Gympie Region Biosecurity Plan

(Invasive Plants and Animals)

GYMPIE REGIONAL COUNCIL
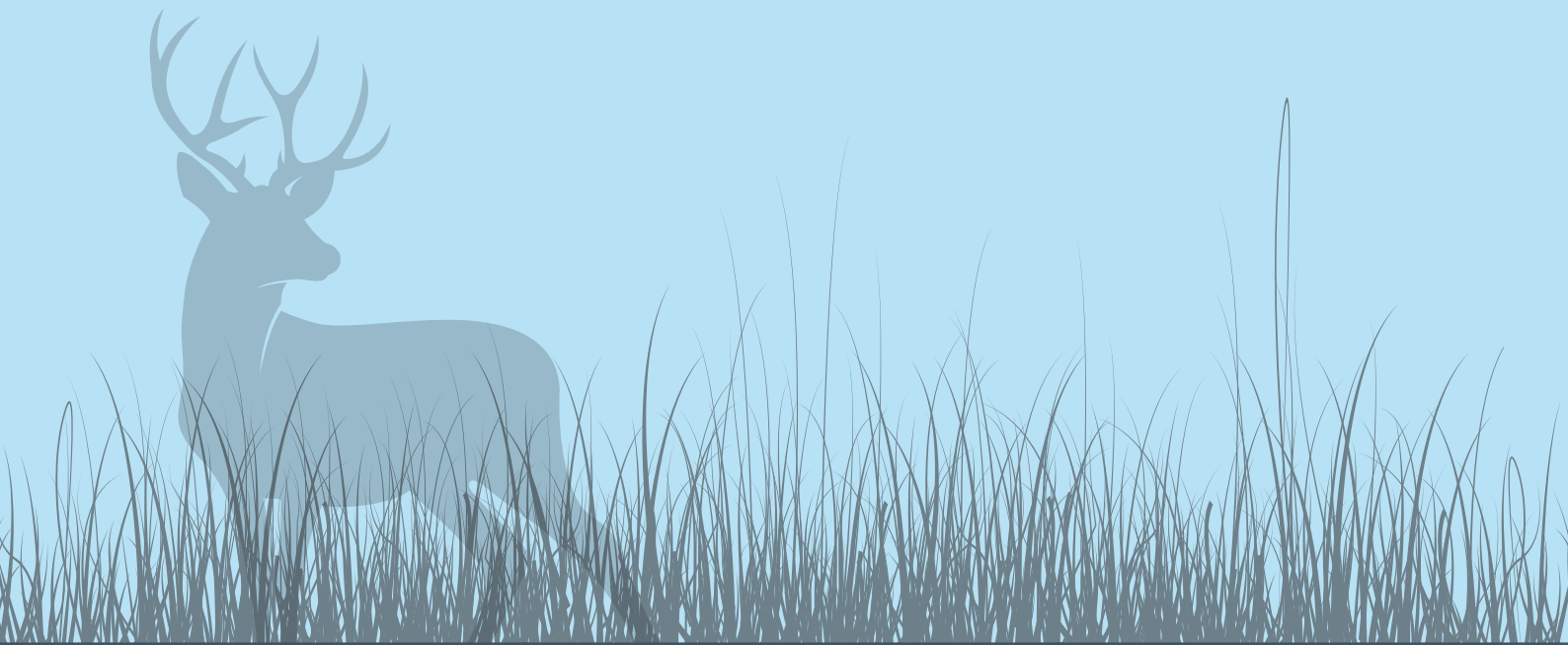
Contents

1. Introduction

1.1   Intent of the Biosecurity Plan

The Gympie Region Biosecurity Plan provides a guide for invasive species management in the region. It supports the implementation of the Queensland *Biosecurity Act 2014* by facilitating a coordinated approach to the management of invasive plants and animals. This plan (and the legislation that underpins it) is based on the premise that biosecurity in the Gympie region is everyone's responsibility. The Gympie Region Biosecurity Plan supports development of this culture, guiding all facets of the community to effective and coordinated management of invasive plants and animals and meeting statutory obligations.
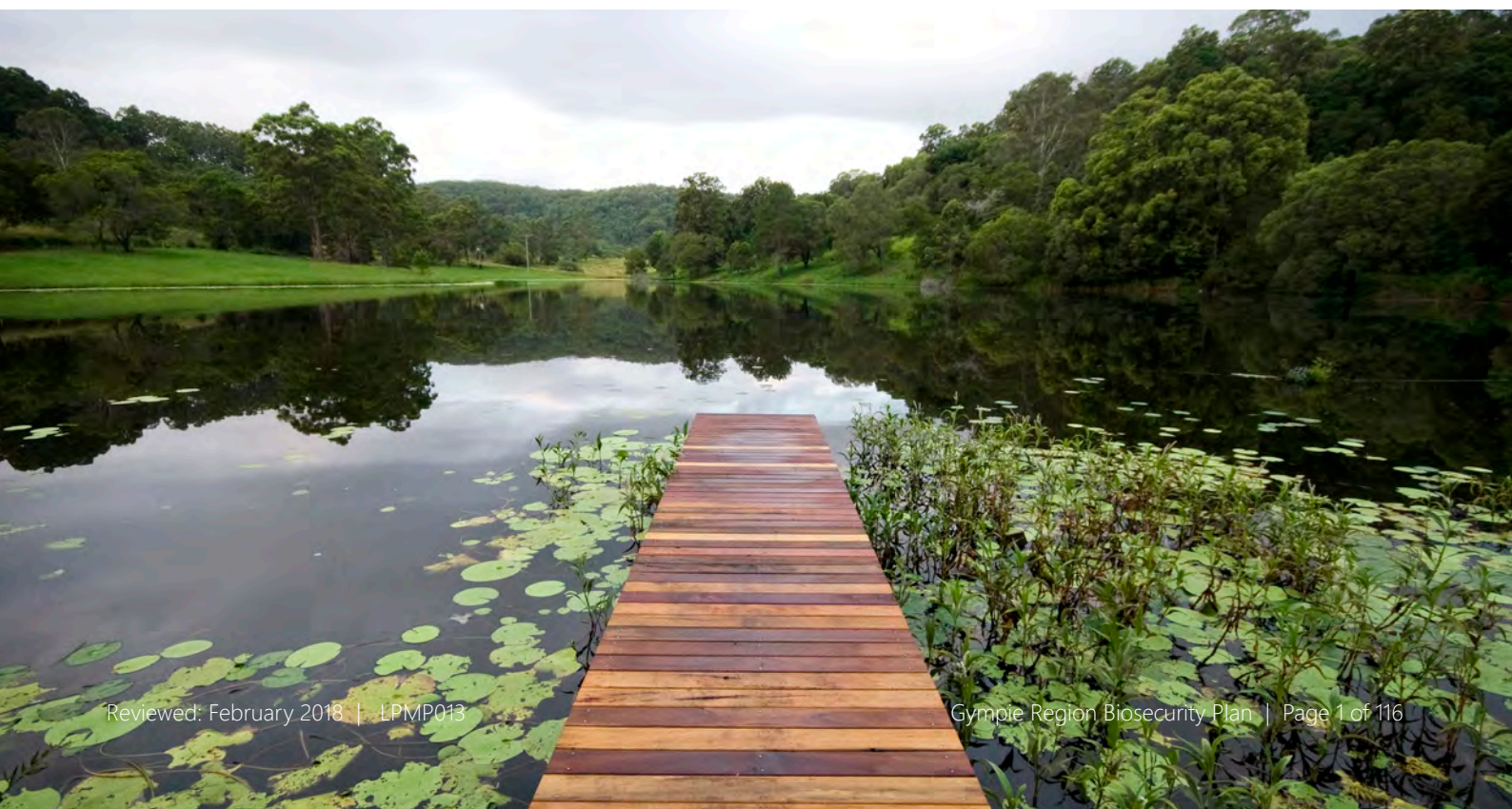
The Gympie Region Biosecurity Plan is for the entire local government area. It relates to all lands and waters (excluding marine) and provides a framework to facilitate the coordinated management of invasive plants and animals in the Gympie region. It includes invasive plants and animals identified in the *Biosecurity Act 2014* as well as other invasive species identified as having significant local impacts.

This Biosecurity Plan has built on past planning efforts and has gained immeasurably from the accumulated experience and expert local knowledge of the Gympie Regional Council staff, the community and the Weed and Pest Advisory Committee members and their networks. It will guide resource allocation and investment in relation to invasive plant and animal matters in the region and provide a consistent basis for regional planning and delivery.

The Gympie Region Biosecurity Plan, and the assessment framework within, complements relevant strategies or plans developed by individual stakeholders for their own needs. It is a tool to assist collaborative effort on the management of invasive species which have been identified as priorities within the region. It can be used to assist all stakeholders to meet the challenges of invasive species management in the Gympie Region now and into the future.

This plan was developed to contribute to sustainable land use by reducing the economic, social and environmental impacts of invasive plants and animals (through appropriate land management, control work, education and compliance activities) on the natural, peri-urban and primary production environments in the Gympie region.

1.2 Commencement and duration

This plan will commence from the time that the Plan is adopted by Council and will be in force for a period of 5 years.

1.3 Gympie Region Biosecurity Plan Vision

The Gympie Region Biosecurity Plan provides a sound basis for the cooperative and coordinated management of invasive plants and animals throughout the region.

The vision and the desired achievements for the Gympie Region Biosecurity Plan emphasise the importance of shared ownership, effective actions and long-term commitment to invasive species management in the region.

> **Our vision is for all tiers of government, industry and the community to work together to protect the economy, the community and the environment of the Gympie region from the negative impact of invasive plants and animals.**
>
> **This will be achieved by ensuring that the following desired outcomes (DO) are achieved:**
>
> **DO 1: Stakeholders are informed, knowledgeable and have ownership of invasive species management,**
>
> **DO 2: Decision making for invasive species management is based on reliable and accurate information,**
>
> **DO 3: Strategic directions for invasive species management in the Gympie region are established, maintained and owned by all stakeholders, and**
>
> **DO 4: Invasive species are strategically managed to reduce the impacts on Gympie region.**

Management Goal 1: **New invasive species presenting a significant threat to the Gympie region are prevented from establishing in the area.**

Desired Achievements:
- High priority species and pathways are identified and managed appropriately.
- Early detection capabilities are developed throughout the Gympie region.

