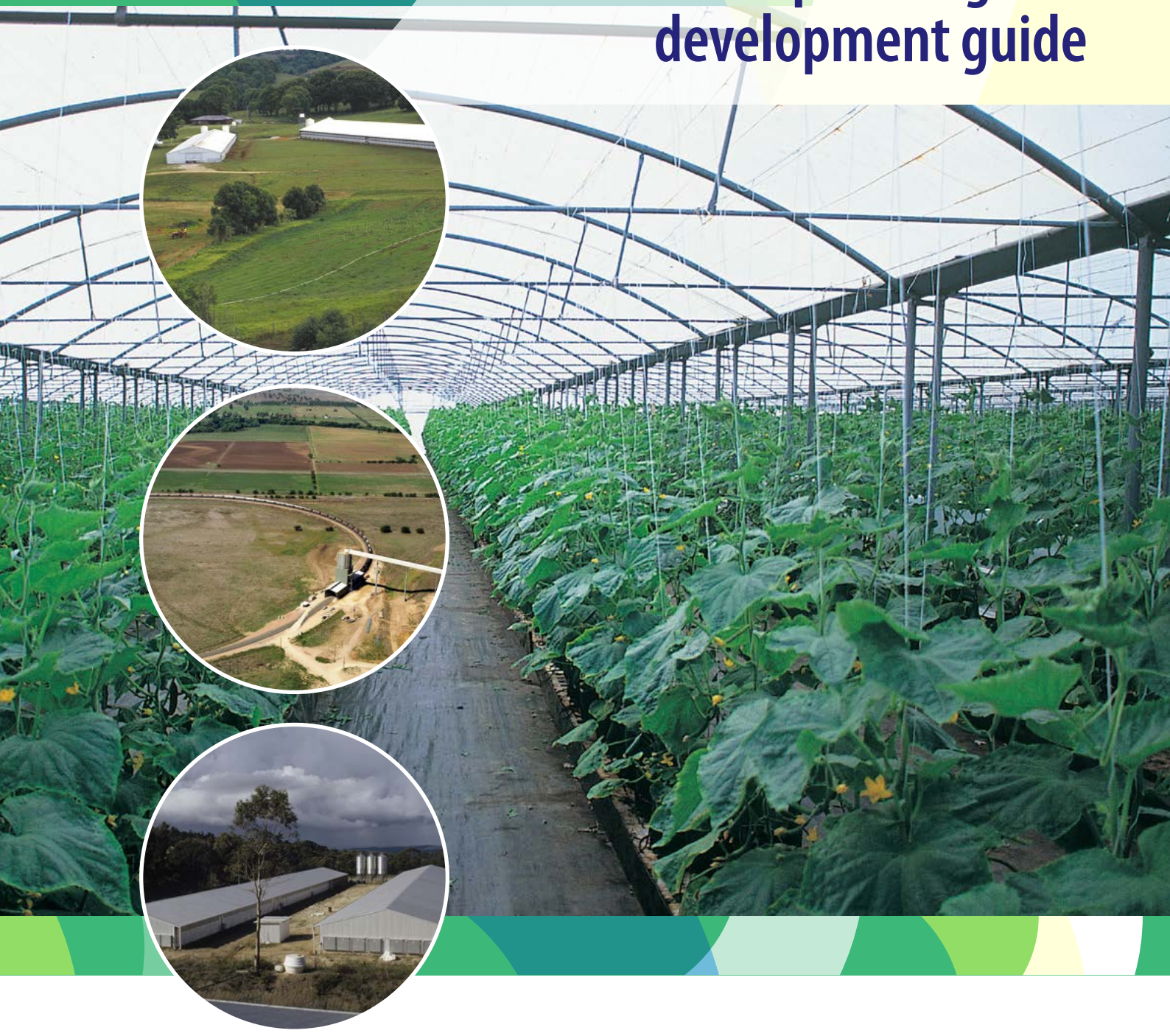
NSW GOVERNMENT

Department of Primary Industries

Managing biosecurity risks in land use planning and development guide



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Managing Biosecurity Risks in Land Use Planning and Development Guide

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Contents

Purpose

The Guide to Biosecurity Risk Management in Land Use Planning and Development (the Guide) outlines steps to be considered to ensure biosecurity is appropriately addressed during the planning and assessment of development proposals, particularly for proposed agricultural enterprises and activities and proposals that may impact on agricultural enterprises or industries. In certain circumstances, this could also include ensuring biosecurity risks are appropriately considered and addressed during the construction and operational phase of a development.

The Guide has been developed to support development proponents, development assessment authorities and other government agencies with a role or the community with an interest in land use planning. The document can be used to guide strategic land use planning and assist in individual development assessments.

1.0 Biosecurity, a shared responsibility

The NSW Biosecurity Strategy 2013-2021 introduced the principle of shared responsibility as:

"Government, industry and the people of NSW working together to protect the economy, environment and community from the negative impacts of animal and plant pests, diseases and weeds for the benefit of the people of NSW."

On 1 July 2017, the shared responsibility of government, industry and the community to manage biosecurity in NSW was implemented by the *NSW Biosecurity Act 2015* (the Biosecurity Act).

The broad objectives for biosecurity in NSW are to manage biosecurity risks from pests and diseases, weeds and contaminants by:

- preventing their entry into NSW
- quickly finding, containing and eliminating any new entries, and
- effectively minimising their impacts, through robust management arrangements, if they cannot be eliminated.

The Biosecurity Act provides a flexible and responsive statutory framework to help achieve these objectives for the benefit of the NSW economy, environment and community.

