

Acknowledgements

Sunshine Coast Council acknowledges the Kabi Kabi people and the Jinibara people as the Traditional Owners of the Sunshine Coast Council Local Government Area. Council recognises the Traditional Owners' continuing cultural, spiritual, social and economic connection to Country.

The Sunshine Coast Council Local Government Area Biosecurity Plan 2017 has been prepared in collaboration with individuals working in relevant industries, community groups, state government departments, natural resource management groups and other stakeholders with a strong interest in invasive species management, including the Traditional Owners who have a strong connection to Country (land and water).

While Council has facilitated the development of this plan as a requirement under the Queensland Government's *Biosecurity Act 2014*, the plan is for the entire Sunshine Coast community to guide their legislative responsibilities for invasive plant and animal management.

As part of the approach to deliver on the Sunshine Coast Council's vision to be Australia's most sustainable region – healthy, smart, creative, there is a commitment to provide a 'healthy environment' that maintains and enhances the region's natural assets, liveability and environmental credentials.

The long-term strategic directions set by *Council's Sunshine Coast Environment and Liveability Strategy 2017* focus on the preservation and enhancement of the natural environment and liveability of the region, enabling a good quality of life for all residents in an accessible and well-connected built environment.

Responding to the impacts of invasive plants and animals across our local government area is a critical component of this approach to ensure available resources target the highest priority invasive species in an effective and efficient manner.

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Front cover image, Mary River: D Dicker

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Contents

Biosecurity planning							
1. Introduction	4						
2. What is a biosecurity plan?	5						
3. What is invasive biosecurity matter?							
4. What threats do invasive plants and animals pose?							
5. What are the legislative and planning frameworks for invasive plant and animal management?	10						
Strategic directions	11						
6. What is our vision for invasive plant and animal management?	11						
7. What are our priorities for the local government area?	12						
8. What are our management responses?	15						
Implementing the plan	17						
9. What are we currently doing?	17						
10. What are the catchment management responses for the priority invasive plants and animals?	18						
11. What are the other management considerations?	21						
12. What are our strategic actions?	22						
Appendix 1 – Roles and responsibilities	26						
Appendix 2 – All other 'Restricted' invasive plants and animals and restriction categories	29						
Appendix 3 – All other 'Locally Significant' invasive plants and animals	31						
Appendix 4 – Catchment management response	34						
Appendix 5 – Regional Alert Species 46							
Appendix 6 – All other 'Restricted' invasive plants and animals occurring in Queensland	47						
Glossary	49						

Biosecurity planning

1. Introduction

Invasive plants and animals impact the region's natural environments, agriculture and production areas, and community and residential areas.

They degrade the region's natural bushland and aquatic environments, reduce scenic amenity values, may cause harm and health issues, reduce the function and values of community open space areas, and impact on productivity, damage infrastructure and increase land management costs.

Managing invasive plants and animals is often challenged not only by the distribution and abundance of invasive species but also limited resources, control measures and data. To ensure the most effective and efficient invasive species management is delivered, it is essential that the highest priority invasive species with the most feasible management approach are targeted.

The Sunshine Coast Council Local Government Area Biosecurity Plan 2017 (the plan), prepared in accordance with the Queensland Government's Biosecurity Act 2014 provides a framework for the management of priority invasive plants and animals in the Sunshine Coast Council local government area.

This plan seeks to assist the community to understand and embrace its legislative responsibilities to manage invasive species and to contribute through cooperative and coordinated actions. The plan has been developed in collaboration with various sectors including government organisations, not-for-profit community groups, Traditional Owners and industry representatives who play a significant role in invasive species management.

The principles and strategies for managing pest species provided in the Queensland Government's *Weed and Pest Animal Strategy 2016–2020* are considered core elements of biosecurity planning at local, regional and state levels. As such, these principles and strategies have been considered in the development of the plan to ensure the delivery of best practice at a local level and alignment with the desired outcomes being sought by the state. Furthermore, implementation of the plan will contribute to the collective efforts being made to improve the health of our land, water and biodiversity across south east Queensland as identified in regional planning (*SEQ Regional Plan, Healthy Land and Water Strategic Plan 2017–2022*).

Sunshine Coast Council will coordinate the ongoing collaborative approach required to implement and report on this plan. Refinements to the strategic risk-based and catchment management approach to the plan will be made as our collective understanding of invasive plants and animals improves through implementation with key stakeholders.



2. What is a biosecurity plan?

A biosecurity plan guides the management of invasive biosecurity matter and is a legislative requirement for local governments to prepare under the Queensland Government's *Biosecurity Act 2014* (the Act).

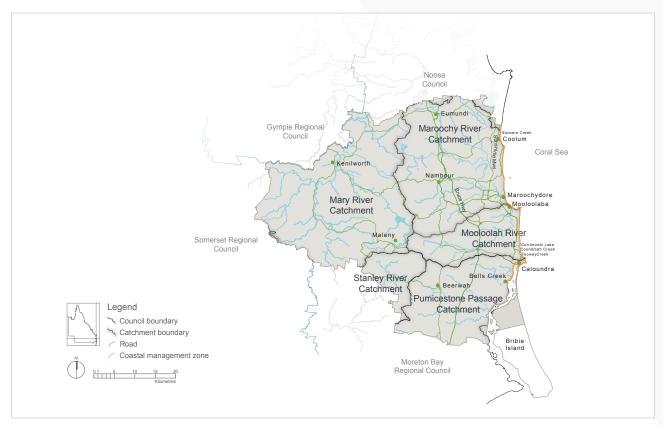
The Sunshine Coast Council Local Government Area Biosecurity Plan 2017 applies to all land and waterways within the boundary of the Sunshine Coast local government area, including land owned and controlled by the Queensland Government, utilities and individuals.

The plan establishes a framework for cooperative and coordinated management that targets priority invasive biosecurity matter and defines management responses most likely to succeed with available resources through a catchment scale management approach.

A catchment scale management approach:

- recognises the different communities, land uses and pressures in each catchment
- allows management responses to be more relevant and targeted
- integrates and complements other catchment management and planning activities
- fosters community ownership and implementation of the plan.

In addition to the five major Sunshine Coast catchments, the coastal environment which focuses on the beaches, dunes and adjacent lands (including other reserves and private properties directly adjoining the coastal dunal system) from the northern tip of the local government area through to Bells Creek in the south, has been recognised as an additional management unit as part of this approach.



Map 1. Sunshine Coast local government area, its five major catchments, coastal management zone and surrounds.

Who is responsible?

Under the Act everyone has a 'General Biosecurity Obligation' to manage biosecurity risks under their control and to take all reasonable and practical measures to minimise the likelihood of causing a biosecurity risk and minimise the adverse effects of dealing with a biosecurity matter or carrier.

Although local governments are responsible for ensuring that invasive biosecurity matter in their jurisdiction is managed in accordance with a developed biosecurity plan, the whole community has a responsibility to take action (Figure 1). Appendix 1 summarises the general roles and responsibilities of each major stakeholder identified in Figure 1.



Figure 1. The major stakeholders for invasive plant and animal management.

3. What is invasive biosecurity matter?

The Act identifies invasive species as 'biosecurity matter' which is defined as:

- a a living thing, other than a human or part of a human; or
- b a pathogenic agent that can cause disease in
 - i a living thing, other than a human; or
 - ii a human, by the transmission of the pathogenic agent from an animal to the human or
- c a disease; or
- d a contaminant.

The Act identifies invasive biosecurity matter as either 'Prohibited' which are those matter not occurring within Queensland and 'Restricted' which are those matter found in Queensland. There are seven groups of invasive biosecurity matter identified under these categories (Figure 2).

From a legislative perspective, local governments are only required to consider 'Prohibited' or 'Restricted' invasive plants and animals in the development of a biosecurity plan (Figure 2). However, other invasive plants and animals that pose a threat to the Sunshine Coast Council local government area can also be considered. These are referred to as 'Locally Significant' invasive plants and animals and may include either exotic (not native to Australia) or native species which are not naturally occurring and are outside of their native range. Based on available knowledge and understanding of these native species, they have been included as they have demonstrated or have the potential capacity to impact on adjoining natural environments outside of managed landscapes, for example parks and gardens.



Figure 2. Prohibited and Restricted Biosecurity Matter categories.



Figure 3. Number of invasive plants and animals considered in the plan.

In total, 287 invasive plants and animals have been considered in the preparation of this plan (Figure 3).

What is not considered in this plan?

The plan does not consider aquatic, animal or plant diseases, parasites or viruses, noxious fish and tramp ants. The Queensland Government Department of Agriculture and Fisheries – Biosecurity Queensland coordinates the government's efforts to prevent, respond to, and recover from these invasive biosecurity matter that threaten the economy and environment. The role of local government is to assist with a response where and when required.

Domestic or public health pests such as vermin, mosquitoes, biting midges, cockroaches and pathogens of humans and domestic animals are likewise not considered in this plan.

4. What threats do invasive plants and animals pose?

The Sunshine Coast is highly regarded for its natural assets including bushland and aquatic environments, fertile and productive agricultural areas and growing community and residential areas, which contribute to the liveability of the region.

Invasive plants and animals can have significant impacts on these environments (Table 1). These impacts are likely to be exacerbated by population growth and climate change.

Table 1. Impacts on key environments from invasive plants and animals.

