



DRAFT Sunshine Coast Council  
Local Government Area Biosecurity Plan



## ACKNOWLEDGEMENT

The *Draft Sunshine Coast Council Local Government Area Biosecurity Plan* 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.

Whilst the Sunshine Coast Council has facilitated the development of this Plan as a requirement under the Queensland Government's *Biosecurity Act 2014*, this 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 *Draft Sunshine Coast Environment and Liveability Strategy* focuses 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 species across our local government area is a critical component of this approach to ensure that available resources target the highest priority invasive species in an effective and efficient manner.

August 2017

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**[www.sunshinecoast.qld.gov.au](http://www.sunshinecoast.qld.gov.au)**

[mail@sunshinecoast.qld.gov.au](mailto:mail@sunshinecoast.qld.gov.au)

T 07 5475 7272 F 07 5475 7277

Locked Bag 72 Sunshine Coast Mail Centre Qld 4560

### Acknowledgements

Council wishes to thank all contributors and stakeholders involved in the development of this document.

### Disclaimer

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## BIOSECURITY PLANNING

### 1 Introduction

Invasive plants and animals may 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 *Draft Sunshine Coast Council Local Government Area Biosecurity Plan* (draft Plan), prepared in accordance with the Queensland Government *Biosecurity Act 2014* provides a framework for the management of high risk invasive biosecurity matter 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 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 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 of the strategic actions with the desired outcomes being sought by the state.

Sunshine Coast Council will coordinate the ongoing collaborative approach required to implement and report on the final plan.

## 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* (referred to as the Act).

The *Draft Sunshine Coast Council Local Government Area Biosecurity Plan 2017* provides contextual information on invasive species management and establishes a framework for cooperative and coordinated management that targets the highest risk invasive biosecurity matter and management responses most likely to succeed with available resources.

The draft Plan 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 final Plan will replace the *Sunshine Coast Local Government Area Pest Management Plan 2012-2016*.

Under the *Biosecurity Act 2014* everyone has a 'General Biosecurity Obligation' (GBO) 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.





The draft Plan defines management responses for each catchment area. A catchment management approach:

- recognises 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; and
- 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) has been recognised as a separate management unit as part of this approach.



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

### 3 What are invasive biosecurity matter?

The *Biosecurity Act 2014* 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.

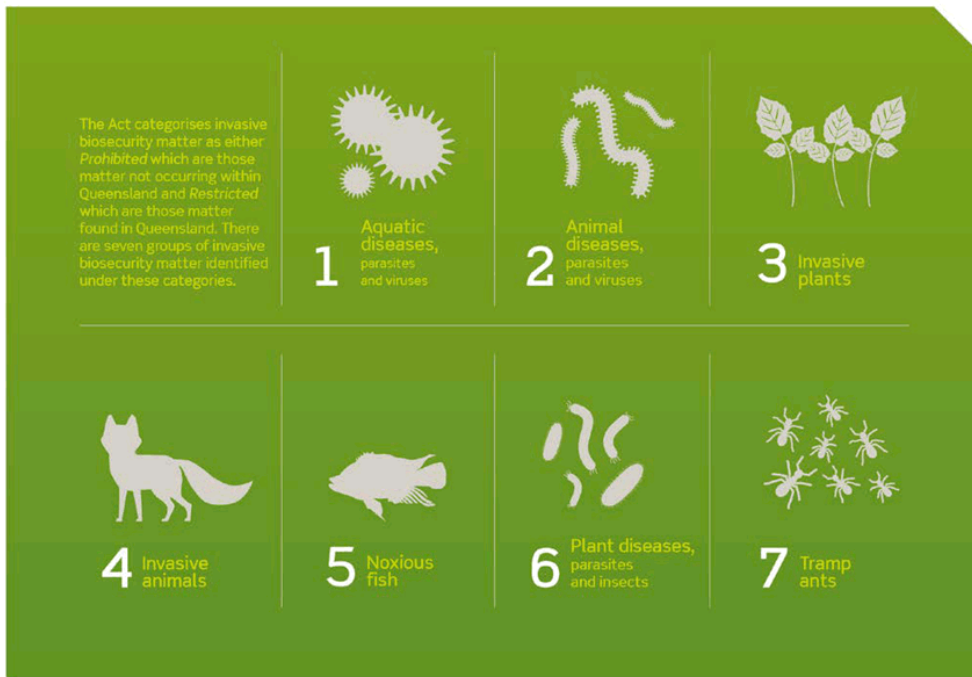


Figure 1. Prohibited and Restricted Matter categories

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. However, other invasive plants and animals considered to pose a threat to the Sunshine Coast Council local government area have also been considered and are referred to as 'Locally Significant' invasive plants and animals.



Figure 2. Number of invasive plants and animals considered in the draft Plan.

**What is not considered in this Plan?**

The draft 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, mosquitos, biting midges, cockroaches and pathogens of humans and domestic animals are also not considered in this draft Plan.



## 4 What threats do invasive plants and animals pose?

The Sunshine Coast is highly regarded for its natural and diverse landscapes. Collectively our impressive bushland and aquatic environments, fertile and productive agricultural areas and our growing community and residential areas, provide residents and visitors to the region with environment, economic, social, health and well-being values that contribute to our valued lifestyles and livelihoods.

Invasive plants and animals can have significant impacts on these environments, which are summarised in Table 1.

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
What are these?	Vegetated areas across the region managed for conservation, whether publicly or privately owned, and including our coastal reserves.	Creeks, rivers, wetlands and fringing riparian vegetation.	Horticulture, agriculture and primary production areas.	Community and residential areas where we live, work, play and connect with nature through our open space network.
What are the impacts of invasive plants?	<ul style="list-style-type: none"> <li>smother and transform ecosystems</li> <li>outcompete the recruitment of native species</li> <li>reduce the ecological values of natural areas</li> </ul>	<ul style="list-style-type: none"> <li>reduce waterway health</li> <li>alter physiochemical conditions</li> <li>interfere with ecological processes</li> <li>destroy infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>cause illness and injury to livestock</li> <li>degrade pastures by outcompeting desirable pasture species</li> <li>contribute to loss of production</li> </ul>	<ul style="list-style-type: none"> <li>reduce amenity and scenic values of natural areas</li> <li>cause health issues e.g. allergens</li> <li>reduce function and values of community open space areas</li> </ul>
What are the impacts of invasive animals?	<ul style="list-style-type: none"> <li>prey and displace native animal species for food and shelter</li> <li>degrade natural bushland and coastal areas</li> </ul>	<ul style="list-style-type: none"> <li>prey on native animal species</li> <li>outcompete native species for food, basking and nesting sites</li> <li>carry diseases and parasites that can infect native animals</li> </ul>	<ul style="list-style-type: none"> <li>outcompete domestic livestock</li> <li>contribute to loss of production</li> <li>prey, threaten and injure livestock</li> <li>carry diseases and parasites that can impact on livestock</li> </ul>	<ul style="list-style-type: none"> <li>destroy infrastructure</li> <li>cause traffic hazards proliferate and dominate retained vegetation patches</li> <li>dominate highly modified urban environments</li> <li>outcompete and prey on native animal species</li> </ul>

## 5 What legislative and planning frameworks exist for invasive plant and animal management?

The management of invasive plants and animals is undertaken by all levels of government. Table 2 outlines the relevant national, state and local legislation and policies that have been considered in the preparation of the draft Plan.

Table 2. Relevant national, state and local legislation and policies.

National	State	Local
<ul style="list-style-type: none"> <li>• <i>Environment Protection and Biodiversity Conservation Act 1999</i></li> <li>• <i>Australian Biodiversity Conservation Strategy 2010-2030</i></li> <li>• <i>Australian Weeds Strategy</i></li> <li>• <i>Australian Pest Animal Strategy</i></li> <li>• Convention of Biological Diversity</li> <li>• Ramsar Convention on Wetlands</li> <li>• The World Heritage Convention</li> </ul>	<ul style="list-style-type: none"> <li>• Queensland Government <i>Biosecurity Act 2014</i></li> <li>• <i>Queensland Weed and Pest Animal Strategy 2016-2020</i></li> <li>• <i>Queensland Wild Dog Management Strategy 2011-16</i></li> <li>• <i>Feral Deer Management Strategy 2013-2018</i></li> <li>• <i>Fisheries Act 1994</i> (noxious and exotic fishes)</li> <li>• <i>Nature Conservation Act 1992</i> (prohibited wildlife)</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Draft Sunshine Coast Environment and Liveability Strategy</i></li> <li>• <i>Sunshine Coast Planning Scheme 2014</i></li> </ul>

The principles and strategies for managing invasive plants and animals is provided in the *Queensland Government Weed and Pest Animal Strategy 2016-2020* and are considered core elements of biosecurity planning at local, regional and state levels. As such, these principles, strategies and desired outcomes (Table 3) have been considered in the development of the Plan to ensure the delivery of best practice at a local level and alignment of the strategic actions with the desired outcomes being sought by the state

Table 3. Desired outcomes pursuant to the *Queensland Government Weed and Pest Animal Strategy 2016-2020*

Desired Outcome	Objective
DO 1 Prevention and early detection	Establishment and spread of invasive biosecurity matter are prevented
DO 2 Monitoring and assessment	Reliable information is the basis for decision making
DO 3 Awareness and education	Stakeholders are informed, knowledgeable and have ownership of pest plant and pest animal management
DO 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
DO 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
DO 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.