1.1 Why is biosecurity important?

Biosecurity is important because it protects our economy, environment and community from:

- pests' animals and weeds,
- diseases and things that may spread diseases
- risks arising from inappropriate stock foods or fertilisers
- contaminants that may cause animals or plants to become chemically affected
- risks caused by bees and non-indigenous animals.

In NSW we have over 39,000 agricultural businesses, 42,000 farms and 66,000 people employed in the agriculture sector alone. This provides a contribution of over $15 billion to the NSW economy, helping to secure regional growth and deliver on health and education

outcomes. Increased global trade, recreational travel and tourism, population growth and movement, and more intensive crop production can increase the likelihood of the introduction and spread of animal and plant diseases, animal pests and weeds. These pose a real threat to domestic and international market access, the supply of safe food, biodiversity and social amenity, and therefore to the agricultural sector, and the NSW economy overall.

Not only is biosecurity vital for industry and the economy, it protects our environment and allows us to enjoy our unique natural landscapes and environments. There are more than 350 species, populations and communities considered to be threatened by the impacts of pest animals across NSW. Biosecurity seeks to minimise and manage these risks, conserve the biodiversity and cultural heritage within these parks and reserves, and prevent biosecurity risks spreading more widely into other states and across Australia.

In NSW, the Act provides the framework for NSW to minimise these risks.

1.2 What is the general biosecurity duty?

Section 22 of the Biosecurity Act includes the general biosecurity duty, which states:

"Any person who deals with biosecurity matter or a carrier and who knows, or ought reasonably to know, the biosecurity risk posed or likely to be posed by the biosecurity matter, carrier or dealing has a biosecurity duty to ensure that, so far as is reasonably practicable, the biosecurity risk is prevented, eliminated or minimised."

Biosecurity risk is the risk that a biosecurity impact will occur (section 14 of the Act). A ***biosecurity impact*** is an adverse effect on the economy, the environment or the community that arises, or has the potential to arise from a biosecurity matter or a carrier and that relates to:

- the introduction, presence, spread or increase of a pest or disease of plants
- the introduction, presence, spread or increase of a pest animal
- the introduction, presence, spread or increase of a weed
- the introduction, presence, spread or increase of a pest or disease of animals
- plants, animals or animal products becoming chemically affected
- risk to public safety caused by bees or non-indigenous animals
- stock food, fertilisers, liming materials and trace element products (section 13 of the Act)

Biosecurity matter is any living thing or part or product of a living thing (other than a human), any part of a plant or animal, a disease, a prion, a contaminant, or a disease agent (section 10 of the Act). A ***carrier*** is anything (including a human) that has or is capable of having biosecurity matter on it (section 11 of the Act).

Although the general biosecurity duty applies broadly, there are a number of elements that must be satisfied:

- **Deals with** – the general biosecurity duty only applies to a person who 'deals with' biosecurity matter or a carrier of biosecurity matter. 'Deal with' includes a wide range of activities, which are listed in section 12 of the Act. Some examples of dealing with biosecurity matter are; to keep, possess, grow, breed, move, supply or manufacture biosecurity matter.

- **Knowledge** – a person must know, or ought reasonably to know, that there is or is likely to be a biosecurity risk arising from their dealing with biosecurity matter or a carrier. This will be a question of fact and will depend on the circumstances of each situation.

  People who know or ought reasonably to know will generally include people who deal with biosecurity matter or carriers on a regular basis as part of a commercial or recreational activity, and people who work professionally (i.e. 'deal') with a particular type of biosecurity matter or carrier. For these people their general knowledge and expertise would in most cases be sufficient to indicate they should know the risks.
- **'Reasonably practicable'** – what is reasonably practicable for the prevention, elimination or minimisation of a biosecurity risk will depend on what was reasonably able to be done at a particular time, taking into account the nature and potential impact of the biosecurity risk, the person's level of knowledge of the risk and actions that could be taken to prevent, eliminate or minimise the risk, and the cost, availability and suitability of these actions. It is not likely to be reasonably practicable if the cost is greatly disproportionate to the risk.
- **Preventing, eliminating or minimising the biosecurity risk** – the risk must be prevented or eliminated if reasonably practicable, otherwise it must be minimised so far as is reasonably practicable.

The general biosecurity duty can apply to more than one person in relation to the same biosecurity risk, for example an owner and a manager may both be responsible for managing a particular biosecurity risk on a property.

1.3 What does biosecurity mean for land use planning and development?

When developing regional strategic plans, district strategic plans and local strategic planning statements, the relevant planning authorities must have regard to economic, social and environmental matters (Part 3, *Environmental Planning and Assessment Act 1979)*. Similarly, when determining a development application, a consent authority must take into account the likely impacts of the development, including environmental impacts on both the natural and built environments, and the social and economic impacts in the locality, and the public interest (section 4.15, *EP& Act*).

This means the planning system plays an important role in protection of NSW from biosecurity risks caused by proposed developments. Examples of such development activities include, but are not limited to:

- new intensive livestock agriculture developments
- new intensive plant agriculture developments
- new aquaculture agricultural developments
- state significant developments
- other proposed developments near existing agricultural businesses, transport corridors, pipelines or other industries.

Decisions on land use and development proposals can minimise the risk of biosecurity issues arising once a facility is operational.

It is important to be aware that in some land use zones, particular types of agricultural development will not require development consent – for example, extensive agriculture in some Rural zones. These developments are still subject to the Biosecurity Act. Proponents of these developments should assess whether their activities and operations comply with their General Biosecurity Duty obligations.

Biosecurity should be considered in all phases of the planning and assessment process to ensure that biosecurity risks are identified and managed appropriately.

It is important that development proponents, landholders, and planning consent authorities consider the potential biosecurity risks of new developments, and that development proposals adopt reasonably practical measures to prevent, eliminate or minimise the potential impact on the environment, the economy and the community in the locality of the development.