	Terrestrial biodiversity and conservation environments	Aquatic and riparian environments	Agriculture and production areas	Community and residential areas
Landscapes / land uses affected	Vegetated areas across the region managed for conservation, whether publicly or privately owned, and including our coastal habitat areas.	Creeks, rivers, wetlands and fringing riparian vegetation.	Horticulture, agriculture and primary production areas.	Community and residential areas where residents and visitors live, work, play and connect with nature through the open space network.
What are the impacts of invasive plants?	smother and transform ecosystems outcompete the recruitment of native plants reduce the ecological values of natural areas harmful or toxic to native animals	 reduce waterway health alter physiochemical conditions interfere with ecological processes destroy infrastructure 	 cause illness and injury to livestock degrade pastures by outcompeting desirable pasture species contribute to loss of production destroy infrastructure 	 reduce amenity and scenic values of natural areas cause health issues eg allergens reduce function and values of community open space areas harmful or toxic to domestic pets destroy infrastructure
What are the impacts of invasive animals?	 prey and displace native animals for food and shelter degrade natural bushland and coastal areas further spread or introduce invasive plants to new areas 	 prey on native animals outcompete native animals for food and habitat areas carry diseases and parasites that can infect native animals 	 outcompete domestic livestock contribute to loss of production prey, threaten and injure livestock carry diseases and parasites that can impact on livestock 	 cause traffic hazards proliferate and dominate retained vegetation patches dominate highly modified urban environments outcompete and prey on native animals prey on domestic pets

5. What are the legislative and planning frameworks for invasive plant and animal management?

The management of invasive plants and animals is undertaken by all levels of government and guided by a range of legislation, strategies and policies (Table 2) which have been considered in the preparation of the plan. Other legislation may need to be considered during the implementation of the plan.

The principles, strategies and desired outcomes of the Queensland Government's *Weed and Pest Animal Strategy 2016–2020* have been considered in the plan to build stronger alignment and ensure implementation delivers best practice.

Table 2. Relevant national, state and local legislation.

National	State	Local
 Environment Protection and Biodiversity Conservation Act 1999 Australian Biodiversity Conservation Strategy 2010–2030 Australian Weeds Strategy 2017–2027 Australian Pest Animal Strategy 2017–2027 Convention of Biological Diversity Ramsar Convention on Wetlands The World Heritage Convention 	 Queensland Government's Biosecurity Act 2014 Queensland Weed and Pest Animal Strategy 2016–2020 Queensland Wild Dog Management Strategy 2011–16 Feral Deer Management Strategy 2013–2018 Fisheries Act 1994 (noxious and exotic fishes) Nature Conservation Act 1992 (prohibited wildlife) 	 Sunshine Coast Environment and Liveability Strategy 2017 Sunshine Coast Planning Scheme 2014

Strategic directions

6. What is our vision for invasive plant and animal management?

The vision for invasive plant and animal management on the Sunshine Coast (Figure 4) emphasises the importance of shared ownership and long-term commitment.



The whole community is aware of their **General Biosecurity Obligation**



Our knowledge and understanding of invasive plants and animals is improved



Management of invasive plants and animals is **coordinated and collaborative**



Biosecuritypartnerships
are effective and ongoing



Over time there is an **evident reduction** in the occurrence of priority invasive plants and animals



There are

effective
shared systems
capturing invasive species data
and management responses



Landholder extension and incentives support action on biosecurity priorities



Emerging threats
are identified and responded to
early and effectively



Planning and operational activities align with biosecurity priorities



Management of invasive plants and animals is **adaptive, innovative and responsive**

Figure 4. Vision for invasive plant and animal management.

7. What are our priorities for the local government area?

The Act allows for a flexible approach to biosecurity planning with an emphasis on shared responsibility and risk-based decision making. A biosecurity risk is any adverse effect caused by biosecurity matter on a biosecurity consideration (human health, social amenity, the economy or the environment).

Understanding the biosecurity risk of identified invasive plants and animals assists in prioritising these species to maximise the effectiveness of available resources for management.

Identifying priority invasive plants and animals

To prioritise the 287 invasive plants and animals known to occur within the Sunshine Coast Council local government area, a risk assessment was undertaken considering the potential impact and likelihood of further spread for each species (Table 3).

The results from this assessment were incorporated into a risk matrix which assisted in the identification of 79 invasive plants and 9 invasive animals as priority species for our local government area. These priority species are collectively referred to as priority invasive plants and animals (Table 4).

Table 3. Risk assessment considerations.

Potential The demonstrated or potential impact of each invasive species on four key environments / impact ▶ areas of value was considered: 1 Terrestrial biodiversity and conservation environments, including our coastal habitat areas 2 Riparian and aquatic environments 3 Community and residential areas 4 Agricultural and production areas These key environments / areas of value were all equally weighted in this consideration. Likelihood of The likelihood of further spread of each invasive species if left unmanaged was considered. Invasive species which were limited in their known distribution but had a high potential to further spread ▶ spread if left unmanaged were considered to pose a high risk. Conversely, invasive species that were already widespread in the local government area or limited in their ability to spread because of ecological/biological reasons were considered a lower risk.

All other invasive plants and animals

There are 199 other 'Restricted' and 'Locally Significant' invasive plants and animals which have not been determined a priority for management. These invasive plants and animals are either widespread or predominately well established in the region, or may be restricted due to their biology or habitat requirements. They do however continue to impact on our terrestrial and biodiversity areas, riparian and aquatic environments, agriculture and production areas and community and residential areas.

Of the other remaining invasive plants and animals not identified as priority species, 13 are 'Restricted' (Appendix 2, Table 1) and 186 are 'Locally Significant' (Appendix 3, Table 1).

A review of the local government scale risk assessment for these species may be required if their potential impact on identified key environments/areas and likelihood of further spread changes.

Management of all other 'Restricted' invasive plants and animals

A General Biosecurity Obligation still remains to manage species listed as 'Restricted' in accordance with their relevant legislative restriction category. There are seven categories which direct specific action to limit the spread and impact of these species by reducing, controlling or containing them (Appendix 2, Table 2). The management of these species is enforceable under the *Biosecurity Act* 2014.

Management of all other 'Locally Significant' invasive plants and animals

These species are considered undesirable and their continued propagation and planting, and potential impacts should be considered. Management of these species may still be guided by other strategic local government planning, policy and operational plans.

Table 4. Priority invasive plants and animals.

'Restricted' Invasive Plants	'Locally Significant' I
annual ragweed (Ambrosia artemisiifolia)	African lovegrass (Eragr
balloon vine (Cardiospermum grandiflorum)	air potato (Dioscorea bu
basket asparagus (Asparagus aethiopicus)	barleria (Barleria prioniti
bitou bush (Chrysanthemoides monilifera ssp. rotundifolia)	blue lotus (Nymphaea ca
broad leaf pepper tree (Schinus terebinthifolius)	blue morning glory (Ipor
cabomba (Cabomba caroliniana)	buffel grass (Cenchrus o
camphor laurel (Cinnamomum camphora)	castor oil (Ricinus comm
cats claw creeper (Dolichandra unguis-cati)	coastal morning glory (//
Chinese celtis (Celtis sinensis)	Colombian wax weed (C
climbing asparagus (Asparagus africanus & A. plumosus)	coral berry (Ardisia cren
common giant rat's tail grass (Sporobolus pyramidalis &	coral berry (Rivina humi
S.nataensis)	coral berry or shoe butto
creeping lantana (Lantana montevidensis)	cow pea (Macrotyloma a
Dutchman's pipe (Aristolochia spp. other than native species)	crofton weed (Ageratina
fireweed (Senecio madagascariensis)	dyschoriste (Dyschoriste
giant Parramatta grass (Sporobolus fertilis)	fragrant thunbergia (Thu
groundsel bush (Baccharis halimifolia)	giant devils fig (Solanum
honey locust (Gleditsia triacanthos including cultivars & varieties	s) giant tropical salvia (Brill
hygrophila (Hygrophila costata)	gidee-gidee (Abrus pred
hymenachne (Hymenachne amplexicaulis and hybrids)	glory lily (Gloriosa super
kudzu (<i>Pueraria montana var. lobata syn. P. lobata, P. triloba</i> other than in the Torres Strait Islands)	glycine (Neonotonia wig
madeira vine (Anredera cordifolia)	— golden trumpet tree (Ha Tabebuia chrysotricha)
Mexican bean tree (Cecropia pachystachya, C. palmata &	grader grass (Themeda
C. peltata)	hiptage (Hiptage bengh
ornamental gingers (Hedychium gardnerianum, H. coronarium, H. flavescens)	
parthenium (<i>Parthenium hysterophorus</i>)	mistflower (Ageratina rip
pond apple (Annona glabra)	moth vine (Araujia serici
prickly pear (Opuntia stricta syn O.inermis)	ochna (Ochna serrulata)
sagittaria (Sagittaria platyphylla)	parrots feather (Myrioph
salvinia (Salvinia molesta)	praxelis (<i>Praxelis clemat</i>
Senegal tea (Gymnocoronis spilanthoides)	purple-leaved plectranth
Singapore daisy (Sphagneticola trilobata syn. Wedelia trilobata	resurrection plant (Bryon
thunbergia (Thunbergia grandiflora syn. T. laurifolia)	ruellia (Ruellia squarrosa
water hyacinth (Eichhornia crassipes)	satinleaf (Chrysophyllun
water lettuce (Pistia stratiotes)	sickle thorn (Asparagus
'Restricted' Invasive Animals	sword pear (Acanthocer
Notificial IIIVasive Allilliais	thatch grass (Hyparrhen

Invasive Plants rostis curvula) ulbifera) itis & B. lupulina) caerulea subsp. zanzibarensis) moea indica) ciliaris) munis) (Ipomea cairica) Cuphea carthagenensis) enata & A. crispa) ilis) ton ardisia (Ardisia elliptica) axillare var. axillare) a adenophora) te deppressa) unbergia fragrans) m chrysotrichum syn. S. hispidum) rillantaisia lamium) ecatorius subsp. africanus) erba) ghtii) landroanthus chrysotrichus syn. a quadrivalvis) halensis) ain (Heteranthera reniformis) paria) ifera) hyllum aquaticum) atidea) thus (Plectranthus ciliatus) ophyllum pinnatum) sa & R.simplex syn. R.tweediana) m oliviforme) s falcatus) ereus tetragonus) thatch grass (Hyparrhenia rufa subsp. rufa)

European fox (Vulpes vulpes)

feral red deer (Cervus elaphus) feral fallow deer (Dama dama)

domestic dog

feral pig (Sus scrofa)

feral cat (Felis catus), other than a domestic cat

feral dog (Canis familiaris), dingo (C. dingo) other than a

feral rusa deer (Rusa timorensis syn. Cervus timorensis)

tree of heaven (Ailanthus altissima)

Indian myna (Acridotheres tristis)

water poppy (Hydrocleys nymphoides)

'Locally Significant' Invasive Animals

8. What are our management responses?

To support a greater sense of shared responsibility and ownership of this plan, management responses for each priority invasive plant and animal is identified for each of the five major catchments where they are known to occur: Pumicestone Passage, Upper Stanley River, Mary River, Mooloolah River and the Maroochy River (including part of the Noosa River catchment).