Management Goal 2: **New incursions of invasive species presenting a significant threat to the Gympie region are eliminated or prevented from further spread.**

Desired Achievements:
- New incursions of high priority invasive species are detected in a timely manner.
- Rapid response capabilities are in place to eradicate or contain new incursions of a high priority invasive species.

Management Goal 3: **Known invasive species are contained to an identified area (or prevented from spreading).**

Desired Achievements:
- Species and containment zones are identified and managed appropriately.
- Timely and effective management programs are in place to ensure prevention of spread from identified zone.

Management Goal 4: **Widespread invasive plants and animals are managed to reduce their impacts on high value assets (such as rural lands, biodiversity, waterways, reserves) in the Gympie region.**

Desired Achievements:
- Identification and prioritisation of management programs where benefits are the greatest.
- Effective and targeted on-ground control provided.
- Private landholders motivated to manage invasive species proactively.

The strategic actions associated with each of the listed management goals are expanded in the invasive species delivery program on pages 18-22. Management expectations for landholders and Gympie Regional Council for each species are included in Appendix 3.

2 Policy Framework

The management of invasive plants and animals is undertaken by all levels of government in Australia and is supported by legislation and strategies. Local governments and their communities continue to be best placed to control locally significant invasive plants and animals. Together they can develop practical and appropriate solutions to deal with the risks posed by invasive species.

The development and implementation of the Gympie Region Biosecurity Plan is undertaken in parallel with the Wide Bay Burnett Regional Biosecurity Strategy 2017-2022, developed by the Wide Bay Burnett Regional Organisation of Councils (WBBROC).

The Wide Bay Burnett Regional Biosecurity Strategy 2017-2022 is intended to facilitate a coordinated approach to the management of invasive plants and animals across the Wide Bay Burnett by:

- Guiding the risk assessment of invasive plants and animals by individual stakeholders; based on extent, potential threats, desired outcomes and achievability; and
- Identifying agreed desired outcomes, management goals and performance indicators; and
- Increasing the effectiveness of existing programs through coordination of activities and sharing of data and resources.

2.1 Biosecurity Act 2014

The *Biosecurity Act 2014* has repealed the *Land Protection (Pest and Stock Route Management) Act 2002*, which provided regulatory controls and powers to manage declared plants and animals in Queensland. The *Biosecurity Act 2014* streamlines and modernises the way invasive species are managed in Queensland as it:

- Embeds the principle of shared responsibility for biosecurity risks (including invasive animals) across government, community and industry;
- Applies equally to all land in the state, regardless of whether it is publicly or privately owned;
- Is premised on the concept of risk, so that invasive species management investment and response is appropriate to the risk;
- Shifts the focus of responsibility for control of invasive biosecurity matter from the land owner to any person using/traversing the land.

The *Biosecurity Act 2014* provides local government with the legal instrument it needs address invasive biosecurity matter. The term 'invasive biosecurity matter' includes only invasive plants and animals listed as prohibited and restricted matter in schedules 1 and 2 of the Act.

In keeping with the premise that biosecurity is a shared responsibility, the Act introduces the legally enforceable concept of a general biosecurity obligation (see definition on page 32).

2.2 Supporting legislation

The following national and state legislation may apply to biosecurity planning and implementation by Council and other stakeholders in the Gympie region.

Level	Description
National	*Environmental Protection and Biodiversity Conservation Act 1999* • Lists key threatening processes for nominated introduced and/or invasive species. • Section 301A provides for the making of Regulations for the control of non-native species.
State	*Biosecurity Act 2014* **and** *Regulation 2016* • Provides local governments with the legal instrument to enforce the management of invasive biosecurity matter (listed as prohibited and restricted in schedule 1 and 2 of the *Act*. • Delegates powers to Local Governments for the control and enforcement of invasive biosecurity matter in accordance with the Local Government's Biosecurity Plan. *Nature Conservation Act 1992* • Provides for protection of dingoes in conservation areas. • Prohibits the taking of scheduled species (plants and animals). • Regulates impacts on protected areas. *Water Act 2000* • Deals with requirements for the protection of riverine environments. *Environmental Protection Act 1994* • Establishes the concept of general environmental duty, and prohibits environmental harm. *Transport Infrastructure Act 1994* **and section 93-95 of the** *Land Act 1994* • Establish that road reserves are State land that are either controlled by the State Department of Transport and Main Roads, or by the relevant Local Government under the *Local Government Act 2009*. *Plant Protection Act 2002* **and** *Regulation 2002* • Defines controlled pests and how they are dealt with. *Animal Care and Protection Act 2001* • Includes providing seized pest animal with appropriate food, shelter and water). *Health (Drug and Poisons) Regulations 1996* • Deals with use of poisons (such as Toxin 1080) for feral animal control.

2.3 Supporting strategies and policies

Level	Description
Federal	*Australian Weeds Strategy (2017-2027)* **and** *Australian Pest Animal Strategy (2017-2027)* • Identifies national priorities for invasive plant and animal management. *Weeds of National Significance (WONS) strategies* • Develops strategic plans for range of species identified because of their invasiveness, impacts on primary production and the environment, potential for spread and socioeconomic impacts. *Australia's Biodiversity Conservation Strategy 2010-2030* • Recognises that invasive species continue to be a major cause of biodiversity pressure which is increasing with climate change. *Recovery Plans, Threat Abatement Plans* **and** *Wildlife Conservation Plans for Matters of National Environmental Significance*
State	*Queensland Biosecurity Strategy 2017-2021(draft)* • Establishes a framework to protect Queensland's ecosystems, industries and way of life, maintain Queensland's national and international reputation for product safety and integrity and ensure ongoing market access for commodities through effective management of pests and diseases. *The Queensland Weed and Pest Animal Strategy 2016–2020* • Establishes a state-wide planning framework that addresses the environmental, economic and community impacts of Queensland's current and potential weeds and pest animals. • The development and implementation of this strategy is based on the management principles of integration, public awareness, commitment, consultation and partnership, planning, prevention and early intervention, best practice and improvement (research, monitoring and evaluation). *Queensland Wild Dog Management Strategy 2011-2016* *Feral Deer Management Strategy 2013-2018*
Regional	*Burnett Mary Regional Plan 2011* *Wide Bay-Burnett Regional Plan* *Wide Bay Burnett Regional Biosecurity Strategy 2017-2022*
Local	*Gympie Regional Council Corporate Plan 2017-2022* *South Burnett Regional Council Biosecurity Plan(draft)* *Sunshine Coast Council Local Government Area Biosecurity Plan 2017* *Noosa Local Government Area Pest Management Plan 2015-2019* *North Burnett Regional Council Pest Management Plan* *Somerset Regional Council 2013-2018 Pest Management Plan* *Fraser Coast Regional Council Biosecurity Plan (interim plan) 2016-2021*

3.1 Description of the region

The Gympie Regional Council area is located in the Wide Bay Burnett region of Queensland and covers an area of nearly 7000sq kms. The Gympie region incorporates urban, coastal, hinterland and extensive rural zones and supports a diverse mixture of landscape, lifestyle and economic values.

The main population centre is Gympie, with small townships and communities at Amamoor, Cooloola Cove, Curra, Goomeri, Gunalda, Imbil, Kandanga, Kilkivan, Rainbow Beach, Tin Can Bay and Woolooga. Rural land is used largely for agriculture, particularly beef production and forestry. Tourism is also an important industry.
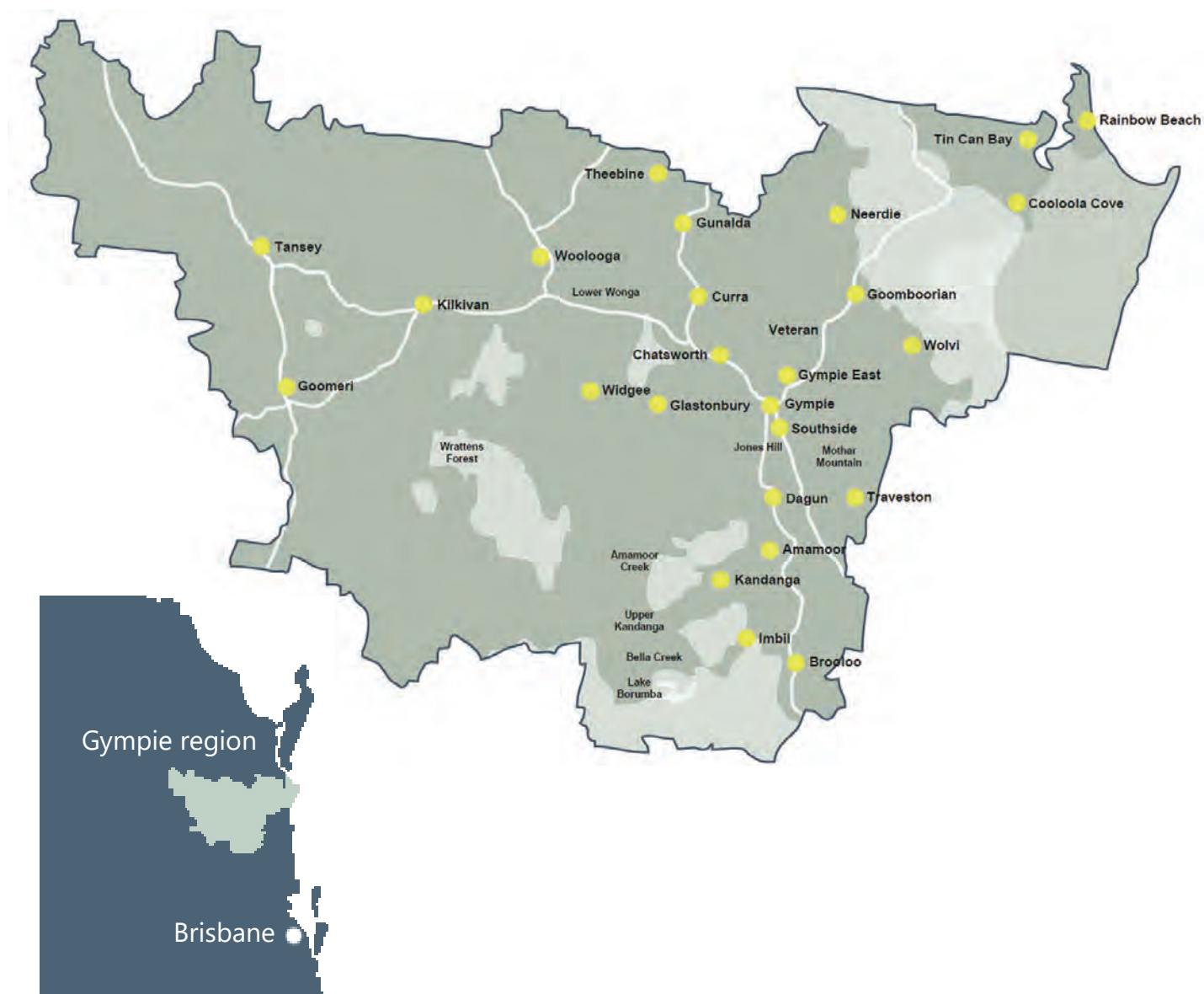
3.2 Key impacts and risks of invasive plants and animals