Industry guidelines and codes of practice and state and federal government biosecurity guidelines should be referred to when assessing development applications, particularly those guidelines that determine the design of a development and which indicate the consent authority should place conditions on the operation of the development. A list of relevant State, National and Industry legislation and guidelines is compiled in Appendix 1.

1.3.1 Intensive Livestock Agriculture Developments

Intensive livestock agriculture means the keeping or breeding, for commercial purposes, of cattle, poultry, pigs, goats, sheep, horses or other livestock, and specifically includes dairies (restricted) – where cattle have access to grazing for less than 10 hours in any 24 hour period, feedlots, pig farms, and poultry farms.

It does not include extensive agriculture, aquaculture or the operation of facilities for drought or similar emergency relief.

The NSW Planning Guidelines – Intensive Livestock Agriculture Development (the Planning Guidelines) assist farms and local and State government planners to understand the assessment requirements in the planning process to effectively manage biosecurity responsibilities. Siting of the proposed development, management practices and set back distances are relevant planning considerations which may mitigate biosecurity risk.

1.3.2 Intensive plant agriculture

Intensive plant agriculture means the cultivation of irrigated crops for commercial purposes, horticulture, turf farming and viticulture. Horticulture is the cultivation of fruit, vegetables, nuts, flowers and nursery products.

Horticulture includes greenhouse horticulture and controlled environment horticulture. Greenhouse horticulture is the production of horticultural crops within, under or sheltered by structures to provide modified growing conditions and/or protection from pests, diseases and adverse weather. Controlled environment horticulture (CEH) is the most modern form of greenhouse horticulture and combines high technology greenhouses with hydroponic growing systems.

In some land use zones in some local government areas, intensive plant agriculture may require development approval. Proponents should check the Local Environment Plan for their locality. If development approval is required, the scale and complexity of the proposed facilities, as well as the characteristics of the location, will determine the detail and depth of the assessment to be

undertaken. See Appendix 2 for a list of potential planning considerations in greenhouse horticulture and CEH operations to address pests, weeds and diseases.

1.3.3 Aquaculture developments

Aquaculture is the propagating, hatching, breeding, rearing, farming keeping and harvesting of fish or marine vegetation with a view to sale or a commercial purpose. It involves a range of developments on both land and water. The *State Environmental Planning Policy (Primary Production and Rural Development) 2019* provides the legislative framework for defining areas where aquaculture is a permissible land use. It also establishes a regime for categorising aquaculture development based on the level of environmental risk and operational factors and allows a consent authority to refuse to grant consent to **other development** that may have an adverse effect on, or impede or be incompatible with an existing oyster aquaculture development or with future oyster aquaculture development in a priority oyster area.

The NSW Land Based Sustainable Aquaculture Strategy is also a useful document for planning the design and operations of a new aquaculture development, including biosecurity considerations.

1.3.4 State Significant Developments

In NSW, State significant development (SSD) projects are important to the State for economic, environmental or social reasons. An SSD project is determined if it is over a certain size, is located in a sensitive environmental area and if it exceeds a specific capital investment value. SSD projects require development consent from the Independent Planning Commission or the Minister for Planning and Public Spaces. The Department of Planning, Industry and Environment's assessment and recommendations are set out in the Environmental Assessment Report which is developed in consultation with relevant agencies, such as the NSW Environment Protection Authority and NSW Department of Primary Industries to ensure environmental and biosecurity risks have been considered.

The full list of SSD projects can be found in the State Environmental Planning Policy (State and Regional Development) 2011. As an example, those with potential biosecurity impacts could include:

- intensive livestock agriculture
- aquaculture
- agricultural produce industries and food and beverage processing
- mining
- extractive industries
- chemical and other manufacturing facilities
- energy generating facilities
- infrastructure developments
- waste storage or water treatment facilities
- waste and resource management facilities

1.3.5 Developments near existing agricultural businesses, transport corridors, pipelines or other industries

Proposed new developments near existing agricultural businesses, transport corridors, pipelines or other industries could present a range of biosecurity risks and impacts if not identified or managed. Pests, diseases and weeds can spread through the movement of people, machinery and vehicles.

2.0 Managing biosecurity risk in land use planning and development

The NSW Planning Guidelines (the Planning Guidelines) outline the following planning and assessment phases:

- Initial considerations and site selection
- Project scoping and risks
- Development application process
- Project implementation

This section provides a step-by-step approach to understanding and managing biosecurity risks during each phase of the land use planning and development process.

2.1 Initial Considerations and Site Selection – Biosecurity Impacts

Potential biosecurity risks may be relevant when the consent authority determines the environmental impacts and the social and economic impacts of the proposed development.

As outlined in the Planning Guidelines, site selection is the key planning consideration for intensive livestock developments and a critical factor in the development assessment process. Site selection is also a relevant planning consideration for developments other than intensive livestock developments. Applicants should carefully consider the potential biosecurity risk of a change in use of land they already own or manage, or of their proposed future development on land they may be seeking to purchase.

It is important to consider the proximity of potential biosecurity risk sources, such as nearby dwellings, transport routes, stock animals, intensive livestock operations, waterbodies and native and pest animals present in the local environment.

It is the responsibility of individuals to ensure they discharge their general biosecurity duty to manage the biosecurity risks of their development proposal.

2.2 Project Scoping and Risks

Biosecurity should be a key consideration during the project scoping and risk assessment phase for a potential development. Input from biosecurity experts early during this phase will help ensure that biosecurity risks are identified promptly, including whether specific management responses or modifications are needed or if consideration should be given to reassessing site selection. Guidance is available from NSW DPI about recommended management practices to mitigate biosecurity risks and peak industry organisations such as Animal Health Australia and Plant Health Australia who have a wide range of useful guidance documents available online.