The coastal environment which focuses on the beaches, dunes and adjacent lands (including other reserves and private properties directly adjoining the coastal dunal system) from the northern tip of the local government area through to Bells Creek in the south, has been recognised as an additional management unit.

Determining catchment management responses

To determine a management response for priority invasive plants and animals present in each catchment and the coastal area, an assessment was undertaken to consider the control feasibility and local management feasibility of each species (Table 5).

These catchment specific assessments were integrated into a catchment management response matrix which identified five management responses (Figure 5), defined in Table 6.

Table 5. Catchment management considerations.

Control feasibility ▶	This assessment considered whether there are effective control measures available to manage the priority species and how easy it is to do so.
Local management feasibility ▶	This assessment considered the known distribution of the priority species in the catchment.

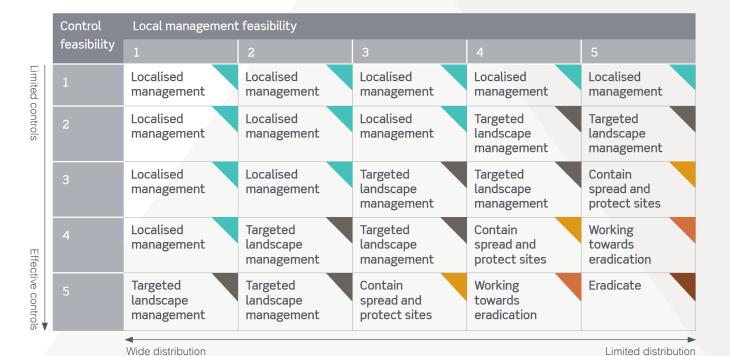


Figure 5. Catchment management response matrix.

Table 6. Catchment management responses.

This management response aims to reduce the extent of identified priority invasive species in the catchment area to below detectable limits in all habitats across all tenures through: destroying all identified priority plants including seedbanks destroying all identified priority animals including juveniles. Working towards eradication This management response aims to significantly reduce the extent of the identified priority invasive species in the catchment in all habitat areas across all tenures through: prioritising sub-catchments to support eradication of identified priority invasive plants and animals at feasible sites. This management category aims to prevent the ongoing spread of the identified priority invasive species in the catchment, protect sites of high economic, environmental and social value and to progressively reduce the overall distribution/density through: controlling all identified priority invasive plants and animals within and adjoining sites of high economic, environmental and social value to maintain their values. Targeted landscape management category aims to reduce the overall impacts of the identified priority invasive species through targeted management where feasible through: identifying feasible management sites/assets in the catchment where coordinated action from all local stakeholders would see positive management outcomes achieved. Localised management This management category identifies priority invasive species that would be targeted for coordinated management if it is likely to impact the function of the site and/or as part of broader project.	Table 0. Catchin	ent management responses.
invasive species in the catchment in all habitat areas across all tenures through: • prioritising sub-catchments to support eradication of identified priority invasive plants and animals at feasible sites. Contain spread and protect sites This management category aims to prevent the ongoing spread of the identified priority invasive species in the catchment, protect sites of high economic, environmental and social value and to progressively reduce the overall distribution/density through: • controlling all identified priority invasive plants and animals within and adjoining sites of high economic, environmental and social value to maintain their values. Targeted landscape management This management category aims to reduce the overall impacts of the identified priority invasive species through targeted management where feasible through: • identifying feasible management sites/assets in the catchment where coordinated action from all local stakeholders would see positive management outcomes achieved. Localised management This management category identifies priority invasive species that would be targeted for coordinated management if it is likely to impact the function of the site and/or as part of	Eradicate	the catchment area to below detectable limits in all habitats across all tenures through: • destroying all identified priority plants including seedbanks
invasive species in the catchment, protect sites of high economic, environmental and social value and to progressively reduce the overall distribution/density through: • controlling all identified priority invasive plants and animals within and adjoining sites of high economic, environmental and social value to maintain their values. Targeted landscape management This management category aims to reduce the overall impacts of the identified priority invasive species through targeted management where feasible through: • identifying feasible management sites/assets in the catchment where coordinated action from all local stakeholders would see positive management outcomes achieved. Localised management This management category identifies priority invasive species that would be targeted for coordinated management if it is likely to impact the function of the site and/or as part of	towards	invasive species in the catchment in all habitat areas across all tenures through:prioritising sub-catchments to support eradication of identified priority invasive plants and
invasive species through targeted management where feasible through: • identifying feasible management sites/assets in the catchment where coordinated action from all local stakeholders would see positive management outcomes achieved. Localised management This management category identifies priority invasive species that would be targeted for coordinated management if it is likely to impact the function of the site and/or as part of	spread and	invasive species in the catchment, protect sites of high economic, environmental and social value and to progressively reduce the overall distribution/density through: • controlling all identified priority invasive plants and animals within and adjoining sites of
management coordinated management if it is likely to impact the function of the site and/or as part of	landscape	invasive species through targeted management where feasible through: • identifying feasible management sites/assets in the catchment where coordinated action
		coordinated management if it is likely to impact the function of the site and/or as part of

It is the intention of this plan to prevent the ongoing spread of priority invasive plants and animals into catchments where they have not been previously observed. To assist with this, priority invasive plants and animals that are not known to be present within a particular catchment but are occurring within a neighbouring catchment are recognised as catchment alert species.

The management response for these alert species seeks to:

- prevent the entry of these priority invasive species into the adjoining catchment area
- undertake targeted public awareness on priority and alert invasive species to assist in early detection and response.

Implementing the plan

9. What are we currently doing?

There are various planning, policies, programs and initiatives being implemented across national, state, regional and local levels to combat the spread and impacts of invasive plants and animals.

Invasive species management is delivered through six management pathways: planning, research and monitoring, targeted control and on-ground actions, community capacity building, community engagement and education, and regulation.

Chart 1 outlines some of the initiatives being delivered by stakeholders throughout the Sunshine Coast Council local government area.

- and demonstration days, event presentations and displays

- Emergency response planning
- Project planning and development

- Bio-control research

- Trial pest plant research
 Monitoring and surveillance projects
 Radio tracking

- Targeted invasive species control projectsRehabilitation projects

Chart 1 - Invasive plant and animal management being delivered by stakeholders throughout the Sunshine Coast Council local government area.

10. What are the catchment management responses for the priority invasive plants and animals?

The priority invasive plants and animals and their respective catchment management response are outlined in Table 7. The individual catchment management response matrices can be viewed in Appendix 4.

Table 7. Priority invasive plant and animals and their respective catchment management response.

Key Localised management Targeted landscape management Working towards eradication Eradicate Catchment alert species			ne Coas ment ar			
Priority Invasive Plants and Animals	Pumicestone Passage	Upper Stanley	Mary	Mooloolah	Maroochy (inc. part of Noosa)	Coastal
'Restricted' Invasive Plants						
annual ragweed (Ambrosia artemisiifolia)						
balloon vine (Cardiospermum grandiflorum)						
basket asparagus (Asparagus aethiopicus)						
bitou bush (Chrysanthemoides monilifera ssp. rotundifolia)						
broad leaf pepper tree (Schinus terebinthifolius)						
cabomba (Cabomba caroliniana)						
camphor laurel (Cinnamomum camphora)						
cats claw creeper (Dolichandra unguis-cati)						
Chinese celtis (Celtis sinensis)						
climbing asparagus (Asparagus africanus & A. plumosus)						
common giant rat's tail grass (Sporobolus pyramidalis & S.nataensis)						
creeping lantana (Lantana montevidensis)						
Dutchman's pipe (Aristolochia spp. other than native species)						
fireweed (Senecio madagascariensis)						
giant Parramatta grass (Sporobolus fertilis)						
groundsel bush (Baccharis halimifolia)						
honey locust (Gleditsia triacanthos including cultivars & varieties)						
hygrophila (Hygrophila costata)						
hymenachne (Hymenachne amplexicaulis and hybrids)						
kudzu (<i>Pueraria montana var. lobata syn. P. lobata, P. triloba</i> other than in the Torres Strait Islands)						
madeira vine (Anredera cordifolia)						
Mexican bean tree (Cecropia pachystachya, C. palmata & C. peltata)						
ornamental gingers (Hedychium gardnerianum, H. coronarium, H. flavescens)						