## 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 emphasises the importance of shared ownership and long-term commitment for invasive species management.

The whole community is aware of their <b>general biosecurity obligation</b>	<b>Our knowledge and understanding</b> of invasive plants and animals is improved
Management of invasive plants and animals is <b>coordinated and collaborative</b>	<b>Biosecurity partnerships</b> are effective and ongoing
Over time there is an <b>evident reduction</b> in the occurrence of priority invasive plants and animals	There are <b>effective shared systems</b> capturing invasive species data and management responses
<b>Landholder extension and incentives</b> support action on biosecurity priorities.	<b>Emerging threats</b> are identified and responded to early and effectively
<b>Planning and operational activities</b> align with biosecurity priorities	Management of invasive plants and animals is <b>adaptive, innovative and responsive</b>

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

The *Biosecurity Act 2014* 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 identify the highest risk invasive plants and animals for the local government area, a risk assessment was undertaken on the 270 invasive plants and animals considered in the development of this plan.

The risk assessment considered:

<b>Impact ►</b>	The demonstrated or potential impact of each invasive species on four key environments / areas: 1. Terrestrial biodiversity and conservation environments 2. Riparian and aquatic environments 3. Community and residential areas 4. Agricultural and production areas
<b>Likelihood of further spread ►</b>	The likelihood of further spread of each invasive species if left unmanaged.

The results from the risk assessment were incorporated into a risk matrix which categorised the identified invasive plants and animals into 'very high', 'high', 'medium' and 'low' risk (Table 4).

Table 4. Risk assessment matrix

Likelihood of further spread	Combined impact assessment scores			
	Low (0-5)	Moderate (6-10)	High (11-15)	Very High (16-20)
5 (High)	Medium	Medium	High	Very High
4	Low	Medium	High	Very High
3	Low	Low	Medium	High
2	Low	Low	Low	Medium
1 (Low)	Low	Low	Low	Low

70 invasive plants and 8 invasive animals were assessed as having a 'very high', 'high' and 'medium' risk and are collectively referred to as **Priority Invasive Plants and Animals (PIPA)** (Table 5). The PIPA and their presence/absence in each catchment is presented in Table 6.

**Management of ‘low risk’ invasive plants and animals**

The remaining 192 invasive plants and animals were identified as ‘low risk’ in the risk assessment. Of these, 12 invasive plants are listed as ‘Restricted’ (Appendix 1 - Table 1 and 2) and the remaining 180 were ‘locally significant’ invasive plants and animals (Appendix 2 - Table 1).

Whilst these invasive plants and animals are not the priority focus of this Plan, a general biosecurity obligation still remains to manage species listed as ‘Restricted’ in accordance with the relevant legislative restriction category. For the ‘locally significant’ invasive plants and animals, intervention may be required if the spread potential and impact of the species on terrestrial biodiversity and conservation environments, aquatic and riparian environments, agriculture and production areas and community residential areas changes.

Table 5. Identification of Priority Invasive Plants and Animals.

Risk Assessment Outcome		
Very High Risk species ▶▶▶	Priority Invasive Plants and Animals	70 invasive plants 8 invasive animals
High Risk species ▶▶▶		
Medium risk species ▶▶▶		
Low risk species ▶▶▶	Low risk invasive plants and animals	192 invasive plants and animals





Table 6. Priority Invasive Plants and Animals and their presence/absence in each catchment.

Priority Invasive Plant and Animals	Sunshine Coast local government catchment areas					
	Pumicestone Passage	Upper Stanley	Mary	Mooloolah	Maroochy inc. part of Noosa	Coastal
<b>'Restricted' Invasive Plants</b>						
annual rag weed ( <i>Ambrosia artemisiifolia</i> )						
balloon vine ( <i>Cardiospermum grandiflorum</i> )						
basket asparagus ( <i>Asparagus aethiopicus</i> )						
bitou bush ( <i>Chrysanthemoides monilifera</i> ssp. <i>rotundifolia</i> )						
broad leaf pepper tree ( <i>Schinus terebinthifolius</i> )						
cabomba ( <i>Cabomba caroliniana</i> )						
camphor laurel ( <i>Cinnamomum camphora</i> )						
cats claw creeper ( <i>Dolichandra unguis-cati</i> )						
Chinese celltis ( <i>Celtis sinensis</i> )						
climbing asparagus ( <i>Asparagus africanus</i> & <i>A. plumosus</i> )						
creeping lantana ( <i>Lantana montevidensis</i> )						
Dutchman's pipe ( <i>Aristolochia</i> spp. other than native species)						
fireweed ( <i>Senecio madagascariensis</i> )						
groundsel bush ( <i>Baccharis halimifolia</i> )						
honey locust ( <i>Gleditsia triacanthos</i> including cultivars & varieties)						
hygrophila ( <i>Hygrophila costata</i> )						
hymenachne ( <i>Hymenachne amplexicaulis</i> and hybrids)						
kudzu ( <i>Pueraria montana</i> var. <i>lobata</i> syn. <i>P. lobata</i> , <i>P. triloba</i> other than in the Torres Strait Islands)						
madeira vine ( <i>Anredera cordifolia</i> )						
Mexican bean tree ( <i>Cecropia pachystachya</i> , <i>C. palmata</i> & <i>C. peltata</i> )						
ornamental gingers ( <i>Hedychium gardnerianum</i> , <i>h. coronarium</i> , <i>h. flavescens</i> )						
parthenium ( <i>Parthenium hysterophorus</i> )						
pond apple ( <i>Annona glabra</i> )						
prickly pear ( <i>Opuntia stricta</i> syn <i>O.inermis</i> )						
rats tail grass (common giant rat tail grass) ( <i>Sporobolus pyramidalis</i> & <i>S.nataensis</i> )						
rats tail grass (giant Parramatta grass) ( <i>Sporobolus fertilis</i> )						
sagittaria ( <i>Sagittaria platyphylla</i> )						
salvinia ( <i>Salvinia molesta</i> )						
Senegal tea ( <i>Gymnocoronis spilanthoides</i> )						
thunbergia ( <i>Thunbergia grandiflora</i> syn. <i>T. laurifolia</i> )						
water hyacinth ( <i>Eichhornia crassipes</i> )						
water lettuce ( <i>Pistia stratiotes</i> )						
<b>'Restricted' Invasive Animals</b>						
cat ( <i>Felis catus</i> ), other than a domestic cat						
dog ( <i>Canis familiaris</i> ), dingo ( <i>C. dingo</i> ) other than a domestic dog						
European fox ( <i>Vulpes vulpes</i> )						
feral pig ( <i>Sus scrofa</i> )						
feral rusa deer ( <i>Rusa timorensis</i> syn. <i>Cervus timorensis</i> )						
feral red deer ( <i>Cervus elaphus</i> )						
feral fallow deer ( <i>Dama dama</i> )						
<b>'Locally Significant' Invasive Plants</b>						
African lovegrass ( <i>Eragrostis curvula</i> )						
air potato ( <i>Discorea bulbifera</i> )						
barleria ( <i>Barleria prioniti</i> & <i>B. lupulin</i> )						
blue lotus ( <i>Nymphaea caerulea</i> subsp. <i>zanzibarensis</i> )						
blue morning glory ( <i>Ipomea indica</i> )						
buffel grass ( <i>Cenchrus ciliaris</i> )						
castor oil ( <i>Ricinus communis</i> )						
coastal morning glory ( <i>Ipomea cairica</i> )						
Columbian wax weed ( <i>Cuphea carthagenensis</i> )						
coral berry ( <i>Ardisia crenata</i> & <i>A. crispa</i> )						
coral berry ( <i>Rivina humilis</i> )						
coral berry or shoe button ardisia ( <i>Ardisia humilis</i> )						
crofton weed ( <i>Ageratina adenophora</i> )						
fragrant thunbergia ( <i>Thunbergia fragrans</i> )						
giant devils fig ( <i>Solanum chrysotrichum</i> syn. <i>S. hispidum</i> )						
giant tropical salvia ( <i>Brillantaisia lamium</i> )						
gidee-gidee ( <i>Abrus precatorius</i> subsp. <i>africanus</i> )						
glory lily ( <i>Gloriosa superba</i> )						
glycine ( <i>Neonotonia wightii</i> )						
golden trumpet tree ( <i>Tabebuia chrysotrichum</i> )						
grader grass ( <i>Themeda quadrivalvis</i> )						
hiptage ( <i>Hiptage benghalensis</i> )						
kidney leaf mud plantain ( <i>Heteranthera reniformis</i> )						
mistflower ( <i>Ageratina riparia</i> )						
moth vine ( <i>Araujia sericifera</i> )						
ochna ( <i>Ochna serrulata</i> )						
parrots feather ( <i>Myriophyllum aquaticum</i> )						
perennial horse gram ( <i>Macrotyloma axillare</i> var. <i>axillare</i> )						
praxelis ( <i>Praxelis clematidea</i> )						
purple-leaved plectranthus ( <i>Plectranthus ciliates</i> )						
resurrection plant ( <i>Bryophyllum pinnatum</i> )						
ruellia ( <i>Ruellia tweediana</i> , <i>R. squarrosa</i> & <i>R.simplex</i> )						
satinleaf ( <i>Chrysophyllum oliviforme</i> )						
sickle thorn ( <i>Asparagus falcatus</i> )						
sword pear ( <i>Acanthocereus tetragonus</i> )						
thatch grass ( <i>Hyparrhenia rufa</i> subsp. <i>rufa</i> )						
tree of heaven ( <i>Ailanthus altissima</i> )						
water poppy ( <i>Hydrocleys nymphoides</i> )						
<b>'Locally Significant' Invasive Animals</b>						
Indian myna ( <i>Acridotheres tristis</i> )						



## 8 What are our management responses?

To support a greater sense of shared responsibility and ownership of this Plan, management responses for each PIPA are identified for each catchment (where they are known to occur), including the Maroochy River (including part of the Noosa River catchment), Mooloolah River, Mary River, Upper Stanley River and Pumicestone Passage. In addition, the coastal environment which focuses on the beaches, dunes and adjacent lands (including other reserves and private properties directly adjoining the coastal dunal system) has been recognised as a separate management unit as part of this approach.