It is estimated that weeds and pest animals costs Queensland more than $700 million each year in loss of production and cost of control. In 2006/2007 (Natural Resource Management on Australian Farms, Australian Bureau of Statistics), 80 per cent of agricultural businesses in the Burnett Mary catchment reported undertaking natural resource management activities to prevent or manage weeds. Of the weed related issues reported, the most common problems were decreased value of production followed by decreased value of holdings. The total expenditure on managing weeds in Queensland was $269 million, predominantly made up of herbicide cost and application.

In the same study, 73 per cent of agricultural businesses in the Burnett Mary catchment reported they had pest problems (including feral animals). Decreased livestock production was a commonly reported problem (55 per cent). $182 million was identified as being spent on pest animal related management activities in Queensland.

In 2015/2016, the Gympie region received a relatively higher industry contribution to total Gross Regional

Product (GRP) from Agriculture, Forestry and Fishing (10.9 per cent) than Queensland (3.1 per cent) which demonstrates the importance of agriculture to the region (source National Institute of Economic and Industry Research 2016).

In addition, the Gympie region is a hub for tourism precincts such as Fraser Island, the Mary Valley and the Sunshine Coast and is the beginning of the Great Bunya Drive through the South Burnett.

The demographic profile of the Gympie region is changing to include a growing peri-urban population and alternative lifestyle movement.

The increasing population of the Gympie region dramatically increases interactions between people and invasive plants and animals and is presenting new challenges in pest management such as the potential for the introduction and spread of new invasive species.

Table 1 demonstrates how invasive plants and animals can have a range of significant impacts on our valued environments, lifestyles and livelihoods in the Gympie region.

	Terrestrial biodiversity and conservation environments	Agriculture and production areas	Community and residential areas
What are these?	Vegetated areas across the Gympie region managed for conservation	Agriculture, horticulture, tourism and other production areas of the Gympie region	Areas where the community lives, works and plays in the Gympie region
Invasive plant impacts	Smother and transform ecosystems Outcompetes native species Reduce the ecological values of natural areas	Reduce productivity by outcompeting desirable pasture species Increase costs of production Contribute to loss of production/income	Reduce access to, amenity and scenic values of natural areas Cause health issues Reduce function and values of community open space areas
Invasive animal impacts	Displace and prey on native species Degrade natural bushlands and ecosystems	Outcompete livestock Contribute to loss of production Prey on and threaten livestock Carry diseases and parasites that can impact on livestock	Destroy infrastructure Cause traffic hazards Prey on native and domestic animal species

Table 1: Impacts on key environments from invasive plants and animals (adapted from Sunshine Coast Council Local Government Area Biosecurity Plan 2017)

Overall, the cost of pest management is extremely high, at landscape, property and regional scales. Effective pest management is not simply a government responsibility. Effective pest management requires understanding, full commitment and participation by the entire community.

3.3 Wide Bay Burnett Invasive Species Assessment Framework

The Wide Bay Burnett Regional Biosecurity Strategy 2017-2022 includes an Invasive Species Assessment Framework to assist individual stakeholders analyse risk and determine realistic management targets for invasive species within their own areas.

All Councils within the WBBROC footprint will develop individual Biosecurity Plans, but will utilise a standard approach to analyse risk and determine priorities for management.

The use of the Invasive Species Assessment Framework involves a number of defined steps:

1. **Collate existing information**

2. **Conduct risk Analysis**

3. **Establish management targets**

4. **Identify management feasibility**
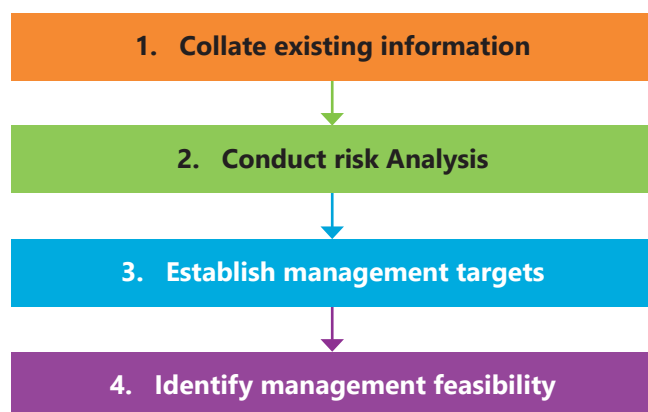
The Invasive Species Assessment Framework for invasive species in the Gympie region is expanded in Appendix 1.

4. Implementation

Weeds and pest animals inflict substantial economic, social and environmental impacts on all residents of Queensland through interference with human health and recreational activities, threats to biodiversity and natural resources and reduction of primary production.

Within the entire Gympie Regional Council area, pest plants and animals are responsible for significant costs in the agricultural sector, have the potential to affect human health and cause damage and loss of amenity in parks, gardens and recreational areas.

The study titled "Economic Impact of State and Local Government Expenditure on Weed and Pest Animal Management in Queensland" (AEC Group, October 2002) indicated a return on investment of between 26:1 and 38:1 on preventing pest incursions.

The same study estimated that all forms of pest management generate a return on investment of approximately 6:1 on resources allocated. This dramatically exceeds many other forms of government investment, such as building roads (-1.9:1).

GENERALISED INVASION CURVE SHOWING ACTIONS APPROPRIATE TO EACH STAGE
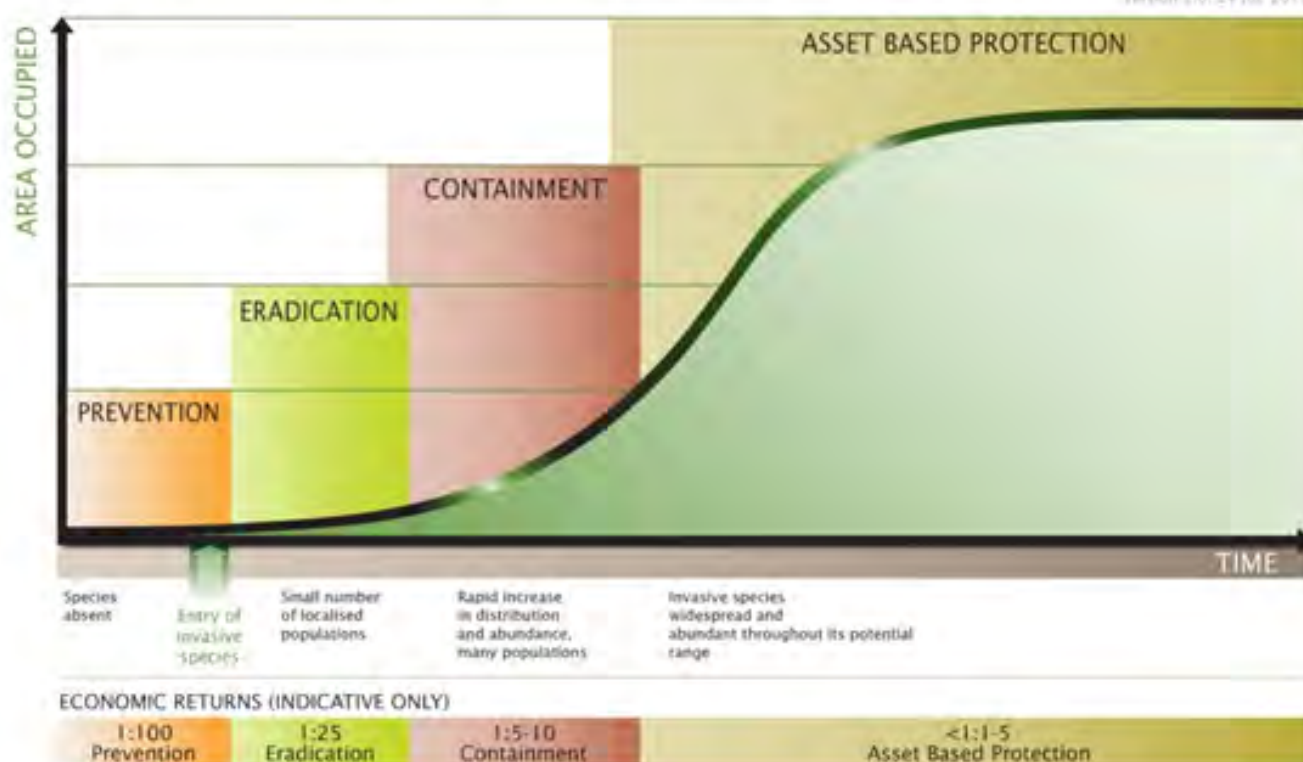
4.1 Guiding principles

The management of invasive plants and animals in the Gympie region is based on eight key principles.