		Sunshine Coast Council local government area catchments				
Priority Invasive Plants and Animals	Pumicestone Passage	Upper Stanley	Mary	Mooloolah	Maroochy (inc. part of Noosa)	Coastal
'Restricted' Invasive Plants continued						
parthenium (Parthenium hysterophorus)						
pond apple (Annona glabra)						
prickly pear (Opuntia stricta syn O.inermis)						
sagittaria (Sagittaria platyphylla)						
salvinia (Salvinia molesta)						
Senegal tea (Gymnocoronis spilanthoides)						
Singapore daisy (Sphagneticola trilobata syn. Wedelia trilobata)						
thunbergia (Thunbergia grandiflora syn. T. laurifolia)						
water hyacinth (Eichhornia crassipes)						
water lettuce (Pistia stratiotes)						
'Restricted' Invasive Animals						
European fox (Vulpes vulpes)						
feral cat (Felis catus), other than a domestic cat						
feral dog (Canis familiaris), dingo (C. dingo) other than a domestic dog						
feral fallow deer (Dama dama)						
feral pig (Sus scrofa)						
feral red deer (Cervus elaphus)						
feral rusa deer (Rusa timorensis syn. Cervus timorensis)						
'Locally Significant' Invasive Plants						
African lovegrass (Eragrostis curvula)						
air potato (Dioscorea bulbifera)						
barleria (Barleria prionitis & B. lupulina)						
blue lotus (Nymphaea caerulea subsp. zanzibarensis)						
blue morning glory (Ipomoea indica)						
buffel grass (Cenchrus ciliaris)						
castor oil (Ricinus communis)						
coastal morning glory (Ipomea cairica)						
Colombian wax weed (Cuphea carthagenensis)						
coral berry (Ardisia crenata & A. crispa)						
coral berry (Rivina humilis)						

Localised management Targeted landscape management Working towards eradication Catchment alert species	2				ncil loca hments	
Priority Invasive Plants and Animals	Pumicestone Passage	Upper Stanley	Mary	Mooloolah	Maroochy (inc. part of Noosa)	Coastal
'Locally Significant' Invasive Plants continued						
coral berry or shoe button ardisia (Ardisia elliptica)						
cow pea (Macrotyloma axillare var. axillare)						
crofton weed (Ageratina adenophora)						
dyschoriste (Dyschoriste deppressa)						
fragrant thunbergia (Thunbergia fragrans)						
giant devils fig (Solanum chrysotrichum syn. S. hispidum)						
giant tropical salvia (Brillantaisia lamium)						
gidee-gidee (Abrus precatorius subsp. africanus)						
glory lily (Gloriosa superba)						
glycine (Neonotonia wightii)						
golden trumpet tree (Handroanthus chrysotrichus syn. Tabebuia chrysotricha)						
grader grass (Themeda quadrivalvis)						
hiptage (Hiptage benghalensis)						
kidney-leaf mud plantain (Heteranthera reniformis)						
mistflower (Ageratina riparia)						
moth vine (Araujia sericifera)						
ochna (Ochna serrulata)						
parrots feather (Myriophyllum aquaticum)						
praxelis (Praxelis clematidea)						
purple-leaved plectranthus (Plectranthus ciliatus)						
resurrection plant (Bryophyllum pinnatum)						
ruellia (Ruellia squarrosa & R.simplex syn. R.tweediana)						
satinleaf (Chrysophyllum oliviforme)						
sickle thorn (Asparagus falcatus)						
sword pear (Acanthocereus tetragonus)						
thatch grass (Hyparrhenia rufa subsp. rufa)						
tree of heaven (Ailanthus altissima)						
water poppy (Hydrocleys nymphoides)						
'Locally Significant' Invasive Animals						
Indian myna (Acridotheres tristis)						

11. What are the other management considerations?

In addition to the management responses for the priority invasive plants and animals and catchment alert species, there is a need to consider other biosecurity threats on our local government area boundary and from both within and outside Queensland.

Threats on our local government area border

'Restricted' invasive plants and animals occurring within neighbouring local government areas pose a risk to the Sunshine Coast Council local government area due to their proximity of occurrence giving rise to an elevated likelihood of entry.

'Restricted' invasive plants and animals not known to be occurring within the Sunshine Coast Council local government area which are known to occur within either Gympie Regional, Somerset Regional, Moreton Regional, and Noosa Council local government areas are considered regional alert species (Appendix 5, Table 1).

The detection of any of these species entering the local government area requires an immediate eradication response with the aim to contain the spread and destroy all incursions. This response is likely to require a collaborative effort by local and state government and other stakeholders depending on the tenure impacted and location of the incursion.

Threats from within Oueensland

There are a number of 'Restricted' invasive plants and animals which occur in other parts of Queensland that do not occur within the Sunshine Coast Council local government area and neighbouring local government areas (Appendix 6, Table 1).

As these 'Restricted' invasive plants and animals are not currently occurring in this local government area, the entry of these species into the area requires an immediate eradication response with the aim to contain the spread and destroy all incursions. This response is likely to require a collaborative effort by local and state government and other stakeholders depending on the tenure impacted and location of the incursion.

Threats from outside Queensland

The *Biosecurity Act 2014* identifies Prohibited Matter as biosecurity matter that is not found in Queensland, but would have a significant adverse impact on our health, way of life, the economy or the environment if it entered the state. Responses to these matters would be coordinated by Queensland Government Department of Agriculture and Fisheries – Biosecurity Queensland with local government and other stakeholders providing support as required.

12. What are our strategic actions?

The strategic actions to manage invasive plants and animals across the Sunshine Coast Council local government area have been grouped under six management pathways, with a particular focus on priority invasive plants and animals, and regional and catchment alert species.

The scope of each strategic action is provided to guide stakeholders in the development of their tailored biosecurity implementation plans. This will ensure that the tasks undertaken by stakeholders will contribute to the delivery of this plan and the desired outcomes of the Queensland Government's *Weed and Pest Animal Strategy 2016-2020* (Tables 8 and 9).

Table 8. Desired outcomes pursuant to the Queensland Government's Weed and Pest Animal Strategy 2016-2020.

Desii	red Outcomes	Objective
1	Prevention and early detection	Establishment and spread of invasive biosecurity matter are prevented.
2	Monitoring and assessment	Reliable information is the basis for decision making.
3	Awareness and education	Stakeholders are informed, knowledgeable and have ownership of pest plant and pest animal management.
4	Effective management systems	Integrated systems for successfully managing and reducing/minimising the impacts of weeds and pest animals are developed and widely implemented through risk management.
5	Strategic planning framework and management	Strategic directions are developed and maintained, with an acceptable level of stakeholder ownership, and are informed by risk management.
6	Commitment, roles and responsibilities	Management of weeds and pest animals is the shared responsibility of land managers, industry, the community and all levels of government. All stakeholders are committed to, and undertake, coordinated pest management. The cost of this management is borne by the risk creators and those who benefit from the management.

Table 9. Strategic actions.

Strategic Actions			sired	Out	come	s		Performance Indicators		
		1	1 2 3 4 5 6				6			
PI	anning					J				
1	Integrate the Sunshine Coast Council Local Government Area Biosecurity Plan 2017 into planning, operational and regulatory instruments and processes. Updating and reflecting the strategic directions of the plan in planning, policy, regulation, project development and delivery and procurement documentation and processes.				I	I		 Number of documents and organisations that reference the plan Percentage of external Biosecurity Reference Group organisations that have developed biosecurity implementation plans or similar that reference the plan Number of key identified organisational documents reference the plan (requires baseline survey). 		
2	Establish, strengthen and participate in biosecurity planning and communication networks. Building stronger organisational and stakeholder relationships that assist with the delivery of biosecurity management including reporting, identification of emerging issues and opportunities to collaborate.							 Number of stakeholder forums and working groups etc Percentage of external Biosecurity Implementation Group stakeholders participating in other biosecurity forums and groups Number of collaborative initiatives developed and delivered. 		
Re	esearch and monitoring									
3	Improve our collective understanding of the biology, ecology, impacts and control measures for priority and regional alert invasive plants and animals and emerging issues. Improving our current knowledge of priority invasive species through research, professional development and other education opportunities. Action also seeks to identify and respond to information gaps including potential impacts associated with climate change.							 Number of professional training opportunities Number of management and research projects developed and being implemented. 		
4	Improve and integrate existing data capture systems and access to and dissemination of this information. Improving the way invasive species data is collected, stored and shared both within and outside organisations.							 Number of inter data sharing events Number of inter and intra shared data connections (requires baseline survey). 		

		Desired Outcomes						
Strategic	Actions	De	sired	Outo	come	s		Performance Indicators
		1	2	3	4	5	6	
Research	h and monitoring continued							
the ef mana threa Impro chang speci mana effect	tor, evaluate and report on ffectiveness of catchment agement programs and new ts. by ving our understanding of ges in the extent of invasive ies to inform surveillance and agement programs and ensure their tiveness in delivering both short-ong-term outcomes.							 Number of projects delivered with measured positive outcomes Number of research or review project recommendations being implemented.
Targeted	control and on-ground actions							
region Coas Devel of str comp grour targe	ent and respond to the entry of nal alert species into Sunshine to local government area. Ilopment and implementation rategic education, partnership, pliance, and collaborative ond projects and initiatives that to regional alert species at the local rement borders.							 Number of preventative actions Number of reported sightings Number of incursion responses Number of collaborative projects between two or more organisations.
priori acros Devel comp mana that ta	te the extent and spread of ty invasive plants and animals as the Sunshine Coast. Ilopment and implementation of plants and collaborative on-ground agement projects and initiatives arget priority invasive plants and pals at a catchment scale.							 Number of targeted projects delivered Percentage reductions from targeted projects Number of collaborative projects between two or more organisations Number of preventative actions Number of reported sightings Number of incursion responses Number of collaborative projects between two or more organisations.
Commun	nity capacity building							
assis the ca Impro new in resou	lop incentives that support and at the community to work towards atchment management responses. Eving existing and developing incentives that provide tools and surces to support the community aget priority invasive plants and als.							 Number of incentives and support programs Number of properties having received incentives Number of occasions of loan management/control equipment being utilised.