During this phase, it is recommended that a proponent undertake a more detailed assessment of biosecurity impacts and risks, as well as assess any particular legal requirements under the Biosecurity Act which may apply to the proposed development. Any potential biosecurity impact may be a relevant consideration in determining a development application, and separately to the planning approval process, there are a number of legislative requirements to be considered under the Biosecurity Act.

If the land use planning or development activity does not breach any specific legal requirements, it is important to consider whether there are any additional actions you should take to meet your general biosecurity duty; and to prevent, eliminate or minimise the biosecurity risk.

The following matters should be considered when deciding if the proposed development will likely cause a biosecurity impact;

- Will the proposed development directly deal with biosecurity matter? For example: a plant, animal, stock food, fertiliser or contaminant.
- Will the proposed development deal with something that may be a carrier of biosecurity matter? For example: equipment, clothing, soil, vehicles, animal-sourced products, waste containing plant and animal-sourced products.
- Does the proposed development have the potential to introduce, harbour, spread or increase the risk of biosecurity matter that may have an impact on the economy, environment or community? For example: create a habitat for a pest animal.

If the answer is yes to at least one of these questions it may suggest the proposed development will pose a biosecurity risk and could increase the likelihood of a biosecurity impact.

In addition, the Biosecurity Act may impose specific requirements, which may not be relevant to the planning process, but may affect whether a proponent can carry out their proposed development. A summary of the types of legal requirements under the Biosecurity Act is set out in Appendix 3.

2.3 Development Application Process

The Local Environment Plan for a locality will state whether a particular agricultural land use requires development consent. Typically, intensive livestock agriculture and aquaculture require development consent from local or state government planning authorities. However, some land uses are permissible without consent, such as grazing, cropping, bee keeping and other forms of extensive agriculture in some rural areas.

Agricultural land uses, whether or not they require development consent, are still subject to provisions under the *Biosecurity Act 2015* and Biosecurity Regulation 2017. Proponents of these land uses should assess whether their activities and operations comply with their general biosecurity duty or other requirements of the Act.

If an Environmental Impact Statement or Statement of Environmental Effects is required, potential biosecurity impacts may be relevant in assessing the likely impact of the activity on the environment. This includes the environmental impact on the community and on the ecosystems, the long-term environmental effects of the proposed development on the environment, the potential endangering of any species of plant or animal and the risk to the safety of the environment from the proposed development.

For other developments, if biosecurity risks and impacts are identified during the planning phases, it may be necessary to address these in the development application documentation as factors that are relevant for assessing the environmental, social and economic impacts of the development, as well as outline any management plan or strategy that may be incorporated into the development approval as conditions on the approval. Information can be obtained from NSW DPI, LLS or from peak industry organisations to provide guidance about recommended management practices to mitigate biosecurity risks.

2.3.1 Planning Considerations

There are a number of conditions of the development approval which a planning authority may impose to limit the likely environmental, economic and social impacts from a development which could also assist in mitigating potential biosecurity risk. Suggested approval conditions that may be imposed for different developments are included in Appendix 2. Some of the key approval conditions include, but are not limited to:

- Buffer zones
- Wash down facilities
- Designated parking areas
- Location to major potable water supply storages and watercourses – poultry production
- Dumping and burying rubbish on site

Buffer zones

A buffer zone is an area of land set aside to minimise the impacts of land uses on each other. Regardless of its nature or primary purpose, all buffers are likely to contribute to biosecurity risk management. Some of the key types of buffers are separation buffers, biological and vegetated buffers, landscape and ecological buffers, and property management buffers.

Separation buffers

The most common form of buffers involves establishing a physical separation between land uses where conflict could arise. In terms of biosecurity risk mitigation management, the biosecurity risk of disease transmission between farms can be reduced through appropriate farm siting and management.

Maximising the separation between farms remains the primary tool for reducing the potential for cumulative biosecurity risks. Farms that are closely co-located may also create additional costs for government in controlling disease outbreaks and imposing quarantine controls.

Although there is not a set distance that will uniformly eliminate all risks of disease transfer, generally the greater the distance the lower the risk. When assessing distance, other factors such as topography, prevailing winds and transport routes should also be considered. For example, setback distances from major roads should also be considered during a biosecurity risk assessment.

The NSW DPI Primefact: Buffer Zones to Reduce Land Use Conflict with Agriculture, outlines indicative separation distances between agriculture and other sensitive receptors to minimise land use conflict. Whist this Primefact does not address biosecurity and environment risk, the evaluation process it describes may also address biosecurity and environmental impact. Each development should be evaluated on a case by case basis and take into account site specific considerations such as topography, vegetation, the nature of the adjacent agricultural operation(s), as well as the type of proposed development.

Biological and vegetated buffers

Buffers created by vegetation planting and physical landscaping work. These buffers can reduce airborne-created conflict such as chemical spray drift.

Landscape and ecological buffers

Refers to the use of existing vegetation to reduce the impacts from developments. These buffers are mostly used to protect a sensitive environment by maintaining or enhancing habitat and life corridors. Undisturbed habitat has increased resilience to infestation by new pests and diseases.

Property management buffers

Use of alternative or specialised management practices or actions at the interface between uses where potential for conflict is high. An example includes adopting specialised chemical application regime for crops close to waterways or property boundaries with the aim of minimising off-site impacts on neighbours and the environment.

Other buffers

Other buffers to consider are bushfire protection buffers, mosquito buffers, airport buffers, power line buffers, rifle range buffers, railway line buffers and cultural heritage buffers.