### Determining Catchment Management Responses

To determine a management response for PIPA present in each catchment, assessments were undertaken that considered the control feasibility and local management feasibility of each.

<b>Control feasibility</b> ►	Whether there are effective control measures available to manage the species and how easily a species could be managed.
<b>Local management feasibility</b> ►	The known abundance of the invasive species in the catchment.

These catchment specific assessments were integrated into a catchment management response matrix which identified five management responses (Table 7), which are defined in Table 8.

Table 7. Catchment management response matrix

Control feasibility	Local management feasibility				
	1	2	3	4	5
1	Localised management	Localised management	Localised management	Localised management	Localised management
2	Localised management	Localised management	Localised management	Targeted landscape management	Targeted landscape management
3	Localised management	Localised management	Targeted landscape management	Targeted landscape management	Contain spread and protect sites
4	Localised management	Targeted landscape management	Targeted landscape management	Contain spread and protect sites	Working towards eradication
5	Targeted landscape management	Targeted landscape management	Contain spread and protect sites	Working towards eradication	Eradicate

Limited controls  Effective controls  
 High abundance of invasive species in catchment  Low abundance of invasive species in catchment

Table 8. Catchment management responses

Catchment Management Responses	
<b>Eradicate</b>	This management response aims to remove the invasive species from the catchment area in all habitats across all tenures through: <ul style="list-style-type: none"> <li>destroying of all invasive plants including seedbanks</li> <li>destroying of all invasive animals including juveniles</li> </ul>
<b>Working towards eradication</b>	This management response aims to significantly reduce the extent of the invasive species in the catchment in all habitat areas across all tenures through: <ul style="list-style-type: none"> <li>prioritising sub-catchments to support eradication of invasive plants and animals at feasible sites</li> </ul>
<b>Contain spread and protect sites</b>	This management category aims to prevent the ongoing spread of the invasive species in the catchment, protect sites of high economic, environmental and social value and to progressively reduce the overall distribution/density through: <ul style="list-style-type: none"> <li>controlling all invasive plants and animals within and adjoining sites of high economic</li> </ul>
<b>Targeted landscape management</b>	This management category aims to reduce the overall impacts of the invasive species through targeted management where feasible through: <ul style="list-style-type: none"> <li>identifying feasible management sites/assets in the catchment where coordinated action from all local stakeholders would see positive management outcomes achieved</li> </ul>
<b>Localised management</b>	This management category identifies invasive species that would be targeted for coordinated management in the catchment if it is likely to impact the function of the site and/or as part of a wider

Table 9 summarises the management response for each PIPA and the catchment they are known to occur in. PIPA that are not known to be present within a particular catchment but are occurring within a neighbouring catchment are recognised as **Alert Catchment Invasive Plants and Animals (ACIPA)** and are identified in Table 9 by a red asterisk (\*). The management response for these alert species seeks to:

- prevent the entry of this PIPA into the adjoining catchment area
- undertake targeted public awareness on 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 plant and animals.

Invasive species management is delivered through planning, research and monitoring, targeted control and on-ground actions, community capacity building, community engagement and education and regulation activities across all these levels.

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



Chart 1 - Invasive plants and animals 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 the respective catchment management response for each are outlined in Table 9. Individual catchment management response frameworks can be viewed in Appendix 3.

Table 9. Priority Invasive Plant and Animals and their respective catchment management response.

Key:

Eradicate	Working towards eradication	Contain Spread and Protect Sites	Targeted Management	Localised Management	Alert Catchment
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PRIORITY INVASIVE PLANTS AND ANIMALS	Sunshine Coast local government catchments					
	Pumicestone Passage	Upper Stanley	Mary	Mooloolah	Maroochy inc. part of Noosa	Coastal
<b>'Restricted' Invasive Plants</b>						
annual rag weed ( <i>Ambrosia artemisiifolia</i> )						-
balloon vine ( <i>Cardiospermum grandiflorum</i> )						
basket asparagus ( <i>Asparagus aethiopicus</i> )						
bitou bush ( <i>Chrysanthemoides monilifera</i> ssp. <i>rotundifolia</i> )	-	-	-	-	-	
broad leaf pepper tree ( <i>Schinus terebinthifolius</i> )						
cabomba ( <i>Cabomba caroliniana</i> )		*				-
camphor laurel ( <i>Cinnamomum camphora</i> )						
cats claw creeper ( <i>Dolichandra unguis-cati</i> )						
Chinese celtis ( <i>Celtis sinensis</i> )						
climbing asparagus ( <i>Asparagus africanus</i> & <i>A. plumosus</i> )						
creeping lantana ( <i>Lantana montevidensis</i> )						
Dutchman's pipe ( <i>Aristolochia</i> spp. other than native species)						
fireweed ( <i>Senecio madagascariensis</i> )						-
groundsel bush ( <i>Baccharis halimifolia</i> )						
honey locust ( <i>Gleditsia triacanthos</i> including cultivars & varieties)	-	*		*		-
hygrophila ( <i>Hygrophila costata</i> )		*				-
hymenachne ( <i>Hymenachne amplexicaulis</i> and hybrids)		*				-
kudzu ( <i>Pueraria montana</i> var. <i>lobata</i> syn. <i>P. lobata</i> , <i>P. triloba</i> other than in the Torres Strait Islands)		*		*		-
madeira vine ( <i>Anredera cordifolia</i> )						
Mexican bean tree ( <i>Cecropia pachystachya</i> , <i>C. palmata</i> & <i>C. peltata</i> )		*	*		*	-
ornamental ginger ( <i>Hedychium gardnerianum</i> , <i>h. coronarium</i> , <i>h. flavescens</i> )						
parthenium ( <i>Parthenium hysterophorus</i> )					*	-
pond apple ( <i>Annona glabra</i> )	-	-	*	*		-
prickly pear ( <i>Opuntia stricta</i> syn. <i>O. inermis</i> )		*	*			
rats tail grass (common giant rat tail grass) ( <i>Sporobolus pyramidalis</i> & <i>S. nataensis</i> )						-
rats tail grass (giant Parramatta grass) ( <i>Sporobolus fertilis</i> )		*				
sagittaria ( <i>Sagittaria platyphylla</i> )	*	*				-
salvinia ( <i>Salvinia molesta</i> )						-
Senegal tea ( <i>Gymnocoronis spilanthoides</i> )		*	*		*	-
thunbergia ( <i>Thunbergia grandiflora</i> syn. <i>T. laurifolia</i> )						
water hyacinth ( <i>Eichhornia crassipes</i> )						-
water lettuce ( <i>Pistia stratiotes</i> )	-					-
<b>'Restricted' Invasive Animals</b>						
cat ( <i>Felis catus</i> ), other than a domestic cat						
dog ( <i>Canis familiaris</i> ), dingo ( <i>C. dingo</i> ) other than a domestic dog <i>Canis familiaris</i> , <i>C. lupus familiaris</i> , <i>C. lupus dingo</i>						
European fox ( <i>Vulpes vulpes</i> )						
feral pig ( <i>Sus scrofa</i> )						-
feral rusa deer ( <i>Rusa timorensis</i> syn. <i>Cervus timorensis</i> )				*		-
feral red deer ( <i>Cervus elaphus</i> )				*		-
feral fallow deer ( <i>Dama dama</i> )	-	*		*		-
<b>'Locally Significant' Invasive Plants</b>						
African lovegrass ( <i>Eragrostis curvula</i> )		*	*			
air potato ( <i>Discorea bulbifera</i> )		*	*		*	-
barleria ( <i>Barleria prioniti</i> & <i>B. lupulin</i> )	-	*	-			
blue lotus ( <i>Nymphaea caerulea</i> subsp. <i>zanzibarensis</i> )		*				-
blue morning glory ( <i>Ipomea indica</i> )						
buffel grass ( <i>Cenchrus ciliaris</i> )	-	*		*	*	-
castor oil ( <i>Ricinus communis</i> )						
coastal morning glory ( <i>Ipomea cairica</i> )		*				
Columbian wax weed ( <i>Cuphea carthagenensis</i> )	*	*				-
coral berry ( <i>Ardisia crenata</i> & <i>A. crispa</i> )						
coral berry ( <i>Rivina humilis</i> )						
coral berry or shoe button ardisia ( <i>Ardisia humilis</i> )						
crofton weed ( <i>Ageratina adenophora</i> )						-
fragrant thunbergia ( <i>Thunbergia fragrans</i> )						-
giant devils fig ( <i>Solanum chrysotrichum</i> syn. <i>S. hispidum</i> )						-
giant tropical salvia ( <i>Brillantaisia lamium</i> )		*		*		-
gidee-gidee ( <i>Abrus precatorius</i> subsp. <i>africanus</i> )		*	*			
glory lily ( <i>Gloriosa superba</i> )			*			
glycine ( <i>Neonotonia wightii</i> )						
golden trumpet tree ( <i>Tabebuia chrysotrichum</i> )	*	*		*		-
grader grass ( <i>Themeda quadrivalvis</i> )		*		*		-
hiptage ( <i>Hiptage benghalensis</i> )	-	-	*	*		-
kidney leaf mud plantain ( <i>Heteranthera reniformis</i> )						-
mistflower ( <i>Ageratina riparia</i> )						-
moth vine ( <i>Araujia sericifera</i> )						
ochna ( <i>Ochna serrulata</i> )						
parrots feather ( <i>Myriophyllum aquaticum</i> )						-
perennial horse gram ( <i>Macrotyloma axillare</i> var. <i>axillare</i> )						
praxelis ( <i>Praxelis clematidea</i> )			*	*		
purple-leaved plectranthus ( <i>Plectranthus ciliates</i> )	-	-	*	*		
resurrection plant ( <i>Bryophyllum pinnatum</i> )						
ruellia ( <i>Ruellia tweediana</i> , <i>R. squarrosa</i> & <i>R. simplex</i> )						
satinleaf ( <i>Chrysophyllum oliviforme</i> )	*	*	*		*	-
sickle thorn ( <i>Asparagus falcatus</i> )	-	*		*	*	
sword pear ( <i>Acanthocereus tetragonus</i> )	-	-	-	-	-	-
thatch grass ( <i>Hyparrhenia rufa</i> subsp. <i>rufa</i> )		*		*		-
tree of heaven ( <i>Ailanthus altissima</i> )	-	-	-	-	-	-
water poppy ( <i>Hydrocleys nymphoides</i> )		*	*		*	-
<b>'Locally Significant' Invasive Animals</b>						
Indian myna ( <i>Acridotheres tristis</i> )						