Strategic Actions	De	Desired Outcomes			Performance Indicators		
		2	3	4	5	6	
Community capacity building continued							
9 Strengthen biosecurity partnerships with not-for-profit community, industry and specialist groups. Recognising and strengthening existing formal and non-formal partnerships and developing new partnership opportunities to collaboratively deliver on biosecurity management priorities.							 Number of existing partnerships Number of new partnerships.
Community and visitor engagement and edu	catio	n					
10 Increase community awareness of priority invasive plants and animals, regional and catchment alert species, and other invasive plants and animals in general. Educating the community and identifying opportunities to develop targeted awareness campaigns that promote the General Biosecurity Obligation and priority invasive plants and animals.							 Number of community education opportunities Number of people engaged through identified events, submissions received, submissions resulting in change, website visits Number of engagement/media platforms used.
Regulation							
11 Develop and implement compliance procedures, policies and programs that support the implementation of the biosecurity plan. Reviewing and updating local laws, development compliance processes, and biosecurity orders, including education on these matters.							 Number of prevention and control programs in the region Number of regulatory actions.

Tracking Progress

Monitoring and tracking our progress is critical to ensure the effectiveness of the plan. Sunshine Coast Council will coordinate the ongoing collaborative approach required to implement and report on this plan. A number of measures have been prepared to enable regular reporting which will be undertaken in partnership with stakeholders. This will be facilitated through the

establishment of a biosecurity implementation group, with representation from key stakeholders who will meet on a regular basis to review priority invasive plants and animals, identify emerging threats and strategic responses, discuss current activities and assist with reporting on the outcomes delivered.

Appendix 1 - Roles and responsibilities

Legislative requirements

There are specific legislative requirements for Restricted Matter and Prohibited Matter.

Restricted Matter

There are seven restriction categories which outline the legislative requirements for Restricted Matter under the Act (refer to Appendix 2, Table 2 for these categories).

Prohibited Matter

If you become aware of Prohibited Matter or you believe, or ought reasonably believe, that something is Prohibited Matter, you need to report it to Department of Agriculture and Fisheries – Biosecurity Queensland within 24 hours and take all reasonable steps to minimise the risks associated with the prohibited matter and and avoid making the situation worse.

General roles and responsibilities

Residents and vistors to the region

- Make informed choices when selecting garden plants.
- · Dispose of garden and other green waste responsibly.
- · Manage domestic pets responsibly.
- Clean vehicles, boats, trailer etc. if they have the potential to spread 'Restricted' or 'Locally Significant' invasive plants and animals, in particular priority invasive plants and animals.
- Be aware of your exposure to or entering the local government area with a potential biosecurity risk when travelling internationally or domestically.
- Be aware when mailing and buying plant, animal or food products from within and outside Australia.
- Cooperate with local and state government in delivering the Sunshine Coast Council Local Government Area Biosecurity Plan 2017.

Sunshine Coast Council

- Administer the Sunshine Coast Council Local Government Area Biosecurity Plan 2017.
- Develop a Sunshine Coast Council Biosecurity Implementation Plan 2017 that identifies the tasks which council intends to deliver.
- · Coordinate and facilitate an external Biosecurity Implementation Group.
- Inform and educate personnel and contractors on General Biosecurity Obligations and local biosecurity priorities.
- Educate, encourage and assist natural resource management groups, community groups, landholders and land managers in invasive plant and animal management.
- Partner with, and collaborate with community groups, industry, state and federal government and other local governments.
- Follow best practice for invasive plant and animal management in line with relevant legislation, policy, guidelines and codes of practice.
- · Prioritise resources to address priority invasive plants and animals and regional alert species.

Water and utility managers (Seqwater, Unitywater, Energex)

- Develop an organisational biosecurity implementation plan that identifies management responses to priority invasive species relevant to land activities for which the entity has responsibility.
- Follow best practice for invasive plant and animal management in line with relevant legislation, policy, guidelines and codes of practice.
- · Inform and educate personnel and contractors on General Biosecurity Obligations and local biosecurity priorities.
- Prioritise resources to address priority invasive plants and animals and regional alert species.

General roles and responsibilities continued

Department of Agriculture and Fisheries – Biosecurity Queensland

- · Monitor and lead prohibited species programs.
- Develop state policy and planning linkages to local government.
- Undertake risk assessment and inform on emerging threats.
- · Inform and educate personnel and contractors on General Biosecurity Obligations and local biosecurity priorities.
- · Research, educate, monitor and establish partnerships with local government and catchment stakeholders.

Department of Transport and Main Road and other transport corridor managers (QRAIL)

- Develop an organisational biosecurity implementation plan that identifies management responses to priority invasive species relevant to land activities for which the entity has responsibility.
- Follow best practice for invasive plant and animal management in line with relevant legislation, policy, guidelines and codes of practice.
- Inform and educate personnel and contractors on General Biosecurity Obligations and local biosecurity priorities.
- · Prioritise resources to address priority invasive plants and animals and regional alert species.

All Queensland government agencies

- Develop an organisational biosecurity implementation plan that identifies management responses to priority invasive species relevant to land activities for which the entity has responsibility.
- Follow best practice for invasive plant and animal management in line with relevant legislation, policy, guidelines and codes of practice.
- · Inform and educate personnel and contractors on General Biosecurity Obligations and local biosecurity priorities.
- · Where relevant, prioritise resources to address priority invasive plants and animals and regional alert species.

Tertiary and other education research facilities

- · Undertake research on invasive plants and animals.
- Develop an organisational biosecurity implementation plan that identifies management responses to priority invasive species relevant to land activities for which the entity has responsibility.
- Follow best practice for invasive plant and animal management in line with relevant legislation, policy, guidelines and codes of practice.
- Inform and educate personnel and contractors on General Biosecurity Obligations and local biosecurity priorities.

Natural resource management groups

- Support biosecurity partnerships for cooperative action on local priorities.
- Promote and facilitate invasive plant and animal management on local priorities.
- Identify and fund research priorities to enable continued improvement in the management of invasive plants and animals.
- Contribute information for mapping weed infestations, bio-control release sites and invasive plant and animal problem areas.
- Inform and educate personnel and contractors on General Biosecurity Obligations and local biosecurity priorities.
- Follow best practice for invasive plant and animal management in line with relevant legislation, policy, guidelines and codes of practice.

General roles and responsibilities continued

Plantation industries

- Develop an organisational biosecurity implementation plan that identifies management responses to priority invasive species relevant to land activities for which the entity has responsibility.
- Follow best practice for invasive plant and animal management in line with relevant legislation, policy, guidelines and codes of practice.
- · Inform and educate personnel and contractors on General Biosecurity Obligations and local biosecurity priorities.
- · Prioritise resources to address priority invasive plants and animals and regional alert species.

Agriculture and production industry

- Follow best practice for invasive plant and animal management in line with relevant legislation, policy, guidelines and codes of practice.
- · Inform and educate personnel and contractors on General Biosecurity Obligations and local biosecurity priorities.
- · Develop standard operating procedures to limit the spread on invasive biosecurity matter.
- · Prioritise resources to address priority invasive plants and animals and regional alert species.

Not-for-profit community groups

- · Partner with local governments to target agreed local government biosecurity priorities.
- Contribute information for mapping weed infestations, bio-control release sites and invasive plant and animal problem areas.
- · Inform and educate personnel and contractors on General Biosecurity Obligations and local biosecurity priorities.
- Educate, encourage and assist land managers in invasive plant and animal management.
- Follow best practice for invasive plant and animal management in line with relevant legislation, policy, guidelines and codes of practice.

Industry contractors and developers

- Inform and educate personnel on General Biosecurity Obligations and local biosecurity matter priorities.
- Developing standard operating procedures to limit the spread of restricted and locally significant invasive plants and animals, in particular priority invasive plants and animals.
- Follow best practice for invasive plant and animal management in line with relevant legislation, policy, guidelines and codes of practice.

Nursery industry

- Follow best practice for invasive plant and animal management in line with relevant legislation, policy, guidelines and codes of practice.
- Inform and educate personnel on General Biosecurity Obligations and local biosecurity priorities.
- · Prioritise resources to address priority invasive plants and animals and regional alert species.

Traditional owners and the broader Aboriginal and Torres Strait Islander community

• Partner with local and state government in delivering the *Sunshine Coast Council Local Government Area Biosecurity Plan 2017.*

Appendix 2 – All other 'Restricted' invasive plants and animals and restriction categories

Table 1. All other 'Restricted' invasive plants and animals not identified as a priority and the relevant restriction category.

All other 'Restricted' invasive plants	Restriction Category
African fountain grass (Cenchrus setaceus syn. Pennisetum setaceum)	3
African tulip tree (Spathodea campanulata)	3
blackberry (Rubus anglocandicans, Rubus fruticosus aggregate)	3
lantana – common (Lantana camara)	3
mother of millions (Bryophyllum delagoense syn. B. tubiflorum, Kalanchoe delagoensis)	3
mother of millions hybrid (Bryophyllum x houghtonii)	3
privets-broad-leaf privet, tree privet (Ligustrum lucidum)	3
privets-small-leaf privet, Chinese privet (Ligustrum sinense)	3
willows (all Salix spp. other than S. babylonica, S. x calodendron and S. x reichardtii)	3
yellow bells (Tecoma stans)	3
yellow oleander, Captain Cook tree (Cascabela thevetia syn.Thevetia peruviana)	3

Table 2. Restriction categories for 'Restricted' invasive plants and animals in accordance with the *Biosecurity Act* 2014.