Wash-down Facilities

Wash-down facilities allow site employees, contractors and visitors to clean their vehicle and equipment in an easily managed area where wash water is contained. Wash-down facilities should be located between the driveway and farm roads, and away from production areas. A sealed (concrete or bitumen) surface or a pad of packed gravel is ideal, with a sump to collect wastewater and debris. There should also be access to power and high-pressure water. Together, these will ensure that biosecurity matter is not moved from one property to another and will help to keep mud, soil, and plant materials away from crops, storage areas and waterways. However, it is still important for the sump and area surrounding the wash-down facility to be treated or checked regularly for the presence of pests or weeds. Any new pests should be managed as soon as possible.

Designated Parking Areas

A well sign-posted and designated parking area should be provided for all visitors. Parking areas serve to contain the entry of new pests away from production sites and provide an opportunity to inspect vehicles and equipment for soil and plant material. Farm machinery should not be allowed through the visitors' parking area.

Location to major potable water supply storages and watercourses

The location of a facility in relation to major potable water supply storages and watercourses is relevant particularly to new intensive poultry facilities. Whatever the source, water provided to poultry farms must be free from microbial contamination that could cause disease in poultry from the transmission of wild birds or lead to food safety issues. For this reason, water, other than town water, must be treated appropriately to comply with the National Water Biosecurity Manual – Poultry Production. New poultry farms should be preferably located away from waterways and wetlands (ideally 3000 metres) that are extensively used by waterfowl.

Dumping and Burying Rubbish on Site

Before disposing of rubbish and waste on site, there needs to be consideration of its contents and the effects it may have on neighbours, waterways and groundwater. It is also important that chemical containers are disposed of in the manner prescribed in the label so as not to cause any animal or plant to become chemically affected. The transport and disposal of waste is regulated by the NSW Environment Protection Authority.

3.0 Managing biosecurity risks during construction and operations

Irrespective of whether or not a development requires approval, biosecurity risks, impacts and management strategies must always be considered. During both construction and operation of the project, the recommended way to demonstrate that biosecurity risks are prevented, eliminated or minimised is through the development and implementation of a biosecurity management plan.

3.1 Biosecurity Management Plans

Biosecurity management plans outline the reasonable measures put in place to protect biosecurity and mitigate the risks of pests and diseases on a property. Biosecurity management plans are recommended for every agricultural enterprise. Examples of reasonable measures include requiring the person to enter the place at certain points only, to write their details in a visitor's log, to wear personal protective equipment when dealing with biosecurity matter or a carrier at the premises, or to clean vehicles after dealing with biosecurity matter or a carrier.

When developing a biosecurity management plan, the proponent should consider activities that could lead to;

- the introduction, presence, spread or increase of a pest or disease of plants
- the introduction, presence, spread or increase of a pest animal
- the introduction, presence, spread or increase of a weed
- the introduction, presence, spread or increase of a pest or disease of animals
- animals or animal products becoming chemically affected.

Through this process, risks can be identified, prioritised and strategies developed to prevent, eliminate or minimise these risks.

Templates for a biosecurity management plans are available from the Farm Biosecurity website, a joint initiative of Animal Health Australia and Plant Health Australia managed on behalf of members.

Recent amendments to the Biosecurity Regulation 2017 regarding biosecurity management plans also provide landholders and potential developers with additional protections to prevent unauthorised access and biosecurity risk to their facility. From 1 August 2019, any person entering a place where a biosecurity management plan applies must comply with the measures outlined in the plan. Failure to comply with these arrangements when dealing with biosecurity matter may be an offence under the Biosecurity Act, and lead to significant penalties or court ordered fines.

Appendix 1. Legislative Requirements and Guidance Materials

State legislation:

- NSW Biosecurity Act 2015
- NSW Biosecurity Regulation 2017
- NSW Biosecurity Act 2015 Instruments
- State Environmental Planning Policy (Primary Production and Rural Development) 2019

State guidance:

- NSW Biosecurity Strategy 2013-2021
- NSW Invasive Species Plan
- NSW DPI – Biosecurity and Food Safety
- NSW DPI - Living and working in rural areas
- NSW Land Based Sustainable Aquaculture Strategy
- Regional Strategic Pest Animal Management Plans
- Regional Strategic Weed Management Plans
- NSW Wild Dog Management Strategy
- NSW Wild Deer Management Strategy
- Invertebrate Pest Incursion Strategy
- Guidelines for Investigating and Responding to Suspected Marine Pest Incursion in NSW.
- NSW Weeds Action Program
- NSW New Weed Incursion Plan
- NSW DPI Factsheet 6 – Have buffer areas around the greenhouse
- NSW DPI Primefact: Buffer Zones to Reduce Land Use Conflict with Agriculture
- Industry Primefact: Agricultural issues for landfill development
- Guidelines for the development of controlled environment horticulture
- Keep it CLEAN: Reducing costs and losses in the management of pests and diseases in the greenhouse

National legislation:

- Biosecurity Act 2015 (Cwlth)
- Biosecurity Regulation 2016 (Cwlth)

National guidance*:*

- Biosecurity – Department of Agriculture

Industry guidance:

- Animal Health Australia
- Aquaculture Farm Biosecurity Plan

- Asparagus Weeds - Best Practice Management Manual
- Australian Prawn Farming Manual
- Best Practice Management for Meat Chicken Production in NSW
- Biosecurity Manual for Beekeepers
- Biosecurity Manual for Citrus Producers
- Biosecurity Manual for the Nursery Production Industry
- Biosecurity Manual for the Papaya Industry
- Biosecurity Manual for Sugarcane Producers
- Biosecurity Manual for Viticulture Industry
- Biosecurity of Mass Poultry Mortality Composting
- Cherry Growers' Biosecurity Manual
- Dairy Biosecurity Healthy Farms
- Farm Biosecurity – Biosecurity Manuals
- Farm Biosecurity Manual for the Banana Industry
- Farm Biosecurity Manual for the Cotton Industry
- Farm Biosecurity Manual for the Duck Meat Industry
- Farm Biosecurity Manual for the Organic Grains Industry
- Introductory weed management manual
- National Best Management Practice for Beekeeping in the Australian Environment
- National Biosecurity Manual for Beef Cattle Feedlots
- National biosecurity plan guidelines for Australian Barramundi Farms
- National biosecurity plan guidelines for Australian oyster hatcheries
- National biosecurity plan guidelines for the Australian land-based abalone industry
- National Farm Biosecurity Manual for Chicken Growers
- National Farm Biosecurity Manual for Pork Production
- National Farm Biosecurity Manual – Poultry Production
- National Water Biosecurity Manual – Poultry Production
- Onion Growers' Biosecurity Manual
- Orchard Biosecurity Manual for the Almond Industry
- Orchard Biosecurity Manual for the Apple and Pear Industry
- Orchard Biosecurity Manual for the Avocado Industry
- Orchard Biosecurity Manual for the Mango Industry
- Orchard Biosecurity Manual for the Summerfruit Industry
- Plant Health Australia
- Potato Growers' Biosecurity Manual
- Weeds in Australia

Appendix 2. Planning considerations

In addition to Appendix 1 and 3, there are additional industry considerations that should be taken into account.

Table 1 Potential planning considerations to manage biosecurity risks and impacts of land use planning developments.

DEVELOPMENT TYPE	POTENTIAL PLANNING CONSIDERATIONS	SUGGESTED MINIMAL BUFFER ZONES AROUND INFRASTRUCTURE*	SOURCE
Dairies	• Designated parking areas for vehicles not required to enter the production area. • Limiting access to water courses. • Selection and management of disposal areas (effluent, waste and dead animals) to prevent the spread of contaminants by water, and animals (e.g. wildlife, pest, animals, other livestock on the property).	• 500 metres	Dairy Biosecurity Healthy Farms
Feedlots	• Designated parking areas for vehicles not entering the production area. • Recommend drinking water for cattle meets criteria listed in the National Guidelines for Beef Cattle Feedlots in Australia. • Selection and management of disposal areas (effluent, waste and dead animals) to prevent the spread of contaminants by water and animals (e.g. wildlife, pest animals, other livestock on the property)	• 1000 metres (cattle) • 500 metres (sheep or goat)	National Biosecurity Manual for Beef Cattle Feedlots

DEVELOPMENT TYPE	POTENTIAL PLANNING CONSIDERATIONS	SUGGESTED MINIMAL BUFFER ZONES AROUND INFRASTRUCTURE*	SOURCE
Pig farms	• Ensure adequate separation distances to minimise impacts on neighbours and meet biosecurity requirements. • Designated parking areas for vehicles not entering the production area. • Selection and management of disposal areas (effluent, waste and dead animals) to prevent avoid the potential spread of contaminants by water, and animals (e.g. wildlife, pest animals, other livestock on the property)	• 1000 metres (indoor) • 500 metres (outdoor)	National Farm Biosecurity Manual for Pork Production

DEVELOPMENT TYPE	POTENTIAL PLANNING CONSIDERATIONS	SUGGESTED MINIMAL BUFFER ZONES AROUND INFRASTRUCTURE*	SOURCE
Poultry farms	• Locate new poultry farms as far as possible from existing poultry farms, to minimise the risk of disease transfer. • Locate new farms ideally 3000 metres away from waterways and wetlands that are extensively used by waterfowl. • Water, other than town water, should be treated appropriately to comply with the National Water Biosecurity Manual – Poultry Production. • Designated parking areas for vehicles not entering the production area. • Selection of disposal areas (effluent, waste and dead animals) to prevent the spread of contaminants by water, and animals (e.g. wildlife, pest animals, other livestock on the property) • Production areas should have a stock proof fence if livestock also graze the property.	• 1000 metres to other intensive poultry farms • 3000 metres to commercial duck farms • 5000 metres to poultry breeder farms	• Best Practice Management for Meat Chicken Production in NSW. • National Farm Biosecurity Manual – Poultry Production. • National Water Biosecurity Manual – Poultry Production. • National Farm Biosecurity Manual for Chicken Growers.

DEVELOPMENT TYPE	POTENTIAL PLANNING CONSIDERATIONS	SUGGESTED MINIMAL BUFFER ZONES AROUND INFRASTRUCTURE*	SOURCE
• **Apiaries**	• An artificial water source should be placed within 200 metres of an apiary if a suitable, naturally occurring water source such as a dam, stream, or river is not within 500 metres. An artificial water source supplied by beekeepers must be suitably covered with mesh to prevent access by wildlife and their accidental drowning.		• Biosecurity Manual for Beekeepers. • National Best Management Practice for Beekeeping in the Australian Environment.

DEVELOPMENT TYPE	POTENTIAL PLANNING CONSIDERATIONS	SUGGESTED MINIMAL BUFFER ZONES AROUND INFRASTRUCTURE*	SOURCE
Controlled environment horticulture	• Establish native vegetation areas to increase habitat for and strengthen the resilience of beneficial animals and insects • Use windbreaks to reduce the opportunity for pests to be carried onto the property • Install insect screening on greenhouses where feasible • Design and manage dams and other wet areas to minimise pests such as mosquitoes. • Identify the priority invasive pest, animals and weed species that may require cooperative cross-tenure management. • Have buffer areas (of at least 5-10 metres wide) around the greenhouse that is kept clean and clear of things which could shelter pests and diseases. This area should be sealed, covered in gravel, or mulched. • Wash-down facilities	• 250 metres	• Guidelines for the development of controlled environment horticulture. • Keep it clean: Reducing costs and losses in the management of pests and diseases in the greenhouse. • NSW DPI Fact Sheet: Preventing pests and diseases in the greenhouse – Have buffer areas around the greenhouse.