## 11 What are the other management considerations?

In addition to the proposed management responses for the PIPA and ACIPA, there is a need to consider other biosecurity threats on our local government area border and from both within and outside Queensland, which are summarised below.

### ***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 local government area due to their proximity of occurrence and elevated likelihood of entry.

'Restricted' invasive plants and animals not known to be occurring within the Sunshine Coast local government area but are known to occur within either Gympie Regional; Somerset Regional; Moreton Regional; and Noosa Council local government areas are considered **Regional Alert Invasive Plants and Animals (RAIPA)** (Appendix 4, 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 will 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 Queensland***

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 local government area and neighbouring local government areas (Appendix 5, Table 1).

As these 'Restricted' invasive plants and animals are not currently occurring in our local government area, the entry of these species into the local government area requires an immediate eradication response with the aim to contain the spread and destroy all incursions. This response will require a collaborative effort by local and state government and other stakeholder 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 Biosecurity Queensland with local government and other stakeholders providing support as required.





## 12 What are our strategic actions?

Table 10 outlines the proposed strategic actions to manage invasive plants and animals across the Sunshine Coast Council local government area (SCC LGA), with a focus on identified Priority Invasive Plants and Animals and Regional Alert Invasive Plants and Animals. The strategic actions have been grouped under six areas of biosecurity management.

The scope of each strategic action is provided to guide stakeholders in the development of their tailored biosecurity implementation plans, which will ensure that the tasks undertaken contribute to the delivery of this Plan and the desired outcomes of the *Queensland Pest Animal and Weed Management Strategy 2016-2020* (refer to table 3, page 10).

### Tracking Progress

Monitoring and tracking our progress are critical to ensure the effectiveness of the final Biosecurity Plan. A number of measures have been prepared to enable regular reporting which will be undertaken in partnership with stakeholders. Sunshine Coast Council will coordinate the ongoing collaborative approach required to implement and report on this Plan. This is proposed to be facilitated through the establishment of a biosecurity implementation group, with representation from key stakeholders who would 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.

Table 10. Proposed strategic actions

Strategic Actions	Desired Outcomes						Measures
	1	2	3	4	5	6	
<b>Planning</b>							
<b>1. Integrate the SCC LGA Biosecurity Plan into planning, operational and regulatory instruments and processes.</b> <i>Updating and reflecting the strategic directions of the SCC LGA Biosecurity Plan in planning, policy, regulation, project development and delivery and procurement documentation and processes.</i>							<ul style="list-style-type: none"> <li>Number of documents and organisations that reference the <i>SCC LGA Biosecurity Plan</i></li> <li>Percentage of external Biosecurity Reference Group organisations that have developed Biosecurity Implementation Plan or similar that reference the <i>SCC LGA Biosecurity Plan</i></li> <li>Number of key identified organisational documents reference the <i>SCC LGA Biosecurity Plan</i> (requires baseline survey)</li> </ul>
<b>2. Establish, strengthen and participate in biosecurity planning and communication networks.</b> <i>Building stronger organisational and stakeholder relationships that assist with the delivery of biosecurity management including reporting, identification of emerging issues and opportunities to collaborate.</i>							<ul style="list-style-type: none"> <li>Number of stakeholder forums and working groups etc.</li> <li>Percentage of external Biosecurity Reference Group stakeholders participating in other biosecurity forums and groups</li> <li>Number of collaborative initiatives developed and delivered</li> </ul>
<b>Research and monitoring</b>							
<b>3. Improve our collective understanding of the biology, ecology, impacts and control measures for ARIBM and PIPA and emerging issues.</b> <i>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.</i>							<ul style="list-style-type: none"> <li>Number of professional training opportunities</li> <li>Number of community education opportunities</li> <li>Number of management and research projects developed and being implemented</li> <li>Percentage improvement in management knowledge of PIPA and RAIPA (requires baseline survey)</li> </ul>
<b>4. Improve and integrate existing data capture systems and access to and dissemination of this information.</b> <i>Improving the way invasive species data is collected, stored and shared both within and outside organisations.</i>							<ul style="list-style-type: none"> <li>Number of inter data sharing events</li> <li>Number of inter and intra shared data connections (requires baseline survey)</li> </ul>
<b>5. Monitor, evaluate and report on the effectiveness of catchment management programs and new threats.</b> <i>Improving our understanding of changes in the extent of invasive species to inform surveillance and management programs and ensure their effectiveness in delivering both short and long term outcomes.</i>							<ul style="list-style-type: none"> <li>Number of projects delivered with measured positive outcomes</li> <li>Number of research or review project recommendations being implemented</li> </ul>
<b>Targeted control and on-ground actions</b>							
<b>6. Prevent the entry of RAIPA into Sunshine Coast local government area.</b> <i>Development and implementation of strategic education, partnership, compliance, and collaborative on-ground projects and initiatives that target RAIPA at the local government borders.</i>							<ul style="list-style-type: none"> <li>Number of preventative actions</li> <li>Number of reported sightings</li> <li>Number of incursion responses</li> <li>Number of collaborative projects between two or more organisations</li> </ul>
<b>7. Reduce the extent of PIPA within the Sunshine Coast</b> <i>Development and implementation of strategic education, compliance, and collaborative on-ground management projects and initiatives that target PIPA within the local government area.</i>							<ul style="list-style-type: none"> <li>Number of targeted projects delivered</li> <li>Percentage reductions from targeted projects</li> <li>Number of collaborative projects between two or more organisations</li> </ul>
<b>8. Prevent the spread of PIPA between catchments.</b> <i>Development and implementation of strategic education, partnership, compliance, and collaborative on-ground projects and initiatives that respond to the spread of PIPA between catchments.</i>							<ul style="list-style-type: none"> <li>Number of preventative actions</li> <li>Number of reported sightings</li> <li>Number of incursion responses</li> <li>Number of collaborative projects between two or more organisations</li> </ul>

Strategic Actions (cont'd)	Desired Outcomes						Measures
	1	2	3	4	5	6	
<b>Community capacity building</b>							
<b>9. Develop incentives that support and assist the community to work towards the catchment management responses.</b> <i>Improving existing and developing new incentives that provide tools and resources to support the community target priority invasive biosecurity matter.</i>							<ul style="list-style-type: none"> <li>Number of incentives and support programs</li> <li>Number of properties having received incentives</li> <li>Number of occasions of loan management/control equipment being utilised</li> </ul>
<b>10. Strengthen biosecurity partnerships with not-for-profit community, industry and specialist groups.</b> <i>Recognising and strengthening existing formal and non-formal partnerships and developing new partnership opportunities to collaboratively deliver on biosecurity management priorities.</i>							<ul style="list-style-type: none"> <li>Number of existing partnerships</li> <li>Number of new partnerships</li> </ul>
<b>Community engagement and education</b>							
<b>11. Increase community awareness of PIPA, RAIPA and other invasive plants and animals in general.</b> <i>Educating the community and identifying opportunities to develop targeted awareness campaigns that promote the General Biosecurity Obligation and priority invasive biosecurity matter.</i>							<ul style="list-style-type: none"> <li>Number of people engaged through identified events, submissions received, submissions resulting in change, website visits</li> <li>Number of engagement/media platforms used</li> </ul>
<b>Regulation</b>							
<b>12. Develop and implement compliance procedures, policies and programs that support the implementation of the Biosecurity Plan.</b> <i>Reviewing and updating local laws, development compliance processes, and biosecurity orders, including education on these matters.</i>							<ul style="list-style-type: none"> <li>Number of prevention and control programs in the region</li> <li>Number of regulatory actions</li> </ul>

### 13 What role can you play?

Under the *Biosecurity Act 2014* everyone has a 'General Biosecurity Obligation' (GBO) 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.