Categories	Restrictions or actions	Examples
1 2	These two categories have specific urgent reporting requirements. These categories must be reported if the restricted matter is in or on a carrier, in your possession or under your control or at a place where you are the occupier and you are not aware that an appropriately authorised officer has been advised or you do not possess a permit for the restricted matter. You must not take any action likely to exacerbate the biosecurity risk. You must take action likely to minimise the biosecurity risk posed by the category 1 or category 2 restricted matter.	Category 1 includes red imported fire ants, electric ants, Asian honey bees, and certain animal diseases, aquatic diseases and pathogens. Category 2 includes certain noxious fish, weeds and pest animals.
3	You must not distribute this restricted matter. This means it must not be given as a gift, sold, traded or released into the environment unless the distribution or disposal is authorised in a regulation or under a permit. Deliberate human distribution or disposal is a key source of spread into other areas of the state.	Weeds, pest animals and noxious fish.
4	You must not move this restricted matter to ensure that it is not spread into other areas of the state.	Specific weeds, pest animals and noxious fish such as the Siam weed, feral pig or giant cichlid.
5	You must not possess or keep this restricted matter under your control. These pests have a high risk of negatively impacting on the environment. You may only keep this restricted matter under a permit of the Act or another Act.	Weeds, pest animals and noxious fish eg miconia, rabbits and carp.
6	You must not possess or keep this restricted matter under your control. You must not feed this category of restricted matter. Feeding this restricted matter may cause their numbers to increase and negatively impact the economy or the environment. Feeding for the purpose of preparing for or undertaking a control program is exempted.	Invasive animals such as feral deer, foxes, rabbits and wild dogs and noxious fish such as carp, gambusia and tilapia.
7	If you have these noxious fish in your possession you must kill the restricted matter and dispose of the carcass in the authorised manner prescribed in regulation.	Noxious fish such as carp, weatherloach, climbing perch, gambusia and tilapia.

Appendix 3 – All other 'Locally Significant' invasive plants and animals

Table 1. All other 'Locally Significant' invasive plants and animals.

'Locally Significant' Invasive Plants	buddleja (Buddleja madagascariensis)	
African olive (Olea europaea subsp. cuspidata syn.	buffalo grass (Stenotaphrum secundatum)	
Olea africana)	bulbil watsonia (Watsonia meriana var. bulbillifera)	
African sedge (Cyperus involucratus)	cadaghi (Corymbia torelliana)*	
Alexander palm (Archontophoenix alexandrae)*	Canadian goldenrod (Solidago canadensis)	
American elder (Sambucus canadensis)	canna lily (Canna indica)	
American sea rocket (Cakile edentula)	cape honeysuckle (Tecoma capensis)	
Anzac flower (Montanoa hibiscifolia)	century plant or sisal (Agave Americana, A. sisala A. vivipara var. vivipara)	
arrowhead vine (Syngonium podophyllum)		
arsenic bush (Senna septemtrionalis)	Chinese burr (Triumfetta rhomboidea)	
Asian bell tree (Radermachera spp.)	Chinese rain tree (Koelreuteria elegans subsp.	
awnless barnyard grass (Echinochloa colona)	formosana syn. Koelreuteria elegans)	
bahia grass (Paspalum notatum)	cobbler's pegs (Bidens pilosa)	
balloon cotton bush (Gomphocarpus physocarpus)	cocos palm (Syagrus romanzoffiana)	
balsam (Impatiens walleriana)	coffee (Coffea arabica)	
barnyard grass (Echinochloa crus-galli)	common sensitive plant (Mimosa pudica)	
beach evening primrose (Oenothera drummondii	coral tree or Indian coral tree (Erythrina x sykesii)	
subsp. drummondii)	coreopsis (Coreopsis lanceolata)	
black eyed Susan (<i>Thunbergia alata</i>)	corky passionflower (Passiflora suberosa)	
blue billygoat weed (Ageratum houstonianum)	couch, Bahama grass (Cynodon dactylon)	
blue heliotrope (Heliotropium amplexicaule)	(introduced cultivars)	
blue taro (Xanthosoma violaceum)	creeping inch plant (Callisia repens)	
Boston fern (<i>Nephrolepis exaltata</i>)	crownbeard, wild sunflower (Verbesina encelioides)	
Brazilian button flower (Centratherum punctatum	crowsfoot grass (Eleusine indica)	
subsp. punctatum)	Cuban hemp (Furcraea foetida)	
Brazilian cherry (Eugenia uniflora)	curry bush (Bergera koenigii)	
Brazilian coral tree (Erythrina crista-galli)	Cyperus (Cyperus teneristolon)	
Brazilian fireweed (Erechtites valerianifolius)	dense water weed (Egeria densa)	
Brazilian nightshade (Solanum seaforthianum)	devil's fig (Solanum torvum)	
broad leaf paspalum (Paspalum mandiocanum)	devil's apple (Solanum capsicoides)	
broad leaved carpet grass (Axonopus compressus)	duranta (Duranta erecta syn. D. repens)	
brown gardenia or yellow mangosteen (Atractocarpus fitzalanii)*	dwarf papyrus (Cyperus papyrus 'Nanus')	

^{*}native species that are not naturally occurring and are outside of their native range.

'Locally Significant' Invasive Plants	s continued
dwarf Parramatta grass (Sporobolu	s africanus)
dwarf umbrella tree (Schefflera arb	oricola)
easter cassia (Senna pendula var. g	glabrata)
elephant grass, bana grass, cane g purpureum)	ırass (Pennisetum
empress tree (Paulownia tomentosa	a)
exotic pines (Pinus sp.)	
fishbone fern (Nephrolepis cordifoli	a)
fishpole bamboo (Phyllostachys au	rea)
flame vine (Pyrostegia venusta)	
flax-leaf fleabane (Conyza bonarier	nsis)
gazania (Gazania linearis)	
golden dodder (Cuscuta campestri	(s)
goosefoot (Syngonium neglectum)	
green cestrum (Cestrum Parqui)	
green leaf desmodium (Desmodium	m intortum)
green panic (Megathyrsus maximus	s var. maximus)
hairy wandering Jew (Commelina b	enghalensis)
hamil grass (Megathyrsus maximus	'Hamil')
hemp (Furcraea selloa)	
Himalayan magnolia (Magnolia cha	траса)
ice-cream bean tree (Inga edulis)	
Indian hawthorn (Rhaphiolepis india	ca)
inkweed (Phytolacca octandra)	
jacaranda (Jacaranda mimosifolia)	
Japanese honeysuckle (Lonicera ja	ponica)
Japanese sunflower, Mexican sunflo	ower (<i>Tithonia</i>
jointed rush (Juncus articulatus)	
khaki weed (Alternanthera pungens	5)
kikuyu grass (Cenchrus clandestin clandestinum)	syn. Pennisetum
18''' '' 11 11 15 15	,)

Kittatinny blackberry (Rubus bellobatus)

leaf cactus (Pereskia aculeata) leucaena (Leucaena leucocephala) loquat (Eriobotrya japonica) Mexican poppy (Argemone ochroleuca) milk weed (Euphorbia heterophylla) molasses grass (Melinis minutiflora) montbretia (Crocosmia x crocosmiiflora) moon flower (Ipomoea alba) Mossman river grass (Cenchrus echinatus) mother-in-law's tongue (Sansevieria trifasciata) mountain ash or Himalayan ash (Fraxinus griffithii) Mullumbimby couch (Cyperus brevifolius) murraya, mock orange (Murraya paniculata 'Exotica') night jessamine (Cestrum nocturnum) nodding thistle (Carduus nutans) noogoora burr (Xanthium occidentale, syn. X. pungens, X. strumarium) northern olive (Chionanthus ramiflora)* olive (Olea europaea) paddy's lucerne or canary creeper (Sida rhombifolia) painted spurge (Euphorbia cyathophora) palm leaf setaria or palm grass (Setaria palmifolia) pampas grass (Cortaderia selloana) pangola grass (Digitaria eriantha) para grass (Urochloa mutica syn. Brachiaria mutica) paspalum (Paspalum dilatatum, P.conjugatum) passionfruit (Passiflora edulis) Paterson's curse (Echium plantagineum) phasey bean (Macroptilium lathyroides) pink periwinkle (Catharanthus roseus) polka-dot plant (Hypoestes phyllostachya) prickly spider-flower (Cleome hassleriana) purple joyweed (Alternanthera brasiliana)	
loquat (<i>Eriobotrya japonica</i>) Mexican poppy (<i>Argemone ochroleuca</i>) milk weed (<i>Euphorbia heterophylla</i>) molasses grass (<i>Melinis minutiflora</i>) montbretia (<i>Crocosmia x crocosmiiflora</i>) moon flower (<i>Ipomoea alba</i>) Mossman river grass (<i>Cenchrus echinatus</i>) mother-in-law's tongue (<i>Sansevieria trifasciata</i>) mountain ash or Himalayan ash (<i>Fraxinus griffithii</i>) Mullumbimby couch (<i>Cyperus brevifolius</i>) murraya, mock orange (<i>Murraya paniculata 'Exotica'</i>) night jessamine (<i>Cestrum nocturnum</i>) nodding thistle (<i>Carduus nutans</i>) noogoora burr (<i>Xanthium occidentale, syn. X. pungens, X. strumarium</i>) northern olive (<i>Chionanthus ramiflora</i>)* olive (<i>Olea europaea</i>) paddy's lucerne or canary creeper (<i>Sida rhombifolia</i>) painted spurge (<i>Euphorbia cyathophora</i>) palm leaf setaria or palm grass (<i>Setaria palmifolia</i>) pampas grass (<i>Cortaderia selloana</i>) pangola grass (<i>Digitaria eriantha</i>) para grass (<i>Urochloa mutica syn. Brachiaria mutica</i>) paspalum (<i>Paspalum dilatatum, P.conjugatum</i>) passionfruit (<i>Passiflora edulis</i>) Paterson's curse (<i>Echium plantagineum</i>) phasey bean (<i>Macroptilium lathyroides</i>) pink periwinkle (<i>Catharanthus roseus</i>) polka-dot plant (<i>Hypoestes phyllostachya</i>) prickly spider-flower (<i>Cleome hassleriana</i>)	leaf cactus (Pereskia aculeata)
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pink periwinkle (Catharanthus roseus) polka-dot plant (Hypoestes phyllostachya) prickly spider-flower (Cleome hassleriana) purple joyweed (Alternanthera brasiliana)	Paterson's curse (Echium plantagineum)
polka-dot plant (<i>Hypoestes phyllostachya</i>) prickly spider-flower (<i>Cleome hassleriana</i>) purple joyweed (<i>Alternanthera brasiliana</i>)	phasey bean (Macroptilium lathyroides)
prickly spider-flower (Cleome hassleriana) purple joyweed (Alternanthera brasiliana)	pink periwinkle (Catharanthus roseus)
purple joyweed (Alternanthera brasiliana)	polka-dot plant (Hypoestes phyllostachya)
	prickly spider-flower (Cleome hassleriana)
purple succulent (Callisia fragrans)	purple joyweed (Alternanthera brasiliana)
	purple succulent (Callisia fragrans)