1. Risk-based prevention and early intervention is generally the most cost-effective approach for managing invasive plants and animals. **Prevention and early detection.**

2. Effective invasive plant and animal management is a responsibility shared between all stakeholders including landholders, community, industry and all levels of government. **Commitment.**

3. Regular monitoring and evaluation of control activities and research about invasive species is needed to make evidence-based decisions and improve management practices. **Improvement (research, monitoring and evaluation).**

4. Prioritisation of invasive plant and animal management must be informed by a risk based approach; considering feasibility, likelihood of success, impact and regional significance. **Planning.**

5. Invasive species management is an integral part of managing natural resources and agricultural systems. **Integration.**

6. Coordination amongst landholders, community, industry and government across a range of scales and tenures is necessary to successfully manage invasive plants and animals. **Consultation and partnership.**

7. Sustaining capability and capacity across landholders, community, industry and government is fundamental to effective long term management of invasive plants and animals. **Public awareness.**

8. Invasive species management must be based on ecologically and socially responsible practices that protect the environment and the productive capacity of natural resources while minimising impacts on the community. It should balance feasibility, cost-effectiveness, sustainability, humaneness, community perceptions, emergency needs and public safety. **Best practice.**

The operating principles forming the basis of the Gympie Region Biosecurity Strategy align with key principles outlined in the Australian Weed Strategy 2017-2027, the Australian Pest Animal Strategy 2017-2027, the draft Queensland Weed and Pest Animal Strategy 2016-2022 and the Wide Bay Burnett Regional Biosecurity Strategy 2017-2022.

4.2 Gympie region invasive species delivery partners

The Gympie Region Biosecurity Plan provides strategies to build community awareness and capacity to manage invasive biosecurity matter (plants and animals) in the Gympie Region. It recognises that the management of invasive plants and animals is most effective if all stakeholders share responsibility and support coordinated effort.

The community sectors involved in invasive plant and animal management include individual landholders, community groups such as Landcare, rural industry and farmer groups, non-government organisations, environmental businesses, and conservation interests. These sectors are represented on the Weed and Pest Advisory Committee, and the members are tasked with engaging with their own networks regarding the role of the committee.

The broad roles and responsibilities of the key delivery partners are identified in Appendix 2.

Gympie Region residents
- Urban
- Rural/Agriculture
- Peri urban

Natural Resource Management Groups
- BMRG
- Landcare
- Waterwatch
- Cooloola Coastcare
- Mary River Catchment Coordinating Committee

Industry/Reference Groups

- Agforce
- Gympie District Beef Liaison Group
- Qld Farmers Federation
- Macadamia Society
- Boating groups
- Nursery and Garden Industry of Qld Private Forest Service Qld

Gympie Regional Council

- Roads and Maintenance
- Parks and Gardens
- Lands Protection
- Environment Planning and Environmental Health
- Asset Management
- Waste Management

Traditional Owners

Educational facilities

Utility Managers

- Ergon
- Energex
- Powerlink
- Telstra

Commonwealth Government

- Department of Defence

State Government

- Biosecurity Queensland
- HQ Plantations
- DNRM
- TMR
- QR
- QPWS
- Sunwater
- SEQWater

Neighbouring Councils

- Sunshine Coast Council
- Noosa Shire Council
- South Burnett Regional Council
- North Burnett Regional Council
- Fraser Coast Regional Council
- Somerset Regional Council

4.3 Gympie region invasive species delivery program

The Gympie region invasive species delivery program is aligned with the vision, management goals and desired achievements which are outlined on pages 5-6 The invasive species delivery program highlights links between the Desired Outcomes and the vision for the Biosecurity Plan outlined on page XXX.

Management goals and strategic actions in the invasive species delivery program are also aligned with actions appropriate to each stage of the generalised invasion curve. These are:

- Prevention
- Eradication
- Containment
- Asset based protection.

The inclusion of management goals and strategic actions in the Gympie Region Biosecurity Plan is to facilitate the development of individual implementation plans by stakeholders in the area.

The management of some invasive species in the Gympie region may be further enhanced by use of management zones. Management zones will be developed in consultation with key stakeholders. Management zones (such as large natural areas, including open public access areas, and sub catchments) will be based on the current extent, management targets and feasibility of sustainable management. Species that may be considered for management in zones (yet to be defined) may include:

- Parthenium
- Weedy Sporobolus Grasses (GRT)
- Water Hyacinth
- African lovegrass.

Monitoring and tracking is critical to ensuring the effectiveness of the Gympie Region Biosecurity Plan. A number of performance measures have been included in the invasive species delivery program to enable ongoing tracking of activities throughout the implementation of the plan.

Management Goal 1: Prevent Entry
New invasive plant and animal species presenting a significant threat to the Gympie region are prevented from establishing in the area.

Strategic Actions	Desired Outcome				Responsibility	Performance Measures
	1	2	3	4		
• Identify and promote invasive plant and animal species posing a significant risk to the Gympie region.	X			X	GRC, BQ, NRM Bodies	• No new invasive plant or animal species entering the region. • Interactive, multi-platform system for identifying, monitoring and reporting new incursions of high risk species developed and implemented.
• Early detection capabilities are developed throughout the Gympie region.	X			X	GRC, BQ, Industry, NRM Bodies	
• Develop proactive partnerships with community and industry to strengthen surveillance and reporting activities.	X			X	GRC, BQ, NRM Bodies	

Management Goal 2: Eradicate
New invasive species presenting a significant threat to the Gympie region are prevented from establishing in the area.

Strategic Actions	Desired Outcome				Responsibility	Performance Measures
	1	2	3	4		
• Implement rapid response procedure (including trace of likely source) to eradicate targeted species and coordinate ongoing response from all stakeholders.			X		GRC	• Identified new incursions of invasive plants and animals eradicated from Gympie region.
• Develop and implement interactive, multi-platform system for identifying, monitoring and reporting new incursions of high risk species.	X				GRC	
• Develop proactive partnerships with community and industry to strengthen surveillance activities.	X				GRC (lead agent), Industry, NRM bodies	
• Implement eradication plan (including use of enforcement and prevention and control programs) for species targeted for eradication.			X		GRC	

Management Goal 3: Containment
Known invasive species are contained to an identified area (or prevented from spreading).

Strategic Actions	Desired Outcome				Responsibility	Performance Measures
	1	2	3	4		
• Identify areas and species suitable for containment.		X			GRC	• High uptake of hygiene and treatment practices by stakeholders to prevent spread of targeted species from containment zone.
• Implement suitable treatment actions to ensure no further spread of targeted species.	X				GRC, land occupiers	

Management Goal 4: Asset Protection
Widespread invasive plants and animals are managed to reduce their impacts on high value assets (such as rural lands, biodiversity, waterways, reserves) in the Gympie region.

Strategic Actions	Desired Outcome				Responsibility	Performance Measures
	1	2	3	4		
• Develop impact management plan incorporating identification and prioritisation of assets in the Gympie region and annual management program.		X	X		GRC lead agency, Industry bodies, NRM bodies, BQ	• High value assets are protected from the impacts of invasive plants and animals through management of strategic areas and building capacity of stakeholders to ensure best practice management.
• Encourage adoption of best practice management activities by land occupiers to reduce the impacts of widespread invasive plants and animals.	X			X	GRC lead agency, land occupiers, Industry bodies, NRM bodies, BQ	

5. Invasive biosecurity matter (plants and animals) considered in the Gympie Region Biosecurity Plan

The Wide Bay Burnett Invasive Species Assessment Framework (Appendix 1) was applied to the invasive biosecurity matter (plants and animals) identified as being significant to the Gympie region.

Tables 2 and 3 include a risk score (step 2), management target (step 3) and management feasibility (step 4) for each invasive plant and animal species. Table 4 identifies the presence or absence of significant invasive biosecurity matter (plants and animals) in surrounding local government areas.

Table 2: Invasive plants of the Gympie region

Species	Declaration Status	Management Target	Feasibility of Long Term Control	Risk Score
Alligator weed	Restricted 3	Prevent Entry		
Cabomba	Restricted 3	Prevent Entry		
Chilean Needle Grass	Restricted 3	Prevent Entry		
Giant Devils Fig	Not declared	Prevent Entry		
Horsetails	Prohibited	Prevent Entry		
Hudson Pear	Restricted 2,3,4,5	Prevent Entry		
Hygrophila	Restricted 3	Prevent Entry		
Karoo Thorn	Prohibited	Prevent Entry		
Kidney Leaf Mud Plantain		Prevent Entry		
Mesquite	Restricted 3	Prevent Entry		
Mexican Bean Tree	Restricted 2,3,4,5	Prevent Entry		
Mexican Feather Grass	Restricted 2,3,4,5	Prevent Entry		
Pond Apple	Restricted 3	Prevent Entry		
Paper Mulberry	Not declared	Prevent Entry		
Red Witchweed	Prohibited	Prevent Entry		
Senegal Tea	Restricted 3	Prevent Entry		
Siam Weed	Restricted 3	Prevent Entry		
Tropical Soda Apple	Prohibited	Prevent Entry		
Willows (other than *Salix babylonica, S calodendron and S. reichardtii*)	Restricted 3	Prevent Entry		

Species	Declaration Status	Management Target	Feasibility of Long Term Control	Risk Score
Parthenium **GRC**	Restricted 3	Eradicate	5	205
Bitou Bush	Restricted 2,3,4,5	Eradicate	5	205
Rubbervine species	Restricted 3	Eradicate	5	205
Hymenachne	Restricted 3	Eradicate	5	185
Bellyache Bush	Restricted 3	Eradicate	5	176
Kudzu	Restricted 3	Eradicate	5	175
Prickly Acacia	Restricted 3	Eradicate	5	170
Water Lettuce	Restricted 3	Eradicate	5	170
Honey Locust	Restricted 3	Eradicate	5	165
Opuntias (*O. microdasys and O. elata*	Restricted 2, 3, 4, 5	Eradicate	5	130
Hairy Sicklepod	Restricted 3	Eradicate	5	130
Fireweed	Restricted 3	Contain	4	148
GRT/Sporobolus grasses **West**	Restricted 3	Contain	4	148
Water Hyacinth **GRC**	Restricted 3	Contain	4	144
African Boxthorn	Restricted 3	Contain	3	140
Salvinia	Restricted 3	Contain	4	130
African Fountain Grass	Restricted 3	Contain	3	128
Paterson's Curse	Not declared	Contain	4	124
African Lovegrass **EAST**	Not declared	Contain	2	108
Willow - Pencil	Not declared	Contain	3	108
Yellow Bells	Restricted 3	Contain	2	85
Lippia	Not declared	Contain	3	82
Leucaena (road reserves)	Not declared	Contain	1	78
Parthenium Wide Bay	Restricted 3	Contain	2	76
African Tulip Tree	Restricted 3	Contain	1	53