Table 11 identifies the general roles and responsibilities of the major stakeholder groups which can contribute to invasive species management.

There are some 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 1, 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 of the prohibited matter and not make the situation worse.

Table 11. Major stakeholders and roles and responsibilities

URBAN, RURAL RESIDENTIAL AND LIFESTYLE LANDHOLDERS
<ul style="list-style-type: none"> <li>• Make informed choices when selecting plants for their gardens</li> <li>• Responsibly dispose of garden and other green waste</li> <li>• Responsibly manage domestic pets</li> <li>• Clean vehicles, boats, trailer etc., if they have the potential to spread invasive biosecurity matter</li> <li>• Participate in community nature conservation partnership programs</li> <li>• Cooperate with local and state government in delivering the <i>Sunshine Coast Local Government Area Biosecurity Plan</i></li> </ul>
SUNSHINE COAST COUNCIL
<ul style="list-style-type: none"> <li>• Enforce and monitor the <i>Sunshine Coast Local Government Area Biosecurity Plan</i></li> <li>• Develop a <i>Sunshine Coast Council Biosecurity Plan Implementation Plan</i> that identifies the tasks which council intends to deliver.</li> <li>• Coordinate and facilitate an external Biosecurity Reference Group Guide</li> <li>• Inform and educate personnel and contractors on general biosecurity obligations and local biosecurity matter priorities</li> <li>• Educate, encourage and assist NRM groups, community groups, landholders and land managers in invasive plant and animal management</li> <li>• Partner with, and collaborate with community groups, industry, state and federal government and other local governments</li> <li>• Follow best practice for invasive plant and animal management in line with relevant legislation, policy, guidelines and codes of practice</li> <li>• Prioritise resources to address <i>Priority Invasive Plants and Animals</i> and <i>Regional Alert Invasive Plants and Animals</i></li> </ul>

**WATER AND UTILITY MANAGERS (SEQ WATER, UNITY WATER, ENERGEX)**

- Develop an organisational Biosecurity Plan Implementation Plan that identifies the tasks to respond to invasive species management for responsible lands and activities
- 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 matter priorities
- Prioritise resources to address *Priority Invasive Plants and Animals* and *Regional Alert Invasive Plants and Animals*

**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 matter priorities
- Research, educate, monitor and establish partnerships, with local catchment stakeholders

**DEPARTMENT OF TRANSPORT AND MAIN ROAD AND OTHER TRANSPORT CORRIDOR MANAGERS (QRAIL)**

- Develop an organisational Biosecurity Plan Implementation Plan that identifies the tasks to respond to invasive species management for responsible lands and activities
- 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 matter priorities
- Prioritise resources to address *Priority Invasive Plants and Animals* and *Regional Alert Invasive Plants and Animals*

**ALL QUEENSLAND GOVERNMENT AGENCIES**

- Develop an organisational Biosecurity Plan Implementation Plan that identifies the tasks to respond to invasive species management for responsible lands and activities
- 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 matter priorities
- Prioritise resources to address *Priority Invasive Plants and Animals* and *Regional Alert Invasive Plants and Animals*

**TERTIARY AND OTHER EDUCATION RESEARCH FACILITIES**

- Undertake research on invasive plants and animals
- 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 matter 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.
- Inform and educate personnel and contractors on general biosecurity obligations and local biosecurity matter priorities
- Follow best practice for invasive plant and animal management in line with relevant legislation, policy, guidelines and codes of practice



**PLANTATION INDUSTRIES**

- Develop an organisational Biosecurity Plan Implementation Plan that identifies the tasks to respond to invasive species management for responsible lands and activities
- 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 matter priorities
- Prioritise resources to address *Priority Invasive Plants and Animals* and *Regional Alert Invasive Plants and Animals*

**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 matter 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 Invasive Plants and Animals*

**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
- 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 on invasive biosecurity matter
- 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 matter priorities
- Prioritise resources to address *Priority Invasive Plants and Animals* and *Regional Alert Invasive Plants and Animals*

## Appendix 1 – Low risk ‘Restricted’ invasive plants and animals and restriction categories

Table 1 – All other ‘Restricted’ invasive plants and animals identified as ‘low risk’ and the relevant restriction category.

RESTRICTED MATTER	Restriction Category
<b>Invasive Plants</b>	
African fountain grass ( <i>Cenchrus setaceus</i> syn. <i>Pennisetum setaceum</i> )	3
African tulip tree ( <i>Spathodea campanulata</i> )	3
blackberry ( <i>Rubus anglocandicans</i> , <i>Rubus fruticosus</i> aggregate)	3
lantana - common ( <i>Lantana camara</i> )	3
mother of millions ( <i>Bryophyllum delagoense</i> syn. <i>B. tubiflorum</i> , <i>Kalanchoe delagoensis</i> )	3
mother of millions hybrid ( <i>Bryophyllum x houghtonii</i> )	3
privets—broad-leaf privet, tree privet ( <i>Ligustrum lucidum</i> )	3
privets—small-leaf privet, Chinese privet ( <i>L. sinense</i> )	3
Singapore daisy ( <i>Sphagneticola trilobata</i> )	3
willows (all <i>Salix</i> spp. other than <i>S. babylonica</i> , <i>S. x calodendron</i> and <i>S. x reichardtii</i> )	3
yellow bells ( <i>Tecoma stans</i> )	3
yellow oleander, Captain Cook tree ( <i>Cascabela thevetia</i> syn. <i>Thevetia peruviana</i> )	3



Table 2. Restriction categories for Restricted Matter in accordance with the *Biosecurity Act 2014*.

Categories	Restrictions or actions	Examples
1 2	<p>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 don't possess a permit for the restricted matter.</p> <p>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.</p>	<p><b>Category 1</b> includes red imported fire ants, electric ants, Asian honey bees, and certain animal diseases, aquatic diseases and pathogens.</p> <p><b>Category 2</b> restricted matter includes certain noxious fish, weeds and pest animals.</p>
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 such as 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 2 – Low risk locally significant invasive plants and animals

Table 1 – All 'low risk' 'Locally Significant' invasive plants and animals.

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

'Locally Significant' Invasive Plants
devil's apple ( <i>Solanum capsicoides</i> )
duranta ( <i>Duranta repens</i> and <i>Duranta erecta</i> )
dwarf papyrus ( <i>Cyperus papyrus</i> 'Nanus')
easter cassia ( <i>Senna pendula</i> var. <i>glabrata</i> )
elephant grass, bana grass, cane grass ( <i>Pennisetum purpureum</i> )
empress tree ( <i>Paulownia tomentosa</i> )
fishbone fern ( <i>Nephrolepis cordifolia</i> )
fishpole bamboo ( <i>Phyllostachys aurea</i> )
flame vine ( <i>Pyrostegia venusta</i> )
flax-leaf fleabane ( <i>Coryza bonariensis</i> )
gazania ( <i>Gazania linearis</i> )
golden dodder ( <i>Cuscuta campestris</i> )
golden trumpet tree ( <i>Handroanthus chrysotrichus</i> syn. <i>Tabebuia chrysotrichum</i> )
goosefoot ( <i>Syngonium neglectum</i> )
green cestrum ( <i>Cestrum Parqui</i> )
green leaf desmodium ( <i>Desmodium intortum</i> )
guinea grass, green panic ( <i>Megathyrsus maximus</i> var. <i>maximus</i> )
hairy wandering jew ( <i>Commelina benghalensis</i> )
hamil grass ( <i>Megathyrsus maximus</i> 'Hamil')
hemp ( <i>Furcraea selloa</i> )
Himalayan magnolia ( <i>Magnolia champaca</i> )
ice-cream bean tree ( <i>Inga edulis</i> )
Indian hawthorn ( <i>Rhaphiolepis indica</i> )
inkweed ( <i>Phytolacca octandra</i> )
jacaranda ( <i>Jacaranda mimosifolia</i> )
Japanese honeysuckle ( <i>Lonicera japonica</i> )
Japanese sunflower, Mexican sunflower ( <i>Tithonia diversifolia</i> )
jointed rush ( <i>Juncus articulatus</i> )
khaki weed ( <i>Alternanthera pungens</i> )
kikuyu grass ( <i>Pennisetum clandestinum</i> )
Kittatinny blackberry ( <i>Rubus bellobatus</i> )
leaf cactus ( <i>Pereskia aculeata</i> )
leucaena ( <i>Leucaena leucocephala</i> )
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>Crocsmia 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</i> )
night jessamine ( <i>Cestrum nocturnum</i> )
nodding thistle ( <i>Carduus nutans</i> )
noogoora burr ( <i>Xanthium pungens</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</i> syn. <i>Brachiaria mutica</i> )
paspalum ( <i>Paspalum dilatatum</i> , <i>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> )
purple joyweed ( <i>Alternanthera brasiliana</i> )