'Locally Significant' Invasive Plants continued
purple top (Verbena spp.)
Queensland blue couch (Digitaria didactyla)*
Queensland maple (Flindersia brayleyana)*
Queensland umbrella tree (Schefflera actinophylla)*
rambling dock (Acetosa sagittata)
rattlepod (Crotalaria grahamiana)
red cherry guava (Psidium cattleianum var. cattleianum)
red Christmas pride (Stephanophysum longifolium)
red natal grass (Melinis repens)
red salvia (Salvia coccinea)
red shank, needle burr (Amaranthus spinosus)
rhodes grass (Chloris gayana)
rosewood, tipuana (Tipuana tipu)
rubber tree (Ficus elastica)
running bamboo (<i>Phyllostachys pubescens and Arundinaria spp.</i>)
saffron thistle (Carthamus lanatus)
sesbania pea (Sesbania cannabina)*
shrubby stylo (Stylosanthes scabra)
signal grass (Urochloa decumbens syn. Brachiaria decumbens)
silverleaf desmodium (Desmodium uncinatum)
siratro (Macroptilium atropurpureum)
snake weed, dark blue snake weed, white snake weed (Stachytarpheta jamaicensis, S. cayennensis, S. australis)
South African pigeon grass (Setaria sphacelata)
spear thistle (Cirsium vulgare)
spiny emex (Emex australis)

swamp foxtail (Pennisetum alopecuroides)* Swedish ivy (Plectranthus verticillatus) sweet viburnum 'Emerald Lustre' (Viburnum odoratissimum var. awabuki) Taiwan lily (Lilium formosanum) tall fleabane (Conyza sumatrensis) taro (Colocasia esculenta) thornapples (Datura spp.) thorny poinciana or mysore thorn (Caesalpinia decapetala) tobacco bush (Solanum erianthum) Turkey rhubarb vine (Acetosa sagittata) urena (Urena lobata) variegated thistle (Silybum marianum) wandering Jew or white flowered wandering Jew (Tradescantia fluminensis syn.Tradescantia albiflora) watercress (Rorippa nasturtium-aquaticum) weeping fig, Benjamin fig (Ficus benjamina)* West Indies guava (Psidium guineense) whisky grass (Andropogon virginicus) white mulberry (Morus alba) white oak (Grevillea baileyana)* white passionflower (Passiflora subpeltata) wild iris (Dietes spp.) wild tobacco tree (Solanum mauritianum) Wynn cassia (Chamaecrista rotundifolia) yellow guava (Psidium guajava) yellow or Mexican waterlily (Nymphaea mexicana) yellowberry (Rubus ellipticus) zebrine (Tradescantia zebrina)

'Locally Significant' Invasive Animals

feral wapiti deer (Cervus Canadensis)

cane toad (Bufo marinus)

Asian house gecko (Hemidactylus frenatus)

squirrel tail or white shrimp plant (Justicia betonica)

star burr (Acanthospermum hispidum)

stinking passionflower (Passiflora foetida)

stinking roger (Tagetes minuta)

^{*}native species that are not naturally occurring and are outside of their native range.

Appendix 4 – Catchment management response

Table 1. Mooloolah River catchment management response matrix.





Notes

- 1. Bold text identifies a 'Restricted' invasive plant or animal and its restriction category as show in Appendix 2, Table 2.
- 2. Refer to Appendix 2 Table 1 for all other 'Restricted' invasive plants and animals identified under the Biosecurity Act 2014.

Table 2. Mary River catchment management response matrix.



		Catchment alert species
4	5	
parrots feather	cabomba (3)kidney-leaf mud plantain	Maroochy Catchment
 coral berry (A. crenata & A. crispa) coral berry or shoe button ardisia (A.elliptica) ochna water hyacinth (3) 	 African love grass coastal morning glory feral fallow deer (3,4,6) 	 purple-leaved plectranthus Senegal tea (3) Mooloolah Catchment air potato gidee-gidee glory lily Mexican bean tree (2,3,4,5) prickly pear (3) satin leaf water poppy
 broad leaf pepper tree (3) Dutchman's pipe (3) grader grass resurrection plant water lettuce (3) 	 barleria basket asparagus (3) climbing asparagus (3) creeping lantana (3) 	
 dyschoriste sagittaria (3) thunbergia (3) 	 balloon vine (3) buffel grass fireweed (3) fragrant thunbergia honey locust (3) hygrophila (3) hymenachne (3) kudzu (3) parthenium (3) sickle thorn 	

- 1. Bold text identifies a 'Restricted' invasive plant or animal and its restriction category as show in Appendix 2, Table 2.
- 2. Refer to Appendix 2 Table 1 for all other 'Restricted' invasive plants and animals identified under the Biosecurity Act 2014.

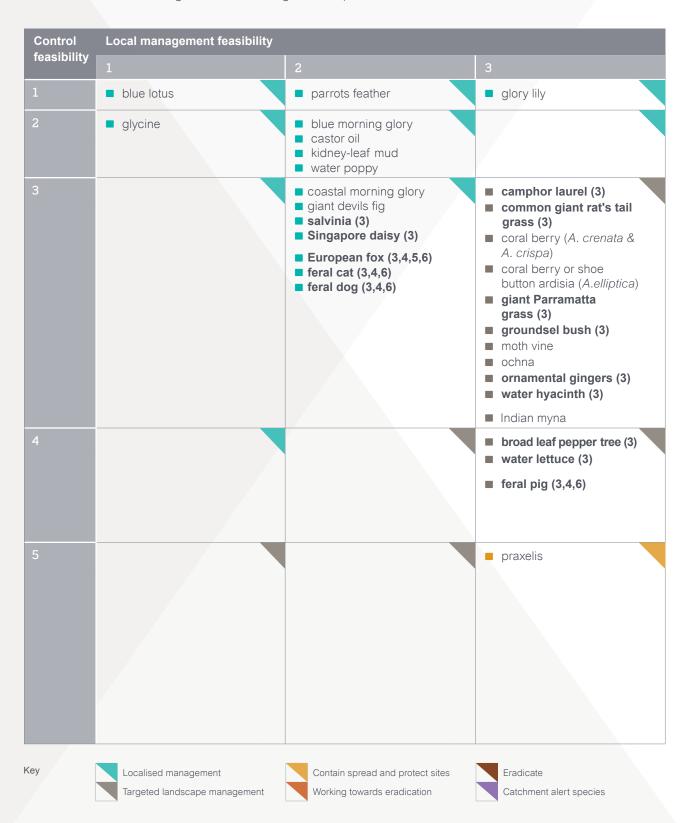
Table 3. Upper Stanley River catchment management response matrix.



		2-4-1
		Catchment alert species
4	5	
parrots feather	■ kidney-leaf mud plantain	 Mary Catchment blue lotus cabomba (3) coastal morning glory Colombian wax weed
ochna	 African love grass cats claw creeper (3) coral berry (A. crenata & A. crispa) coral berry (R.humilis) coral berry or shoe button ardisia (A.elliptica) giant Parramatta grass (3) water hyacinth (3) feral red deer (3.4.6) 	 dyschoriste golden trumpet tree honey locust tree (3) hygrophila (3) kudzu (3) sagittaria (3) sickle thorn feral fallow deer (3,4,6) Mooloolah Catchment air potato
 basket asparagus (3) broad leaf pepper tree (3) Chinese celtis (3) resurrection plant 	 feral rusa deer (3,4,6) climbing asparagus (3) creeping lantana (3) Dutchman's pipe (3) grader grass ruellia water lettuce (3) 	 barleria blue lotus cabomba (3) coastal morning glory Colombian wax weed gidee-gidee glory lily golden trumpet tree hygrophila (3) prickly pear (3)
	 balloon vine (3) buffel grass fireweed (3) fragrant thunbergia hymenachne (3) parthenium (3) 	 sagittaria (3) satinleaf Senegal tea (3) water poppy Pumicestone Catchment
	■ thunbergia (3)	 air potato blue lotus cabomba (3) coastal morning glory giant tropical salvia gidee-gidee glory lily hygrophila (3) kudzu (3) Mexican bean tree (2,3,4,5) prickly pear (3) Senegal tea (3) thatch grass water poppy

- 1. Bold text identifies a 'Restricted' invasive plant or animal and its restriction category as show in Appendix 2, Table 2.
- 2. Refer to Appendix 2 Table 1 for all other 'Restricted' invasive plants and animals identified under the Biosecurity Act 2014.