DEVELOPMENT TYPE	POTENTIAL PLANNING CONSIDERATIONS	SUGGESTED MINIMAL BUFFER ZONES AROUND INFRASTRUCTURE*	SOURCE
Viticulture	• Wash-down facilities • Designated parking areas for vehicles not entering the production area. • Identify the priority invasive pest, animals and weed species that may require cooperative cross-tenure management. • Disposal of waste plant material away from nurseries, vineyard areas, water sources and packing sheds. • Awareness of the Grapevine phylloxera biosecurity zone in NSW, such as the mandatory requirements relating to the movement and treatment carriers of phylloxera.		• Biosecurity Manual for the Viticulture Industry.

DEVELOPMENT TYPE	POTENTIAL PLANNING CONSIDERATIONS	SUGGESTED MINIMAL BUFFER ZONES AROUND INFRASTRUCTURE*	SOURCE
Orchards	• Wash-down facilities. • Designated parking areas for vehicles not entering the production area. • Identify the priority invasive pest, animals and weed species that may require cooperative cross-tenure management. • Establishment of three zones around the farm – access, separation, and farming – and limit access according to the risk status of the area. This includes vehicle and equipment movement.	250 metres	• Orchard Biosecurity Manual for the Almond Industry. • Orchard Biosecurity Manual for the Apple and Pear Industry. • Orchard Biosecurity Manual for the Avocado Industry. • Orchard Biosecurity Manual for the Mango Industry. • Orchard Biosecurity Manual for the Summerfruit Industry. • Biosecurity Manual for Citrus Producers. • Cherry Growers' Biosecurity Manual.
Other horticulture (including outdoor cropping, sugar cane, turf farms)	• Wash-down facilities. • Designated parking areas for vehicles not entering the production area. • Design and manage dams and other wet areas to minimise pests such as mosquitoes.	• 300 metres	• Farm Biosecurity Manual for the Banana Industry. • Farm Biosecurity Manual for the Cotton Industry. • Farm Biosecurity Manual for the Organic Grains Industry. • Onion Growers' Biosecurity Manual. • Potato Grower's Biosecurity Manual. • Biosecurity Manual for Sugarcane Producers.

DEVELOPMENT TYPE	POTENTIAL PLANNING CONSIDERATIONS	SUGGESTED MINIMAL BUFFER ZONES AROUND INFRASTRUCTURE*	SOURCE
Nursery production industry	• Production nursery area run-off should not enter irrigation sources without prior catchment and treatment. This could include ensuring that the production nursery is not too close to water sources. • Disposal of waste away from production facilities/areas and water sources. • Wash-down facilities. • Designated parking areas for vehicles not entering the production area. • Work through regional committees to identify the priority invasive pest, animals and weed species that may require cooperative cross-tenure management.		• Biosecurity Manual for the Nursery Production Industry.

DEVELOPMENT TYPE	POTENTIAL PLANNING CONSIDERATIONS	SUGGESTED MINIMAL BUFFER ZONES AROUND INFRASTRUCTURE*	SOURCE
Aquaculture	• Aquaculture must be a permissible land use and compatible with nearby land uses. • Site specific investigations should be undertaken to indicate that the site is suitable for an aquaculture operation. This includes supply of water and enough land to manage wastewater or means of disposal via municipal infrastructure. • Consideration of the site's operation to native aquatic species within the catchment – manage risks of escape of stock and spread of disease. • Setback/buffer distance (greater than 50 metres) from waterbodies. Vegetated buffer zones of not less than 20 metres should be maintained between any irrigated areas and adjoining watercourses. • Import of soil for construction of ponds – ensure that it is pest free. • Predatory or scavenging animal populations should be controlled or excluded from production facilities.	•	• NSW La nd Based Sustainable Aquaculture Strategy. • Aquaculture Farm Biosecurity Plan: generic guidelines and templates.

DEVELOPMENT TYPE	POTENTIAL PLANNING CONSIDERATIONS	SUGGESTED MINIMAL BUFFER ZONES AROUND INFRASTRUCTURE*	SOURCE
Waste disposal or resource management facilities	• Landfills should be designed and sustainably managed to minimise environmental impacts, including biosecurity risks. • Considerations for the safe disposal of dead animals / birds from local agricultural operations or veterinary surgeries. • Appropriate fencing around the property to prevent pest animal incursions. • Location to agricultural operations in the surrounding locality (grazing or cropping enterprises, intensive agriculture or horticulture) including groundwater usage and relevant agricultural improvements such as houses, sheds, cropping areas, irrigation systems, improved pastures. • Transportation of waste and recycling materials.		• NSW DPI Primefact: Agricultural issues for landfill developments.

** Buffer zones are one potential condition of a development approval which a planning authority may impose to limit the likely environmental, economic and social impacts from a development which could also assist in mitigating potential biosecurity risk*.

Appendix 3. Legal Requirements under the *Biosecurity Act 2015*

If dealing with biosecurity matter, the proponent should check compliance with the following (see below for more detail):

- *Biosecurity Act 2015*
  - Prohibited matter
  - Mandatory measures
  - Biosecurity zones
  - Emergency Orders
  - Control Orders
- Biosecurity Regulation 2017
- Biosecurity (National Livestock Identification System) Regulation 2017
- Biosecurity Order (Permitted Activities) 2019

Prohibited matter and related biosecurity duties

Prohibited matter is biosecurity matter that is listed in Schedule 2 of the Biosecurity Act. This is biosecurity matter that could have significant adverse consequences to the economy, environment or community. Prohibited matter includes foot and mouth disease, avian influenza, Hendra virus (other than in pteropid bats), citrus canker, and parthenium weed. Notification requirements apply to any person who is aware of the presence or suspected presence of prohibited matter. It is an offence to deal with prohibited matter.