'Locally significant' Invasive Plants
purple succulent ( <i>Callisia fragrans</i> )
purple top ( <i>Verbena</i> spp.)
Queensland maple ( <i>Flindersia brayleyana</i> )
Queensland blue couch ( <i>Digitaria didactyla</i> )
Queensland umbrella tree ( <i>Schefflera actinophylla</i> )
rambling dock ( <i>Acetosa sagittata</i> )
rattlepod ( <i>Crotalaria grahamiana</i> )
red cherry guava ( <i>Psidium cattleianum</i> var. <i>cattleianum</i> )
red Christmas pride ( <i>Stephanophysum longifolium</i> )
red natal grass ( <i>Melinis repens</i> )
red salvia ( <i>Salvia coccinea</i> )
red shank, needle burr ( <i>Amaranthus spinosus</i> )
rhodes grass ( <i>Chloris gayana</i> )
rosewood, tipuana ( <i>Tipuana tipu</i> )
rubber tree ( <i>Ficus elastica</i> )
running bamboo ( <i>Phyllostachys pubescens</i> and <i>Arundinaria</i> spp.)
saffron thistle ( <i>Carthamus lanatus</i> )
sesbania pea ( <i>Sesbania cannabina</i> )
shrubby stylo ( <i>Stylosanthes scabra</i> )
signal grass ( <i>Brachiaria decumbens</i> )
silverleaf desmodium ( <i>Desmodium uncinatum</i> )
siratro ( <i>Macroptilium atropurpureum</i> )
slash pine ( <i>Pinus elliotii</i> )
snake weed, dark blue snake weed, white snake weed ( <i>Stachytarpheta jamaicensis</i> , <i>S. cayennensis</i> , <i>S. australis</i> )
South African pigeon grass ( <i>Setaria sphacelata</i> )
spear thistle ( <i>Cirsium vulgare</i> )
spiny emex ( <i>Emex australis</i> )
Squirrel tail or white shrimp plant ( <i>Justicia betonica</i> )
star burr ( <i>Acanthospermum hispidum</i> )
stinking passionflower ( <i>Passiflora foetida</i> )
stinking roger ( <i>Tagetes minuta</i> )
swamp foxtail ( <i>Pennisetum alopecuroides</i> )
Swedish ivy ( <i>Plectranthus verticillatus</i> )
sweet viburnum 'Emerald Lustre' ( <i>Viburnum odoratissimum</i> var. <i>awabuki</i> )
Taiwan lily ( <i>Lilium formosanum</i> )
tall fleabane ( <i>Conyza sumatrensis</i> )
taro ( <i>Colocasia esculenta</i> )
thornapples ( <i>Datura</i> spp.)
thorny poinciana or mysore thorn ( <i>Caesalpinia decapetala</i> )
tobacco bush ( <i>Solanum erianthum</i> )
urena ( <i>Urena lobata</i> )
variegated thistle ( <i>Silybum marianum</i> )
wandering Jew or white flowered wandering Jew ( <i>Tradescantia fluminensis</i> syn. <i>Tradescantia albiflora</i> )
watercress ( <i>Rorippa nasturtium-aquaticum</i> )
weedy sporobolus grasses, Parramatta grass ( <i>Sporobolus africanus</i> )
weeping fig, Benjamin fig ( <i>Ficus benjamina</i> )
West Indies guava ( <i>Psidium guineense</i> )
whisky grass ( <i>Andropogon virginicus</i> )
white mulberry ( <i>Morus alba</i> )
white oak ( <i>Grevillea baileyana</i> )
white passionflower ( <i>Passiflora subpeltata</i> )
wild iris ( <i>Dietes</i> spp.)
wild tobacco tree ( <i>Solanum mauritianum</i> )
Wynn cassia ( <i>Chamaecrista rotundifolia</i> )
yellow guava ( <i>Psidium guajava</i> )
yellow waterlily ( <i>Nymphaea mexicana</i> )
yellowberry ( <i>Rubus ellipticus</i> )
zebrine ( <i>Tradescantia zebrina</i> )
'Locally significant' Invasive Animals
Asian House Gecko ( <i>Hemidactylus frenatus</i> )
cane toad ( <i>Bufo marinus</i> )
feral wapiti deer ( <i>Cervus Canadensis</i> )

### Appendix 3 – Catchment management response

Table 1 - Mooloolah River Catchment Management Response Matrix (**bold** = 'restricted' invasive plant or animal)

Control Feasibility	Local Management Feasibility					Not present in catchment but present in adjoining catchment ▼ * <b>EARLY DETECTION/ PREVENTION = ALERT CATCHMENT SPECIES</b>  <b>MAROOCHY CATCHMENT</b> grader grass hiptage honey locust kudzu purple-leaved plectranthus pond apple feral rusa deer feral red deer feral fallow deer  <b>PUMICESTONE CATCHMENT</b> giant tropical salvia grader grass thatch grass  <b>UPPER STANLEY CATCHMENT</b> feral rusa deer feral red deer  <b>MARY CATCHMENT</b> buffel grass honey locust kudzu feral rusa deer feral red deer feral fallow deer sickle thorn  • feral pig
	1	2	3	4	5	
1	• blue lotus		• glory lily	• parrots feather		
2	• glycine • perennial horse gram	• <b>cabomba</b> • castor oil • Columbian wax weed • kidney leaf mud plantain	• blue morning glory		• water poppy	
3		• giant devils fig  • <b>European fox</b> • <b>feral cat</b> • <b>feral dog</b>	• camphor laurel • cats claw creeper • coastal morning glory • coral berry ( <i>A. crenata</i> syn. <i>A. crispa</i> ) • coral berry ( <i>R. humilis</i> ) • coral berry or shoe button • ardisia ( <i>A. elliptica</i> syn. <i>A. humilis</i> ) • crofton weed • common giant rat tail grass • giant Parramata grass • gidee-gidee • groundsel bush • madeira vine • mistflower • moth vine • ochna • ornamental gingers • water hyacinth  • Indian myna	• air potato • water lettuce	• African lovegrass • salvinia	
4		• broad leaf pepper tree	• barleria • basket asparagus	• <b>Chinese celtis</b> • resurrection plant	• climbing asparagus • creeping lantana • Dutchman's pipe • golden trumpet tree • ruellia  • feral pig	
5				• <b>hygrophila</b>	• annual rag weed • balloon vine • bitou bush^ • fireweed • fragrant thunbergia • hymenachne • Mexican bean tree • parthenium • praxelis • prickly pear • satinleaf • saggitaria • senegal tea • thunbergia	

Table 2 – Mary River Catchment Management Response Assessment (**bold = 'restricted' invasive plant or animal**)

Control Feasibility	Local Management Feasibility					Not present in catchment but present in adjoining catchment ▼ * <b>EARLY DETECTION/ PREVENTION = ALERT CATCHMENT SPECIES</b>  <b>MAROOCHEY CATCHMENT</b> gidee-gidee glory lily hiptage pond apple prickly pear purple-leaved plectranthus praxelis Senegal tea  <b>MOOLOOLAH CATCHMENT</b> African love grass air potato gidee-gidee glory lily Mexican bean tree praxelis prickly pear satin leaf water poppy  <b>UPPER STANLEY CATCHMENT</b> praxelis
	1	2	3	4	5	
1	<ul style="list-style-type: none"> <li>blue lotus</li> </ul>			<ul style="list-style-type: none"> <li>parrots feather</li> </ul>		
2	<ul style="list-style-type: none"> <li>castor oil</li> <li>glycine</li> <li>perennial horse gram</li> </ul>	<ul style="list-style-type: none"> <li>Columbian wax weed</li> </ul>			<ul style="list-style-type: none"> <li>cabomba</li> <li>kidney leaf mud plantain</li> </ul>	
3		<ul style="list-style-type: none"> <li>coral berry (<i>R. humilis</i>)</li> <li>ruellia</li> <li>giant devils fig</li> <li>European fox</li> <li>feral cat</li> <li>feral dog</li> </ul>	<ul style="list-style-type: none"> <li>blue morning glory</li> <li>camphor laurel</li> <li>cats claw creeper</li> <li>common giant</li> <li>rat tail grass</li> <li>crofton weed</li> <li>giant Parramata grass</li> <li>groundsel bush</li> <li>madeira vine</li> <li>mistflower</li> <li>moth vine</li> <li>ornamental gingers</li> <li>salvinia</li> <li>Indian myna</li> <li>feral rusa deer</li> <li>feral red deer</li> </ul>	<ul style="list-style-type: none"> <li>coral berry (<i>A. crenata</i> syn. <i>A. crispa</i>)</li> <li>coral berry or shoe button ardisia (<i>A. elliptica</i> syn. <i>A. humilis</i>)</li> <li>ochna</li> <li>water hyacinth</li> </ul>	<ul style="list-style-type: none"> <li>coastal morning glory</li> <li>feral fallow deer</li> </ul>	
4		<ul style="list-style-type: none"> <li>feral pig</li> </ul>	<ul style="list-style-type: none"> <li>Chinese celtis</li> <li>golden trumpet tree</li> </ul>	<ul style="list-style-type: none"> <li>broad leaf pepper tree</li> <li>Dutchman's pipe</li> <li>grader grass</li> <li>resurrection plant</li> <li>water lettuce</li> </ul>	<ul style="list-style-type: none"> <li>basket asparagus</li> <li>climbing asparagus</li> <li>creeping lantana</li> </ul>	
5			<ul style="list-style-type: none"> <li>annual rag weed</li> </ul>	<ul style="list-style-type: none"> <li>sagittaria</li> <li>thunbergia</li> </ul>	<ul style="list-style-type: none"> <li>balloon vine</li> <li>buffel grass</li> <li>kudzu</li> <li>parthenium</li> <li>fireweed</li> <li>fragrant thunbergia</li> <li>honey locust</li> <li>hygrophila</li> <li>hymenachne</li> <li>praxelis</li> <li>sickle thorn</li> </ul>	