Species	Declaration Status	Management Target	Feasibility of Long Term Control	Risk Score
African Lovegrass **WEST**	Not declared	Asset protection	2	105
Groundsel Bush	Restricted 3	Asset protection	2	99
Annual Ragweed	Restricted 3	Asset protection	2	96
Mother of Millions	Restricted 3	Asset protection	2	84
Prickly Pear	Restricted 3	Asset protection	3	76
Water Hyacinth **Mary Valley**	Restricted 3	Asset protection	2	68
Privet	Restricted 3	Asset protection	1	66
Madeira Vine	Not declared	Asset protection	2	57
Lantana (road reserves)	Restricted 3	Asset protection	2	38
GRT/Sporobolus grasses **EAST**	Restricted 3	Asset protection	2	38
Camphor Laurel	Restricted 3	Asset protection	2	36
Slash Pine	Not declared	Asset protection	1	36
Chinese Elm	Restricted 3	Asset protection	2	35
Broadleaf Pepper Tree	Restricted 3	Asset protection	1	34
Captain Cook Tree	Restricted 3	Asset protection	3	33
Asparagus Fern (*Asparagus aethiopicus, A. africanus and A. plumosusl*)	Restricted 3	Asset protection	1	31
Singapore Daisy	Restricted 3	Asset protection	1	29
Balloon Vine	Restricted 3	Asset protection	1	25
Easter Cassia	Not declared	Asset protection	3	24
Ochna	Not declared	Asset protection	1	
Cats Claw Creeper	Restricted 3	Asset protection	1	
Dutchmans Pipe	Restricted 3	Asset protection	2	
Golden Rain Tree		Asset protection	1	
Tree of Heaven		Asset protection	1	
Hamill Grass		Asset protection	1	

Table 3: Invasive animals of the Gympie region

Species	Declaration status	Management Target	Feasibility of Long Term Control	Risk score
Red-eared slider turtle	Restricted 2, 3, 4, 5, 6	Prevent Entry		
Barbary Sheep	Restricted 2, 3, 4, 5, 6	Prevent Entry		
Blackbuck Antelope	Restricted 2, 3, 4, 5, 6	Prevent Entry		
Hog deer	Restricted 2, 3, 4, 5, 6	Prevent Entry		
Corn snake	Prohibited	Prevent Entry		
Sambar deer	Restricted 2, 3, 4, 5, 6	Prevent Entry		
Starlings	Not declared	Prevent Entry		
Ferrets	Prohibited	Prevent Entry		
Exotic snakes	Prohibited	Prevent Entry		
Blackbird	Not declared	Eradicate	5	110
Feral rusa deer	Restricted 3, 4, 6	Contain	4	100
European rabbit	Restricted 3, 4, 5, 6	Contain	2	78
Feral horse	Not declared	Contain	4	54
Indian Myna	Not declared	Contain	4	96
Feral goat	Restricted 3, 4, 6	Asset protection	5	84
Feral chital deer	Restricted 3, 4, 6	Asset protection	2	52
Feral fallow deer	Restricted 3, 4, 6	Asset protection	2	52
Feral red deer	Restricted 3, 4, 6	Asset protection	2	52
Feral gig	Restricted 3, 4, 6	Asset protection	1	33
Wild dog	Restricted 3, 4, 6	Asset protection	1	32
European fox	Restricted 3, 4, 6	Asset protection	1	30
Feral cat	Restricted 3, 4, 6	Asset protection	1	28

Table 4 Invasive plants and animals in surrounding local government areas

Invasive Biosecurity Matter	Category	Gympie Regional Council	Somerset Regional Council	South Burnett Regional Council	North Burnett Regional Council	Sunshine Coast Council	Noosa Shire Council	Fraser Coast Regional Council
Invasive Animals								
Red-eared slider turtle (*Trachemys scripta elegans*)	2, 3, 4, 5, 6							
Barbary Sheep (*Ammotragus lervia*)	2, 3, 4, 5, 6							
Blackbuck Antelope (*Antilope cervicapra*)	2, 3, 4, 5, 6							
Feral Goat (*Capra hircus*)	3, 4, 6							
Blackbird (*Turdus merula*)	ND							
Hog deer (*Axis porcinus*)	2, 3, 4, 5, 6							
Rusa deer (*Cervis timorensis*)	3, 4, 6							
Fallow deer (*Dama dama*)	3, 4, 6							
Chital deer (*Axis axis*)	3, 4, 6							
Sambar deer (*Rusa unicolor, syn. Cervus unicolor*)	2, 3, 4, 5, 6							
Invasive Plants								
Alligator Weed (*Alternanthera philoxeroides*)	3							
Belly-ache bush (*Jatropha gossypiifolia* and hybrids)	3							
Blackberry (*Rubis fruticosus spp*)	3							
Cabomba (*Cabomba caroliniana*)	3							
Chilean needle grass (*Nassella neesiana*)	3							
Cholla cacti with the following names:								
• coral cactus (*Cylindropuntia fulgida*)	3							
• devil's rope pear (*C. imbricata*)	3							
• hudson pear (*Cylindropuntia rosea and C. tunicata*)	2, 3, 4, 5							
• jumping cholla (*C. prolifera*)	2, 3, 4, 5							
• snake cactus (*C. spinosior*)	3							
Eve's pin cactus (*Austrocylindropuntia subulata*)	3							

Invasive Biosecurity Matter	Category	Gympie Regional Council	Somerset Regional Council	South Burnett Regional Council	North Burnett Regional Council	Sunshine Coast Council	Noosa Shire Council	Fraser Coast Regional Council
Invasive Plants								
Giant Devil's Fig (*Solanum chrysotrichum*)	ND		orange	green	orange	red	orange	orange
Horsetails (*Equisetum*)	PRO	green	green	green	green	green	green	green
Hygrophila (*Hygrophila costata*)	3	green	green	green	green	orange	orange	orange
Karoo Thorn (*Acacia karroo*)	PRO	green	green	green	green	green	green	green
Kudzu (*Puraria montana*)	3		green	green	green	green	green	green
Kidney Leaf Mud Plantain (*Heteranthera reniformis*)	3	green	orange	green	green	orange	orange	green
Lippia (*Phyla canescens*)	ND		green	red				orange
Madeira Vine (*Anredera cordifolia*)			orange	red	orange	red		green
Mesquites with the following names:								
• honey mesquite (*Prosopis glandulosa*)	3	green	green	green	green	green	green	green
• mesquite or algarroba (*Prosopis pallida*)	3	green	green	green	green	green	green	green
• Quilpie mesquite (*Prosopis velutina*)	3	green	green	green	green	green	green	green
Mexican Bean Tree with the following names:	2, 3, 4, 5		green	green	green	orange	green	green
• *Cecropia pachystachya*			green	green	green	orange	green	green
• *C. palmata*			green	green	green	orange	green	green
• *C. peltata*			green	green	green	orange	green	green
Mexican feather grass (*Nassella tenuissima*)	2, 3, 4, 5	green	green	green	green	green	green	green
Miconia with the following names:	2, 3, 4, 5		green	green	green	green	green	green
• *Miconia calvescens*		green	green	green	green	green	green	green
• *M. cionotricha*		green	green	green	green	green	green	green
• *M. nervosa*		green	green	green	green	green	green	green
• *M. racemosa*		green	green	green	green	green	green	green
Mimosa pigra (*Mimosa pigra*)	2, 3, 4, 5	green	green	green	green	green	green	green
Ornamental gingers with the following names:	2, 3, 4, 5		green	green	green	red	green	orange
• *Hedychium coronarium*	3	green	green	green	green	red	green	orange
• *Hedychium flavescens*	3	green	green	green	green	red	green	orange
• *Hedychium gardnerianum*		green	green	green	green	red	green	orange

Invasive Biosecurity Matter	Category	Gympie Regional Council	Somerset Regional Council	South Burnett Regional Council	North Burnett Regional Council	Sunshine Coast Council	Noosa Shire Council	Fraser Coast Regional Council
Invasive Plants								
Paper mulberry (*Broussonetia papyrifera*)	ND	Absent		Absent	Absent	Absent		Absent
Pond apple (*Annona glabra*)	3	Absent	Absent	Absent	Absent	Present (not close)	Absent	Absent
Prickly acacia (*Vachellia nilotica*)	3		Absent	Absent	Present (not close)	Absent	Absent	Absent
Prickly pears:			Present (not close)	Absent				
• prickly pear (*O. elata*)	2, 3, 4, 5		Absent	Present (close)	Absent	Absent	Absent	Absent
• bunny ears (*O. microdasys*)	2, 3, 4, 5		Absent	Absent	Present (not close)	Absent	Absent	Absent
Senegal tea (*Gymnocoronis spilanthoides*)	3	Absent	Absent	Absent	Absent	Present (not close)	Absent	Absent
Siam Weed:			Absent	Absent	Absent	Absent	Absent	Absent
• *Chromolaena squalida*	3	Absent	Absent	Absent	Absent	Absent	Absent	Absent
• *C. odorata*	3	Absent	Absent	Absent	Absent	Absent	Absent	Absent
Tropical Soda Apple (*Solanum viarum*)	PRO	Absent	Absent	Absent	Absent	Absent	Absent	Absent
Willows (all *Salix spp.* other than *S. babylonica, S. x calodendron* and *S. x reichardtii*)	3		Absent	Absent	Absent	Present (not close)	Absent	Absent
Witchweed (*Striga spp*)	PRO	Absent	Absent	Absent	Absent	Absent	Absent	Absent
Yellow Bells (*Tecoma stans*)	3		Present (not close)	Present (not close)	Present (not close)	Present (not close)	Present (close)	Absent
Yellow fever tree (*vachellia xanthophloea*)	PRO	Absent	Present (not close)	Absent	Absent	Absent	Absent	Absent

Absent

Present in area, not close to GRC boundary

Present in area, close to GRC boundary

6. Measuring success and continuous improvement

Monitoring involves the collection and analysis of information to assist timely decision making, ensure accountability and provide the basis for evaluation and learning. It is an on-going process of methodical collection of data to provide indications of progress and achievement of objectives.