Mandatory measures

Regulations made under the Biosecurity Act may specify actions that must be taken to prevent, eliminate or minimise biosecurity risks posed or likely to be posed in relation to biosecurity matter, carriers or dealings. These are known as mandatory measures.

Mandatory measures are in relation to an identified biosecurity risk (such as cattle tick, Newcastle disease, Mediterranean fruit fly), and may apply generally or in specified circumstances such as only to certain classes of people or in relation to certain activities. If mandatory measures apply to a particular dealing or activity then the relevant person must comply with those measures, regardless of whether they know or reasonably should know about the risks posed or likely to be posed.

In most cases, if a person complies with the relevant mandatory measures, they will have discharged their general biosecurity duty. In some cases, the mandatory measures may state the minimum actions that are required for the duty to be discharged and additional measures may be required to discharge your general biosecurity duty.

For example, a mandatory measure may require farm machinery to be free of weed seeds before being moved from a property. This approach gives individuals flexibility in how they achieve the outcome, while ensuring that the biosecurity risk is addressed. Alternatively, the mandatory measure could require that specified parts of the machinery be washed with a high-pressure hose, at a particular type of location or in a specified manner.

Biosecurity zones

A biosecurity zone is established by regulation and its purpose is to prevent, eliminate, minimise or otherwise manage a biosecurity risk or biosecurity impact. A biosecurity zone will apply to a specified area that can be the whole State, a defined part of the State, a group of neighbouring properties or an individual property. A biosecurity zone will be used to provide for the long-term

management of a particular biosecurity risk or biosecurity impact. For example, Cane Toad Biosecurity Zone, Potato Biosecurity Zone, and, POMS Biosecurity Zone.

More information on biosecurity zones can be found on the NSW DPI Biosecurity Zones Factsheet.

To find out what Biosecurity Zones are currently in place, visit the Biosecurity Regulation 2017 on the NSW Legislation Website.

Emergency orders

An emergency order can be made when a biosecurity risk occurs or is about to occur that is, or may have a significant biosecurity impact on the economy, environment or community and emergency measures are required. The order will apply to specific premise/s, area or the whole of NSW and specify what must be done to isolate, prevent the spread and if practicable, eradicate the of the biosecurity risk.

Emergency orders can be used when a biosecurity risk is having or could have a significant biosecurity impact. This would include an incursion of a pest or disease listed as prohibited matter under the Biosecurity Act, for example, foot and mouth disease, red imported fire ant or citrus canker. Emergency orders are also available for responding to any biosecurity risk if there is or there is potential for a significant biosecurity impact, including when the risk is unknown, such as incursion of an exotic unidentified pest or disease organism.

An emergency order can be in force for a period specified in the order but not exceeding six months. However, this period may be extended by the Secretary (or delegate) for a further period of six months, if required.

More information on emergency orders can be found on the NSW DPI Emergency Orders Factsheet.

To find out what Emergency Orders are currently in place, visit the NSW DPI website**.**

Control orders

A control order is an order made by the Minister (or delegate) that establishes one or more zones to prevent, eliminate, minimise or otherwise manage a biosecurity risk or biosecurity impact. Generally, a control order will apply to specific premise/s, area or the whole of NSW and are made to prevent the introduction of, or to eradicate, particular biosecurity matter. A control order can be made quickly so that a timely response can be mounted to a biosecurity risk or impact that does not require an emergency response, or while longer term management arrangements are being developed.

For example, a control order could require containment, treatment or disposal of soil, stock, plants or products from a contaminated area, to prevent the contaminant entering the human food chain. It could prohibit grazing or, plant and livestock production on the contaminated area, and require decontamination actions such as removal or deep burial.

A control order can remain in place for up to five years. If longer term management is required, a biosecurity zone could be established.

More information on control orders can be found on the NSW DPI Control Orders Factsheet.

To find out what Control Orders are currently in place, visit the NSW DPI website**.**

Additional actions that could be taken to minimise a biosecurity risk and meet the biosecurity duty

The biosecurity duty requires you to take all steps reasonably practicable to prevent, eliminate or minimise biosecurity risks that you know or ought reasonably to know about. These risks are

not specifically identified under the Biosecurity Act, but may be regional or local biosecurity risks, or a risk previously identified.

Evidence of compliance with one's general biosecurity duty can be provided by referring to;

- state strategic plans, regional strategies and local plans, and
- guidelines and advisory material, and
- codes of practice and industry standards.

A number of resources exist to assist with biosecurity risk mitigation in relation to introduction, presence, spread or increase of pests or diseases of plants and animals. Resources such as industry biosecurity standards and guidelines and codes of practice, and factsheets and "prime facts" produced by state and federal government agencies provide guidance for the minimum requirements expected to meet the biosecurity duty. A list of information and guidance materials can be found in Appendix 1. With any proposal, the proponent should consider and make efforts to familiarise themselves with the risks involved and the suggested recognised methods of risk reduction. Appendix 2 outlines some potential planning considerations that could be undertaken to minimise biosecurity risks and impacts of a proposed development.

Local Land Services is one of the key government agencies in relation to biosecurity. This organisation works with landholders, industry and the community to uphold biosecurity at a local level throughout NSW. Local Land Services have developed useful resources to assist landholders manage biosecurity risks and develop mitigation strategies. These include regional strategic weed and pest animal management plans. For more information on the regional strategic weed and pest animal management plans, contact the closest Local Land Services office.