Table 4. Pumicestone Passage catchment management response matrix.





- 1. Bold text identifies a 'Restricted' invasive plant or animal and its restriction category as show in Appendix 2, Table 2.
- 2. Refer to Appendix 2 Table 1 for all other 'Restricted' invasive plants and animals identified under the Biosecurity Act 2014.

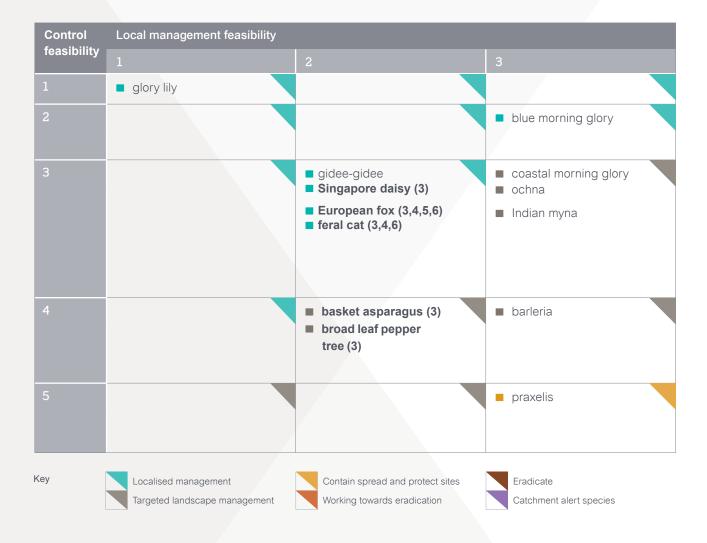
Table 5. Maroochy River (and part Noosa River) catchment management response matrix.





- 1. Bold text identifies a 'Restricted' invasive plant or animal and its restriction category as show in Appendix 2, Table 2.
- 2. Refer to Appendix 2 Table 1 for all other 'Restricted' invasive plants and animals identified under the Biosecurity Act 2014.

Table 6. Coastal management response matrix.



4	5
cow pea glycine	castor oilColombian wax weedkidney-leaf mud plantain
 coral berry (A. crenata & A. crispa) coral berry (R.humilis) coral berry or shoe button ardisia (A.elliptica) madeira vine (3) ornamental gingers (3) 	 African lovegrass air potato camphor laurel (3) giant Parramatta grass (3) groundsel bush (3) moth vine purple-leaved plectranthus
■ feral dog (3,4,6)	
resurrection plant	 Chinese celtis (3) climbing asparagus (3) creeping lantana (3) Dutchman's pipe (3) ruellia
prickly pear (3)	 balloon vine (3) bitou bush (2,3,4,5) fragrant thunbergia sicklethorn

- 1. Bold text identifies a 'Restricted' invasive plant or animal and its restriction category as show in Appendix 2, Table 2.
- 2. Refer to Appendix 2 Table 1 for all other 'Restricted' invasive plants and animals identified under the Biosecurity Act 2014.

Appendix 5 - Regional Alert Species

Table 1. Regional alert species, their restriction category and occurrence in adjoining local government areas.

'Restricted' invasive plants and animals occurring in adjoining local government areas	Restriction Category	Moreton Bay Regional Council	Gympie Regional Council	Somerset Regional Council	Noosa Shire Council
Invasive Plants					
African boxthorn (Lycium ferocissimum)	3			Υ	
alligator weed (Alternanthera philoxeroides)	3	Υ			
harrisia cactus (Harrisia martinii, H. tortuosa and H.pomanensis syn. Cereus pomanensis)	3			Υ	
prickly acacia (Vachellia nilotica)	3		Υ		
prickly pear – • velvety tree pear (Opuntia tomentosa)	3	Υ	Υ	Υ	Υ
• drooping tree pear (O. monacantha syn. O. vulgaris)	3		Υ		
• bunny ears (O. microdasys)	2,3,4,5	Υ	Υ	Υ	Υ
rat's tail grasses – American rat's tail grass (Sporobolus jacquemontii)	3	Y		Υ	
rubber vines – rubber vine (C. grandiflora)	3			Υ	
sicklepods – • hairy cassia (<i>S. hirsuta</i>)	3		Υ		
tobacco weed (Elephantopus mollisz)	3			Υ	
water mimosa (Neptunia oleracea and N. Plena)	2,3,4,5				Υ
Invasive Animals					
European rabbit (oryctolagus cuniculus)	3,4,5,6	Υ			
feral chital (axis) deer (Axis axis)	3,4,6	Υ	Υ		
red-eared slider turtle (<i>Trachemys scripta</i> elegans)	2,3,4,5,6	Υ			

Note:
1. Refer to Appendix 2 Table 2 for Restriction Category details.

Appendix 6 – All other 'Restricted' invasive plants and animals occurring in Queensland

Table 1. All other 'Restricted' Invasive Plants and Animals occurring in Queensland.

All other 'Restricted' Invasive Plants and Animals occurring in Queensland	Restriction Category
Invasive Plants	
asparagus fern (Asparagus scandens)	3
athel pine (Tamarix aphylla)	3
badhara bush (Gmelina elliptica)	3
belly-ache bush (Jatropha gossypiifolia and hybrids)	3
boneseed (Chrysanthemoides monilifera ssp. monilifera)	2,3,4,5
bridal veil (Asparagus declinatus)	3
candyleaf (Stevia ovata)	3
cane cactus (Austrocylindropuntia cylindrica)	3
Chilean needle grass (Nassella neesiana)	3
chinee apple (Ziziphus mauritiana)	3
Cholla cacti with the following names – • coral cactus (<i>Cylindropuntia fulgida</i>) • snake cactus (<i>C. spinosior</i>) • devil's rope pear (<i>C. imbricata</i>)	3
 Hudson pear (Cylindropuntia rosea and C. tunicata) jumping cholla (C. prolifera) 	2,3,4,5
elephant ear vine (Argyreia nervosa)	3
Eve's pin cactus (Austrocylindropuntia subulata)	3
flax-leaf broom (Genista linifolia)	3
gamba grass (Andropogon gayanus)	3
giant sensitive plant (Mimosa diplotricha var. diplotricha)	3
gorse (Ulex europaeus)	3
harungana (Harungana madagascariensis)	3
Koster's curse (Clidemia hirta)	2,3,4,5
limnocharis, yellow burrhead (Limnocharis flava)	2,3,4,5
Madras thorn (Pithecellobium dulce)	2,3,4,5
mesquites – honey mesquite (<i>Prosopis glandulosa</i>) mesquite or algarroba (<i>Prosopis pallida</i>) Quilpie mesquite (<i>Prosopis velutina</i>)	3
Mexican feather grass (Nassella tenuissima)	2,3,4,5
miconia with the following names – • Miconia calvescens • M. cionotricha • M. nervosa • M. racemosa	2,3,4,5

All other 'Restricted' Invasive Plants and Animals occurring in Queensland (continued)	Restriction Category
Invasive Plants	
mimosa pigra (<i>Mimosa pigra</i>)	2,3,4,5
Montpellier broom (Genista monspessulana)	3
parkinsonia (<i>Parkinsonia aculeata</i>)	3
prickly pear (O. elata)	2,3,4,5
rubber vines – ornamental rubber vine (Cryptostegia madagascariensis)	3
sicklepods – • foetid cassia (Senna tora) • sicklepod (S. obtusifolia)	3
silver-leaf nightshade (Solanum elaeagnifolium)	3
telegraph weed (Heterotheca grandiflora)	3
Invasive Animals	
barbary sheep (Ammotragus Iervia)	2,3,4,5,6
blackbuck antelope (Antilope cervicapra)	2,3,4,5,6
feral goat (Capra hircus)	3,4,6
sambar deer (Rusa unicolor, syn. Cervus unicolor)	2,3,4,5,6

Note:
1. Refer to Appendix 2 Table 2 for Restriction Category details.

Biosecurity considerations

A Biosecurity Consideration can be human health, social amenity, the economy or the environment.

Biosecurity matter

Biosecurity Matter is a living thing, other than a human or part of a human; or a pathogenic agent that can cause disease in a living thing, other than a human, or in a human, by the transmission of the pathogenic agent from the animal to the human; or a disease; or a contaminant.

Biosecurity risk

A Biosecurity Risk is a risk of any adverse effect on a biosecurity consideration, caused by or likely to be caused by biosecurity matter; or dealing with biosecurity matter or a carrier; or carrying out an activity relating to biosecurity matter or a carrier.

General biosecurity obligation

The General Biosecurity Obligation requires everyone to manage biosecurity risks under their control and take all reasonable and practical measures to minimise the likelihood of causing a biosecurity risk and minimise the adverse effects of dealing with a biosecurity matter or carrier.

Locally significant matter

An invasive plant or animals not recognised in the *Biosecurity Act 2014* and determined to pose a risk to local environment, social and economic values of the Sunshine Coast local government area.

Prohibited matter

Prohibited Matter is biosecurity matter not currently present or known to be present in Queensland which is prohibited because it may have a significant adverse effect on a biosecurity consideration if it did enter Queensland.

Restricted matter

Restricted Matter is biosecurity matter found in Queensland and may have adverse effects on a biosecurity consideration if conditions or restrictions under the *Biosecurity Act 2014* were not imposed.