As lead agent in the implementation of the Biosecurity Plan, Gympie Regional Council has a responsibility to demonstrate to its customers, stakeholders and the community that the Biosecurity Strategy is sound and effective. Monitoring, evaluation and reporting on performance will underpin the plan and associated programs and systems.

7. Review Process

The Biosecurity Plan will remain current for 5 years from the date of adoption. Whilst there is no mandatory requirement to review the Biosecurity Plan under the *Biosecurity Act 2014*, the progress of the Gympie Region Biosecurity Plan will be reviewed formally every 12 months by the Weed and Pest Advisory Committee.

The Committee will consider:

• Program goals and objectives

• Outputs and outcomes in key areas

• Monitoring changes against a baseline

• Stakeholder commitments and roles.

The Committee may amend, replace or approve minor revisions of the Biosecurity Plan at any time, if required in accordance with relevant requirements of the *Biosecurity Act 2014* and subject to formal Council endorsement.

8. Definitions

8.1 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.

The Act categorises invasive biosecurity matter as either 'prohibited' or 'restricted.
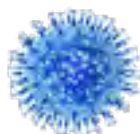
AQUATIC DISEASES, parasites and viruses

ANIMAL DISEASES, parasites and viruses

INVASIVE PLANTS

INVASIVE ANIMALS

NOXIOUS FISH

PLANT DISEASES, parasites and insects

TRAMP ANTS

From a legislative perspective, local government is only required to consider invasive biosecurity matter, which may be declared as prohibited or restricted or other, in the development of the Biosecurity Plan. The Gympie Region Biosecurity Plan does not consider aquatic, animal or plant diseases, parasites, viruses or noxious fish.

Invasive biosecurity matter is classified as:

• Prohibited matter (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), or

• Restricted matter (found in Queensland and has a significant impact on human health, social amenity, the economy or the environment. Specific actions must be taken to limit the spread and impact of this matter by reducing, controlling or containing it.

8.2 Categories of restricted biosecurity matter

There are six categories of restricted matter relevant to local government.

1. Must be reported to a Biosecurity Queensland inspector within 24 hours.

2. Must be reported to a local government or Biosecurity Queensland inspector within 24 hours.

3. Must not be distributed (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.

4. Must not be moved to ensure that it does not spread into other areas of the state.

5. Must not be possessed or kept unless under a permit of the *Biosecurity Act 2014* or another Act.

6. Must not be fed.

8.3 General Biosecurity Obligation (GBO)

The GBO means that any person dealing with biosecurity matter (in this case, invasive plants and animals) must take all reasonable and practical steps to prevent or minimise each biosecurity risk. This may include:

- If you are a livestock owner, you are expected to stay informed about invasive species that could affect or be carried by your animals, as well as weeds and pest animals that could be on your property. You are also expected to manage these invasive species appropriately.

- If you are a landowner (rural, urban, peri-urban), you are expected to stay informed about the weeds and pest animals (such as wild dogs) that could be on your property. You are also expected to manage these invasive species appropriately.

- If you are a commercial horticulture grower, you are expected to stay informed about the invasive species that could affect or be carried by your crops, as well as weeds and pest animals that could be on your property. You are also expected to manage these invasive species appropriately.

- If you farm animals such as deer, goats or pigs commercially, you are expected to ensure that the animals are kept in an escape proof enclosure, cage or other structure. You are also expected to maintain the enclosures in a suitable condition.

9. Resources

Further information can be found by contacting GRC (Lands Protection) on 1300 307 800 or via the following websites:

https://www.gympie.qld.gov.au/weeds-and-pest-animal-control

https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants

https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted

Australian Weeds Strategy 2017-2027
http://www.environment.gov.au/biodiversity/invasive/weeds/publications/strategies/weed-strategy.html

Australian Pest Animal Strategy 2017-202
http://www.agriculture.gov.au/pests-diseases-weeds/pest-animals-and-weeds/review-aus-pest-animal-weed-strategy/aus-pest-animal-strategy

Draft Queensland Weed and pest Strategy 2016-2022

Queensland Biosecurity Strategy 2017-2022
https://publications.qld.gov.au/dataset/draft-queensland-biosecurity-strategy

Burnett Mary Regional Group Strategic Plan 2015-2020
http://www.bmrg.org.au/files/4814/6363/9543/Strategic_Plana.pdf

Wide Bay Burnett Regional Plan 2011
https://www.dilgp.qld.gov.au/resources/plan/wide-bay/wbb-regional-plan.pdf

Weeds of National Significance (2016)
https://www.daf.qld.gov.au/plants/weeds-pest-animals-ants/weeds/wons

Developing local area biosecurity plans – a guide for local governments 2016

Wide Bay Burnett Regional Biosecurity Strategy 2017-2023

Bundaberg Regional Council Pest Management Plan 2010
http://www.bundaberg.qld.gov.au/files/Draft_PMP_2010.pdf

North Burnett Regional Council Pest Management Plan

South Burnett Regional Council Biosecurity Plan

Fraser Coast Interim Biosecurity Plan 2016-2021
http://www.frasercoast.qld.gov.au/documents/4362881/41228091/Fraser%20Coast%20Pest%20Management%20Plan.pdf

Economic impact of state and local government expenditure on weed and pest animal management in Queensland
https://www.lgaq.asn.au/lgaq/publications/pages/WeedPestMgmtEconomicImpact.html

Appendix 1: Invasive Species Assessment Framework

Councils within the Wide Bay Burnett region utilise a risk-based approach for determining management objectives and priorities for invasive species management to ensure that resources are targeted to provide the greatest return.

The utilisation of an agreed management system will enhance the consistency of individual Biosecurity Plans and identify opportunities for collaboration with key stakeholders throughout the region.

The Wide Bay Burnett Invasive Species Assessment Framework involves a number of defined steps which are detailed in the following section. The use of a standardised description of components of each step is central to the assessment framework.

1. **Collate existing information**

2. **Conduct risk Analysis**

3. **Establish management targets**

4. **Identify management feasibility**
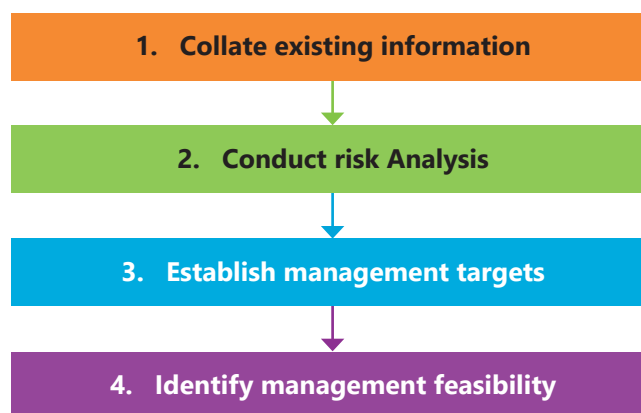
Step 1: Collate existing information on the invasive species	
• Gather information about a particular species such as existing priorities and current distribution to build a profile.	
• Generally this information is made available by Councils to other stakeholders.	
Existing Priority	**Score**
Weed of National Significance (WONS)	5
National Eradication Program	5
State Management Program	5
Other	0
Current Status	**Score**
Prohibited Invasive Biosecurity Matter	5
Restricted Invasive Biosecurity Matter	4
Declared locally	4
Environmental	3
Not declared	1
Extent	**Score**
Isolated/historic	5
Localised (occasional)	4
Localised (common)	3
Widespread (occasional)	2
Widespread (common)	1

Step 2: Conduct a risk analysis on the invasive species

- This involves working through a risk analysis process incorporating both potential and existing threats, while considering the negative impacts of the invasive species on Conservation/Biodiversity, Social, Agricultural and Economic (other than agriculture) values.
- The risk analysis process can be used for both plants and animals.

2.1 Identify potential threats

Likelihood of widespread establishment	Score
Already established throughout the region.	5
Characteristics well suited to the region, very likely to establish, present in neighbouring area, noted historic sites.	4
Characteristics moderately suited to the region, numerous means of introduction.	3
Limited suitability to the region; few, if any, means of introduction.	2
Unsuited to the region; very little, if any, likelihood of establishment.	1
Dispersal mechanisms	**Score**
Spread exceptionally easily by all listed vectors.	5
Spread easily via 3 of the listed vectors.	4
Spread moderately easily via 2 of the listed vectors.	3
Spread by only 1 of the following vectors • human/machinery • domestic animal/wildlife • reproductive/vegetative • wind/water.	2
Limited ability to spread in any way.	1
Invasiveness	**Score**
Species displays all listed characteristics and can successfully invade a range of land systems.	5
Species displays 3 listed characteristics and can successfully invade a range of land systems.	4
Species displays 2 listed characteristics and can successfully invade suitable land systems only.	3
Species displays limited invasive characteristics limited to 1 of the following and may invade suitable land systems only: • ability to germinate/reproduce in arrange of environments • competitive ability • reproductive advantage • distance of dispersal.	2
Species doesn't display any significant invasive characteristics.	1

Management Cost	Score
Ongoing and high cost treatments to discharge general biosecurity obligation.	5
Ongoing, moderate cost treatments to discharge general biosecurity obligation.	4
Initial moderate cost to discharge general biosecurity obligation.	3
Multiple, low cost treatments to discharge general biosecurity obligation.	2
Single, low cost treatment to discharge general biosecurity obligation.	1

2.2 Identify impacts caused by infestation/incursion

Conservation/Biodiversity	Score
Species likely to drastically out-compete native species and impact on biodiversity in a broad range of natural areas (including sensitive areas).	5
Species likely to drastically out-compete native species impact on biodiversity limited to the pests' suited habitat.	4
Species has the potential to invade edges and disturbed systems, has the potential to destroy ecology which is already threatened.	3
Species likely to develop a presence in conservation areas without widespread out-competition of native species.	2
Species unlikely to establish effectively in conservation areas unless by isolated infestations, dumping or urban escapes. Unlikely to penetrate undisturbed areas.	1
Social	**Score**
Species displays severe impacts on all 4 listed social values.	5
Species has significant impacts on 3 of the listed social values.	4
Species has significant impacts on 2 of the listed social values.	3
Species may impact on 1 of the following social values • human health and wellbeing • personal safety and accessibility • visual amenity • management of public and private assets.	2
Species has no documented impacts on any social values.	1
Agriculture	**Score**
Major threat to agriculture by way of reduced output with increased control expenses. Control is added to existing routine management practices and impacts on economic viability of operations. Has the potential to devalue land or force change of land use. Impacts likely to extend adjoining properties.	5
Moderate threat to agriculture with reduction in output and increased management expenses. Control is added to existing routine pest management practices for crop or pastures. Benefits of management outweigh costs. Not likely to impact on land value. Impacts may to extend adjoining properties.	4
Moderate threat to agriculture. Increased maintenance including drainage lines, creeks and roadways. Threats to crop/pasture/livestock can be abated as part of routine management practices.	3
Moderate threat to farm assets and visual amenity throughout the property. Species may impact on native vegetation in non-production areas over time.	2
Not of concern to agriculture under good land management practices.	1

Economic (other than agriculture)	Score
Species may have a negative impact on 4 of the listed economic values.	5
Species may have a negative impact on 3 of the listed economic values.	4
Species may have a negative impact on 2 of the listed economic values.	3
Species may have an impact on only 1 of the following economic values • ability to derive income from the land system, including land values • visual amenity • ability to harbour pests • ease of management.	2
Not of concern to economic endeavours in the region.	1

2.3 Calculate the final risk ranking for invasive species in the area

Once a risk assessment has been conducted on all invasive species in an area (property, local government catchment scale), they can be ranked according to the risk represented.