Table 3 – Upper Stanley River Catchment Management Response Matrix (**bold = 'restricted' invasive plant or animal**)

Control Feasibility	Local Management Feasibility					Not present in catchment but present in adjoining catchment ▼
	1	2	3	4	5	
1				<ul style="list-style-type: none"> <li>parrots feather</li> </ul>		<p>• <b>EARLY DETECTION/ PREVENTION = ALERT CATCHMENT SPECIES</b></p> <p><b>MARY CATCHMENT</b>                      blue lotus                      buffel grass                      coastal morning glory  <b>cabomba</b>                      Columbian wax weed  <b>feral fallow deer</b>                      golden trumpet tree  <b>honey locust tree</b>  <b>hygrophila</b>  <b>hymenachne</b>  <b>kudzu</b>  <b>sagittaria</b>                      sickle thorn</p> <p><b>MOOLOOLAH CATCHMENT</b>                      African love grass                      air potato                      barberia                      blue lotus  <b>bitou bush</b>  <b>cabomba</b>                      coastal morning                      Columbian wax weed  <b>hygrophila</b>  <b>hymenachne</b>                      gidee-gidee                      glory lily                      golden trumpet tree  <b>prickly pear</b>                      satinleaf  <b>sagittaria</b>  <b>Senegal tea</b>                      water poppy</p> <p><b>PUMICESTONE CATCHMENT</b>                      African love grass                      air potato                      blue lotus  <b>bitou bush</b>  <b>cabomba</b>                      coastal morning glory                      giant tropical salvia  <b>giant Parramata grass</b>                      gidee-gidee                      glory lily                      grader grass  <b>hygrophila</b>  <b>hymenachne</b>  <b>kudzu</b>  <b>Mexican bean tree</b>  <b>prickly pear</b>  <b>Senegal tea</b>                      water poppy</p>
2	<ul style="list-style-type: none"> <li>glycine</li> <li>perennial horse gram</li> </ul>	<ul style="list-style-type: none"> <li>blue morning glory</li> <li>castor oil</li> </ul>			<ul style="list-style-type: none"> <li>kidney leaf mud plantain</li> </ul>	
3		<ul style="list-style-type: none"> <li>giant devils fig</li> <li>European fox</li> <li>feral cat</li> <li>feral dog</li> </ul>	<ul style="list-style-type: none"> <li>common giant rat tail grass</li> <li>camphor laurel</li> <li>crofton weed</li> <li>groundsel bush</li> <li>madeira vine</li> <li>mistflower</li> <li>moth vine</li> <li>ornamental gingers</li> <li>salvinia</li> <li>Indian myna</li> </ul>	<ul style="list-style-type: none"> <li>ochna</li> </ul>	<ul style="list-style-type: none"> <li><b>cats claw creeper</b></li> <li>coral berry (<i>A. crenata</i> syn. <i>A. crispa</i>)</li> <li>coral berry (<i>R. humilis</i>)</li> <li>coral berry or shoe button</li> <li>ardisia (<i>A. elliptica</i> syn. <i>A. humilis</i>)</li> <li>ruellia</li> <li><b>water hyacinth</b></li> <li>feral red deer</li> <li>feral rusa deer</li> </ul>	
4			<ul style="list-style-type: none"> <li>feral pig</li> </ul>	<ul style="list-style-type: none"> <li>broad leaf pepper tree</li> <li>basket asparagus</li> <li>Chinese celtis</li> <li>resurrection plant</li> </ul>	<ul style="list-style-type: none"> <li>climbing asparagus</li> <li>creeping lantana</li> <li>Dutchman's pipe</li> <li>water lettuce</li> </ul>	
5					<ul style="list-style-type: none"> <li>annual rag weed</li> <li>balloon vine</li> <li>fireweed</li> <li>fragrant thunbergia</li> <li>parthenium</li> <li>praxelis</li> <li>thunbergia</li> </ul>	



Table 4 – Pumicestone Passage Catchment Management Response Matrix (**bold = 'restricted' invasive plant or animal**)

Control Feasibility	Local Management Feasibility					Not present in catchment but present in adjoining catchment ▼ * <b>EARLY DETECTION/ PREVENTION = ALERT CATCHMENT SPECIES</b> <b>MOOLOOLAH CATCHMENT</b> Columbian wax weed golden trumpet tree satinleaf <b>sagittaria</b>
	1	2	3	4	5	
1	<ul style="list-style-type: none"> <li>blue lotus</li> </ul>	<ul style="list-style-type: none"> <li>parrots feather</li> </ul>	<ul style="list-style-type: none"> <li>glory lily</li> </ul>			
2	<ul style="list-style-type: none"> <li>glycine</li> </ul>	<ul style="list-style-type: none"> <li>blue morning glory</li> <li>castor oil</li> <li>kidney leaf mud plantain</li> <li>water poppy</li> </ul>		<ul style="list-style-type: none"> <li>cabomba</li> </ul>	<ul style="list-style-type: none"> <li>perennial horse gram</li> </ul>	
3		<ul style="list-style-type: none"> <li>coastal morning glory</li> <li>giant devils fig</li> <li><b>salvinia</b></li> <li><b>European fox</b></li> <li><b>feral cat</b></li> <li><b>feral dog</b></li> </ul>	<ul style="list-style-type: none"> <li>common giant rats tail grass</li> <li>camphor laurel</li> <li>giant Parramata rats tail grass</li> <li>groundsel bush</li> <li>mistflower</li> <li>moth vine</li> <li>ochna</li> <li>ornamental gingers</li> <li>water hyacinth</li> <li>Indian myna</li> </ul>		<ul style="list-style-type: none"> <li>African lovegrass</li> <li>air potato</li> <li><b>cats claw creeper</b></li> <li>coral berry (<i>A. crenata</i> syn. <i>A. crispa</i>)</li> <li>coral berry (<i>R. humilis</i>)</li> <li>coral berry or shoe button ardisia (<i>A. elliptica</i> syn. <i>A. humilis</i>)</li> <li>crofton weed</li> <li>gidee-gidee</li> <li>madeira vine</li> <li>feral rusa deer</li> <li>feral red deer</li> </ul>	
4			<ul style="list-style-type: none"> <li>broad leaf pepper tree</li> <li>water lettuce</li> <li>feral pig</li> </ul>	<ul style="list-style-type: none"> <li>resurrection plant</li> </ul>	<ul style="list-style-type: none"> <li>basket asparagus</li> <li>Chinese celtis</li> <li>climbing asparagus</li> <li>creeping lantana</li> <li>ruellia</li> <li>Dutchman's pipe</li> <li>grader grass</li> </ul>	
5				<ul style="list-style-type: none"> <li>hygrophila</li> </ul>	<ul style="list-style-type: none"> <li>annual rag weed</li> <li>balloon vine</li> <li>bitou bush</li> <li>fireweed</li> <li>fragrant thunbergia</li> <li>giant tropical salvia</li> <li>hymenachne</li> <li>kudzu</li> <li>Mexican bean tree</li> <li>parthenium</li> <li>praxelis</li> <li>prickly pear</li> <li>Senegal tea</li> <li>thatch grass</li> <li>thunbergia</li> </ul>	

Table 5 - Maroochy River (and part Noosa River) Catchment Management Response Matrix (**bold = 'restricted' invasive plant or animal**)