In the Wide Bay Burnett, the formula for the final risk ranking for invasive plants and animals is:

(Existing Priority + Current Status + Potential Threat + Impact) x Extent

Step 3: Establish management targets for each species		
• The management targets for invasive species are aligned with the Invasion Curve outlined in the Wide Bay Burnett Regional Biosecurity Strategy 2017-2023.		
Outcome	**Description**	**Score**
Prevent entry	• High priority species not previously identified as being present in the region are prevented from entering. • High risk areas and pathways identified and monitored regularly to identify possible incursion by new species. • All staff aware of high priority species and high risk sites and pathways.	4
Eradication	• Species not previously recorded in the region are prevented from establishing. • Effective rapid response program in place to ensure all visible incursions/populations are effectively controlled within the entire region. • Historical sites identified and monitored regularly to identify and eradicate new incursions.	3
Containment	• Eradication not feasible, areas known to be clean but suitable for establishment. • Widespread species restricted to identified containment zones.	2
Asset protection	• Management programs target protection of high priority assets from widespread species within the region. • Impact of widespread species reduced in the region through identification of management zones and targeted programs. • Landholders implementing best practice activities to reduce the impact of invasive plants and animals. • Landholders throughout the region have the capacity and commitment to manage widespread invasive species.	1

Step 4: Identify the management feasibility for each species	
• The feasibility of long term control must be built into operational programs for invasive species management.	
Achievability/feasibility of long term control	**Score**
Prevention of entry of high risk species likely as high risk sites and pathways identified and surveillance program are in place.	6
Eradication of the invasive species is highly achievable as incursion is small or very contained. Ongoing surveillance necessary to ensure no further reinfestation.	5
Potential to eradicate isolated infestations/populations in particular catchment/geographic area that is unlikely to become reinfested.	4
Potential for Council/landholders to satisfy basic strategic control targets with appropriate funding/resources.	3
Management of the invasive species requires universal commitment from all stakeholders. Operational control is reliant on coordinated action from all stakeholders.	2
Invasive species is widespread throughout the region covering various tenures. There is no universal control available.	1

Appendix 2: Delivery Partner Responsibilities

Local Government

Local government has a major responsibility for invasive species management through the enforcement of the *Biosecurity Act 2014* and has an important role to play in engaging local communities, managing public lands and assisting with emergency management.

Gympie Regional Council

Invasive species management in the local government area including:

- monitoring and surveillance,
- landholder education and awareness,
- management of invasive species on Council lands, roads and reserves
- collection of data relating to invasive plants and animals
- compliance activities.

State Government

The Queensland State Government leads the development of policies, strategies and legislation that promote a comprehensive and responsive biosecurity system across Queensland. The Department of Agriculture and Fisheries (DAF) is the lead agency for invasive species management within the QLD Government.

Biosecurity Queensland

State/Regional planning, mapping and research, compliance, surveillance, early detection, destruction of infestations on a priority basis, raising awareness, support local government planning, 1080 supply and administration.

HQ Plantations

Maintain HQ Plantations Land in accordance with *Biosecurity Act 2014* and prevent spread of invasive plants and animals within the specified lands or into neighbouring properties. Coordination with adjacent landholders, Councils and other State government agencies in regional pest management.

Department of Natural Resources and Mines (State Land Management)

Maintain unallocated State Lands in accordance with *Biosecurity Act 2014* and prevent spread of invasive plants and animals within the specified lands or into neighbouring properties. Coordination with adjacent landholders, Councils and other State government agencies in regional pest management.

Queensland Parks and Wildlife Service

Managing invasive plants and animals in parks, forests and other areas gazetted under the *Nature Conservation Act 1992* and *Forestry Act 1959* in accordance with *Biosecurity Act 2014*. Coordination with adjacent landholders, Councils and other State government agencies in regional pest management.

Department of Transport and Main Roads

Maintain road reserves in accordance with *Biosecurity Act 2014* and prevent spread of invasive plants and animals within the road network or into neighbouring properties. Coordination with adjacent landholders, Councils and other State government agencies in regional pest management.

Queensland Rail

Maintain rail corridors in accordance with *Biosecurity Act 2014* and prevent spread of invasive plants and animals within the rail network or into neighbouring properties. Coordination with adjacent landholders, Councils and other State government agencies in regional pest management.

Federal Government

The Commonwealth government has a role in preventing new weed incursions at national borders (quarantine); in education, research and development; in funding, and national legislation. National agreements outline the roles and responsibilities of government and industry in responding to emergency plant, pest and disease incidents, and detail how those responses will be funded.

Department of Defence

Maintain Defence Lands in accordance with *Biosecurity Act 2014* and prevent spread of invasive plants and animals within specified lands or into neighbouring properties. Coordination with adjacent landholders, Councils and other State government agencies in regional pest management.

Department of Agriculture and Water Resources

Manage, coordinate and prepare for response actions to national priority pests, diseases and weeds, including research.

Industry Bodies

Industry bodies in the region promote and facilitate invasive species management on agreed local/regional priorities and identify and fund research priorities to enable continued improvement in the management of weeds and pest animals.

Agforce

Landholder support including training for invasive species management. Participation in communication of initiatives to members and encourage member participation in invasive species management.

Canegrowers

Landholder support including training for invasive species management. Participation in communication of initiatives to members and encourage member participation in invasive species management.

NGIQ (Nursery and Garden Industry Queensland)

Landholder support including training for invasive species management. Participation in communication of initiatives to members and encourage member participation in invasive species management.

Community groups, volunteers and individuals

Community groups and volunteers play an important role in the management of invasive species in the region by enlisting support and providing on-ground control. Building on this foundation is essential in sharing responsibility for invasive species management.

Burnett Mary Regional Group (BMRG)

Natural resource and environmental management in the Burnett and Mary catchments through:

- Collaboration with the Queensland Government, Landcare groups, agricultural groups, regional councils and landholders to oversee natural resource and environmental management in the Wide Bay Burnett region
- Promoting invasive species management across the Burnett and Mary catchments with adequate and appropriate planning and coordinated delivery.

Mary River Catchment Coordinating Committee (MRCCC)

Work with the community, business and government to secure funding to manage invasive plants and animals in the Mary catchment; including community advice, training, support, services and workshops

Seqwater

Maintain relevant lands in accordance with *Biosecurity Act 2014* and prevent spread of invasive plants and animals to neighbouring properties. Coordination with adjacent landholders, Councils and other State government agencies in regional pest management.

Sunwater

Maintain relevant lands in accordance with *Biosecurity Act 2014* and prevent spread of invasive plants and animals to neighbouring properties. Coordination with adjacent landholders, Councils and other State government agencies in regional pest management.

Burnett Catchment Care Association

Work with the community, business and government to secure funding to manage invasive plants and animals in the Burnett Catchment; including community advice, training, support, services and workshops

District Landcare groups

Work with the community, business and government to secure funding to manage invasive plants and animals, provide advice, training, support, services and workshops to community.

Primary Producers, Rural and peri-urban Residents, Urban residents

All landholders to take an active role in managing biosecurity risks under their control. Includes early detection, destruction of infestations and pest control in environmentally significant areas.

Utility Managers

All managers of linear reserves have an important role in the management of invasive species in the region, including the development and implementation of management strategies and the education of the community and other stakeholders.

Ergon

Maintain relevant energy infrastructure in accordance with *Biosecurity Act 2014* and prevent spread of invasive plants and animals to neighbouring properties. Coordination with adjacent landholders, Councils and other State government agencies in regional pest management.

Energex

Maintain relevant energy infrastructure in accordance with *Biosecurity Act 2014* and prevent spread of invasive plants and animals to neighbouring properties. Coordination with adjacent landholders, Councils and other State government agencies in regional pest management.

Powerlink

Maintain relevant energy infrastructure in accordance with *Biosecurity Act 2014* and prevent spread of invasive plants and animals to neighbouring properties. Coordination with adjacent landholders, Councils and other State government agencies in regional pest management.

Telstra

Maintain relevant infrastructure in accordance with *Biosecurity Act 2014* and prevent spread of invasive plants and animals to neighbouring properties. Coordination with adjacent landholders, Councils and other State government agencies in regional pest management.

Appendix 3: Priority invasive species and management requirements

The *Biosecurity Act 2014* allows for a flexible approach to biosecurity planning with an emphasis on shared responsibility and risk based decision making. Management goals and expectations have been defined through consultation with key stakeholders.

The following section of the Gympie Region Biosecurity Plan provides guidance for delivery partners contributing to the management of invasive plants and animals in the Gympie region.

Information sheets for each species considered in the Gympie Biosecurity Plan have been developed as below. Please refer to Section 5 (pp 23-25) for order.