Control Feasibility	Local Management Feasibility					Not present in catchment but present in adjoining catchment ▼ * <b>EARLY DETECTION/ PREVENTION = ALERT CATCHMENT SPECIES</b>  <b>MARY CATCHMENT</b> sickle thorn parthenium buffel grass  <b>MOOLOOLAH CATCHMENT</b> air potato Mexican bean tree parthenium satinleaf Senegal tea water poppy
	1	2	3	4	5	
1	<ul style="list-style-type: none"> <li>blue lotus</li> </ul>	<ul style="list-style-type: none"> <li>glory lily</li> <li>parrots feather</li> </ul>				
2	<ul style="list-style-type: none"> <li>glycine</li> <li>perennial horse gram</li> </ul>	<ul style="list-style-type: none"> <li>blue morning glory</li> <li>castor oil</li> <li>Columbian wax weed</li> <li>kidney leaf mud plantain</li> </ul>			<ul style="list-style-type: none"> <li>cabomba</li> </ul>	
3		<ul style="list-style-type: none"> <li>coastal morning glory</li> <li><b>camphor laurel</b></li> <li>giant devils fig</li> <li>ochna</li> <li><b>salvinia</b></li> <li><b>European fox</b></li> <li><b>feral cat</b></li> <li><b>feral dog</b></li> </ul>	<ul style="list-style-type: none"> <li>cats claw creeper</li> <li>common giant rat tail grass</li> <li>crofton weed</li> <li>gidee-gidee</li> <li><b>giant Parramata grass</b></li> <li>groundsel bush</li> <li>madeira vine</li> <li>mistflower</li> <li>moth vine</li> <li>ornamental gingers</li> <li>purple-leaved plectranthus</li> <li>water hyacinth</li> </ul>	<ul style="list-style-type: none"> <li>coral berry (<i>A. crenata</i> syn. <i>A. crispata</i>)</li> <li>coral berry (<i>R. humilis</i>)</li> <li>coral berry or shoe button ardisia (<i>A. elliptica</i> syn. <i>A. humilis</i>)</li> </ul>	<ul style="list-style-type: none"> <li>African love grass</li> <li>hiptage</li> <li><b>pond apple</b></li> <li><b>feral rusa deer</b></li> <li><b>feral red deer</b></li> <li><b>feral fallow deer</b></li> </ul>	
4		<ul style="list-style-type: none"> <li>broad leaf pepper tree</li> </ul>	<ul style="list-style-type: none"> <li>barleria</li> <li><b>basket asparagus</b></li> </ul>	<ul style="list-style-type: none"> <li><b>Chinese celtis</b></li> <li><b>creeping lantana</b></li> <li>grader grass</li> <li>resurrection plant</li> </ul>	<ul style="list-style-type: none"> <li>climbing asparagus</li> <li>Dutchman's pipe</li> <li>golden trumpet tree</li> <li>ruellia</li> <li><b>water lettuce</b></li> <li><b>feral pig</b></li> </ul>	
5				<ul style="list-style-type: none"> <li>fireweed</li> <li>hygrophila</li> <li>sagittaria</li> <li>thunbergia</li> </ul>	<ul style="list-style-type: none"> <li>annual rag weed</li> <li>balloon vine</li> <li>bitou bush</li> <li>fragrant thunbergia</li> <li>honey locust</li> <li>hymenachne</li> <li>kudzu</li> <li>praxelis</li> <li><b>prickly pear</b></li> </ul>	

Table 6 – Coastal Management Response Matrix (**bold = 'restricted' invasive plant or animal**)

Control Feasibility	Local Management Feasibility				
	1	2	3	4	5
1	<ul style="list-style-type: none"> <li>glory lily</li> </ul>				
2			<ul style="list-style-type: none"> <li>blue morning glory</li> </ul>	<ul style="list-style-type: none"> <li>perennial horse gram</li> <li>glycine</li> </ul>	<ul style="list-style-type: none"> <li>castor oil</li> <li>Columbian wax weed</li> <li>kidney leaf mud plantain</li> </ul>
3		<ul style="list-style-type: none"> <li>gidee-gidee</li> <li><b>European fox</b></li> <li><b>feral cat</b></li> </ul>	<ul style="list-style-type: none"> <li>coastal morning glory</li> <li>ochna</li> <li>Indian myna</li> </ul>	<ul style="list-style-type: none"> <li>coral berry (<i>A. crenata</i> syn. <i>A. crispa</i>)</li> <li>coral berry (<i>R. humilis</i>)</li> <li>coral berry or shoe button ardisia (<i>A. elliptica</i> syn. <i>A. humilis</i>)</li> <li>madeira vine</li> <li>ornamental gingers</li> <li>feral dog</li> </ul>	<ul style="list-style-type: none"> <li>African lovegrass</li> <li><b>camphor laurel</b></li> <li><b>giant Parramatta grass</b></li> <li><b>groundsel bush</b></li> <li>hiptage</li> <li>moth vine</li> <li>purple-leaved plectranthus</li> </ul>
4		<ul style="list-style-type: none"> <li>basket asparagus</li> <li>broad leaf pepper tree</li> </ul>	<ul style="list-style-type: none"> <li>barleria</li> </ul>	<ul style="list-style-type: none"> <li>resurrection plant</li> </ul>	<ul style="list-style-type: none"> <li>climbing asparagus</li> <li>Chinese celtis</li> <li>creeping lantana</li> <li>Dutchman's pipe</li> <li>ruellia</li> </ul>
5				<ul style="list-style-type: none"> <li>prickly pear</li> </ul>	<ul style="list-style-type: none"> <li>balloon vine</li> <li>bitou bush</li> <li>praxelis</li> <li>sicklethorn</li> </ul>

## Appendix 4 – Regional Alert Invasive Plants and Animals

Table 1. Regional Alert Restricted Matter, their restriction category and occurrence in adjoining local government areas

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

## Appendix 5 – All other Restricted Matter

Table 1 – All other Restricted Matter occurring in Queensland

All other Restricted Matter occurring in Queensland	Restriction Category
<b>Invasive Plants</b>	
athel pine ( <i>Tamarix aphylla</i> )	3
asparagus fern ( <i>Asparagus scandens</i> )	3
belly-ache bush ( <i>Jatropha gossypifolia</i> and hybrids)	3
badhara bush ( <i>Gmelina elliptica</i> )	3
boneseed ( <i>Chrysanthemoides monilifera</i> ssp. <i>monilifera</i> )	2,3,4,5
bridal veil ( <i>Asparagus declinatus</i> )	3
candy leaf ( <i>Stevia ovata</i> )	3
cane cactus ( <i>Austrocylindropuntia cylindrica</i> )	3
Chilean needle grass ( <i>Nassella neesiana</i> )	3
chinee apple ( <i>Ziziphus mauritiana</i> )	3
Cholla cacti with the following names—	
• coral cactus ( <i>Cylindropuntia fulgida</i> )	3
• devil's rope pear ( <i>C. imbricata</i> )	3
• Hudson pear ( <i>Cylindropuntia rosea</i> and <i>C. tunicata</i> )	2,3,4,5
• jumping cholla ( <i>C. prolifer</i> )	2,3,4,5
elephant ear vine ( <i>Argyrea nervosa</i> )	3
Eve's pin cactus ( <i>Austrocylindropuntia subulata</i> )	3
flax-leaf broom ( <i>Genista linifolia</i> )	3
gamba grass ( <i>Andropogon gayanus</i> )	3
giant sensitive plant ( <i>Mimosa diplotricha</i> var. <i>diplotricha</i> )	3
gorse ( <i>Ulex europaeus</i> )	3
harungana ( <i>Harungana madagascariensis</i> )	3
Koster's curse ( <i>Clidemia hirta</i> )	2,3,4,5
limnocharis, yellow burrhead ( <i>Limnocharis flava</i> )	2,3,4,5
Mexican feather grass ( <i>Nassella tenuissima</i> )	2,3,4,5
Madras thorn ( <i>Pithecellobium dulce</i> )	2,3,4,5
mesquites—	
• honey mesquite ( <i>Prosopis glandulosa</i> )	3
• mesquite or algarroba ( <i>Prosopis pallida</i> )	
• Quilpie mesquite ( <i>Prosopis velutina</i> )	
miconia with the following names—	
• <i>Miconia calvescens</i>	
• <i>M. cionotricha</i>	2,3,4,5
• <i>M. nervosa</i>	
• <i>M. racemosa</i>	
mimosa pigra ( <i>Mimosa pigra</i> )	2,3,4,5
Montpellier broom ( <i>Genista monspessulana</i> )	3
parkinsonia ( <i>Parkinsonia aculeata</i> )	3
prickly pear ( <i>O. elata</i> )	2,3,4,5
rubber vines—ornamental rubber vine ( <i>Cryptostegia madagascariensis</i> )	3
sicklepods—	
• foetid cassia ( <i>Senna tora</i> )	3
• sicklepod ( <i>S. obtusifolia</i> )	
silver-leaf nightshade ( <i>Solanum elaeagnifolium</i> )	3
tobacco weed ( <i>Elephantopus mollis</i> )	3
telegraph weed ( <i>Heterotheca grandiflora</i> )	3
snake cactus ( <i>C. spinosior</i> )	
<b>Invasive Animals</b>	
barbary sheep ( <i>Ammotragus lervia</i> )	2,3,4,5,6
blackbuck antelope ( <i>Antilope cervicapra</i> )	2,3,4,5,6
feral cat ( <i>Prionailurus bengalensis</i> x <i>Felis catus</i> )	3,4,6
feral goat ( <i>Capra hircus</i> )	3,4,6
sambar deer ( <i>Rusa unicolor</i> , syn. <i>Cervus unicolor</i> )	2,3,4,5,6
yellow crazy ant ( <i>Anoplolepis gracilipes</i> )	3

## Glossary

### 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.

### 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.

### 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.

### 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.

### 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.

### Biosecurity Considerations

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