Invasive Species *(Scientific Name)*

Photos courtesy of the Queensland Government

Category	Potential Entry Points	Impacts and threats
Declaration status		Identification of impacts and threats

Invasion characteristics		Management Goal and Expectations
Habitat		Management goal and expectation for key stakeholders

Alligator Weed (*Alternanthera philoxeroides*)

Category	Potential Entry Points	Impacts and threats
Restricted Category 3	Known infestations in adjoining Councils. Known substitute for Asian vegetable. Spread easily in waterways and by contaminated machinery (boats, vehicles).	**Environmental** Poses extreme threat to waterways and wetlands. Restricts water flow in creeks, channels and drains. Reduces water quality. Reduces water bird and fish activity. Kills fish and submerged native water plants. Replaces native wetland plants. Damages pumps and irrigation equipment. Poses extreme threat to irrigated croplands. Increases water loss through evapotranspiration. **Social** Impedes water sports and boating access. Endangers swimmers and animals. Creates favourable habitat for mosquitoes.

Invasion characteristics (perennial aquatic and land weed)	Management Goal and Expectations
Alligator weed is not known to be present in the Gympie region. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of arriving in the region due to current and potential distribution and/or an existing high risk pathway. Further informatio n can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/alligator-weed.	**Goal** Prevent entry – no known infestations **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring of occupied land and activities to prevent entry. **GRC** Education of all stakeholders to prevent entry.

Cabomba (*Cabomba caroliniana*)

Category	Potential Entry Points	Impacts and threats
Restricted Category 3	Known infestations in adjoining Councils. Spread easily in waterways and by contaminated machinery (boats, vehicles).	**Environmental** Aggressively invades native freshwater systems. Transforms aquatic ecosystems. Displaces native plants. Affects native wildlife. **Economic** Affects water quality. Increases siltation in lakes. Obstructs creeks, lakes and dams. Interferes with infrastructure (e.g. irrigation). **Social** Impedes aquatic recreational activities. Endangers swimmers who can become entangled.
Invasion characteristics (perennial submerged aquatic)		**Management Goal and Expectations**
Cabomba is not known to be present in the Gympie region. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of arriving in the region due to current and potential distribution and/or an existing high risk pathway. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/cabomba.		**Goal** Prevent entry – no known infestations **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring of occupied land and activities to prevent entry. **GRC** Education of all stakeholders to prevent entry.

Chilean Needle Grass *(Nassella neesiana)*

Category	Potential Entry Points	Impacts and threats
Restricted Restricted Category 3 Weed of National Significance	Spread by seeds sticking to clothing, livestock, vehicles and farm/other machinery, in contaminated seeds or fodder. Also spread by floodwater moving seed downstream and over flood plains.	**Environmental** **Environmental** Reduces natural biodiversity by replacing native species. **Economic** Heavy infestations displace desirable pasture species. Decreases productivity of pastures by up to 50 per cent. Long, sharp seeds injure animals, downgrading lamb and sheep meat, wool, skins and hides.

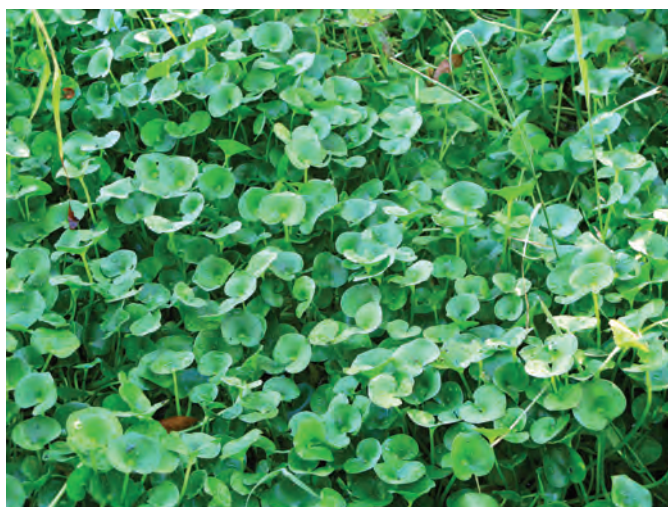| Invasion characteristics (perennial tussock grass)	Management Goal and Expectations
Chilean needle grass is not known to be present in the Gympie region. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of arriving in the region due to current and potential distribution and/or an existing high risk pathway. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/chilean-needle-grass.	**Goal** Prevent entry – no known infestations **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring of occupied land and activities to prevent entry. **GRC** Education of all stakeholders to prevent entry.

Horsetails *(Equisetum spp.)*

Category	Potential Entry Points	Impacts and threats
Prohibited	Spreads mostly by vegetative means. Popular as a garden plant.	**Environmental** Forms pure stands over extensive areas, mainly in wetlands and low-lying crops.

Invasion characteristics (non woody herbaceous plant)	Management Goal and Expectations
Horsetails are not known to be present in the Gympie region. It is generally found in moist disturbed areas. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of arriving in the region due to current and potential distribution and/or an existing high risk pathway. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/prohibited/horsetails.	**Goal** **Prevent entry – no known infestations** **Expectations** **Landholder** All sightings to be reported to Biosecurity Queensland on 13 25 23. Consistent monitoring of occupied land and activities to prevent entry. **GRC** Education of all stakeholders to prevent entry.

Hudson Pear
(Cylindropuntia pallida (syn. rosea, C. tunicata)

Category	Potential Entry Points	Impacts and threats
Restricted Category 2, 3, 4, 5	Spread by animals, vehicles and humans.	**Environmental** Destroys native pastures. **Economic** Becomes costly and time-consuming to control. **Social** Sharp spines threaten native animals, bushwalkers and farm animals. Spines can penetrate boots and tyres.

Invasion characteristics (densely branched cactus)	Management Goal and Expectations
Hudson pear is not known to be present in the Gympie region. It is generally found semi-arid rangelands. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of arriving in the region due to current and potential distribution and/or an existing high risk pathway. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/hudson-pear.	**Goal** Prevent entry – no known infestations **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring of occupied land and activities to prevent entry. **GRC** Education of all stakeholders to prevent entry.

Hygrophila *(Hygrophila costata)*

Category	Potential Entry Points	Impacts and threats
Restricted Category 3	Known infestations in adjoining Councils. Spread easily in waterways and by contaminated machinery (boats, vehicles).	**Environmental** Grows aggressively and competes with native water plants. Forms mats of dense, floating growth at the edges of freshwater lakes.
Invasion characteristics (erect herb/water weed)		**Management Goal and Expectations**
Hygrophila is not known to be present in the Gympie region. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of arriving in the region due to current and potential distribution and/or an existing high risk pathway. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/hygrophila.		**Goal** **Prevent entry – no known infestations** **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring of occupied land and activities to prevent entry. **GRC** Education of all stakeholders to prevent entry.

Karoo Thorn (*Acacia karroo*)

Category	Potential Entry Points	Impacts and threats
Prohibited	Its seeds are spread by animals, wind and water, as well as by people – it has been intentionally cultivated in several states.	**Environmental** Forms dense thorny thickets leading to habitat loss. Invades large areas, particularly where land has been overgrazed. Resists fire and is well-suited to rangelands and open grasslands. **Economic** Reduces agricultural productivity by suppressing grass growth. Prevents stock movement and can restrict watering.

Invasion characteristics (shrub or tree)	Management Goal and Expectations
Karoo thorn is not known to be present in the Gympie region. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of arriving in the region due to current and potential distribution and/or an existing high risk pathway. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/prohibited/karoo-thorn.	**Goal** Prevent entry – no known infestations **Expectations** **Landholder** All sightings to be reported to Biosecurity Queensland on 132 523. Consistent monitoring of occupied land and activities to prevent entry. **GRC** Education of all stakeholders to prevent entry.

Kidneyleaf Mudplaintain (*Heteranthera reniformis*)

Category	Potential Entry Points	Impacts and threats
Not declared	Known infestations in adjoining Councils. Spread easily in waterways and by contaminated machinery (boats, vehicles).	**Environmental** Forms dense mats that smother native aquatic plants. **Economic** Serious weed of flooded rice fields overseas. Provides good habitat for mosquitoes.

Invasion characteristics (shrub or tree)	Management Goal and Expectations
Kidneyleaf mudplantain is not known to be present in the Gympie region. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of arriving in the region due to current and potential distribution and/or an existing high risk pathway. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/other/kidneyleaf-mudplantain.	**Goal** Prevent entry – no known infestations **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring of occupied land and activities to prevent entry. **GRC** Education of all stakeholders to prevent entry.

Mesquite *(Prosopis glandulosa, P. pallida, P. velutina, P. spp. Hybrid)*

Category	Potential Entry Points	Impacts and threats
Restricted Category 3	Common across western Queensland. Seeds spread by stock faeces, some pest animals and native animals.	**Environmental** Forms dense, impenetrable thickets. Out-competes other vegetation. Quickly invades upland country. **Economic** Sharp thorns can puncture vehicle tyres. **Social** Sharp thorns can injure animals and humans.

Invasion characteristics (multi stemmed shrub)	Management Goal and Expectations
Mesquite is not known to be present in the Gympie region. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of arriving in the region due to current and potential distribution and/or an existing high risk pathway. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/mesquite.	**Goal** **Prevent entry – no known infestations** **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring of occupied land and activities to prevent entry. **GRC** Education of all stakeholders to prevent entry.

Mexican Bean Tree

(Cecropia pachystachya, C. palmata and C. peltata)

Category	Potential Entry Points	Impacts and threats
Restricted category 2, 3, 4, 5	Garden specimens found in Mackay, Cairns and Brisbane. Seeds spread by fruit bats and birds.	**Environmental** Potential to invade and dominate moderately moist forest ecosystems, possibly causing serious and irreversible damage.

Invasion characteristics (fast growing tree)	Management Goal and Expectations
Mexican feather grass is not known to be present in the Gympie region. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of arriving in the region due to current and potential distribution and/or an existing high risk pathway. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/mexican-feather-grass.	**Goal** Prevent entry – no known infestations **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring of occupied land and activities to prevent entry. **GRC** Education of all stakeholders to prevent entry.

Mexican Feather Grass (*Nassella tenuissima*)

Category	Potential Entry Points	Impacts and threats
Restricted category 2, 3, 4, 5	Seeds spread by flooding, vehicles and machinery, and on clothing, livestock and fur of pets.	**Environmental** Causes severe environmental damage to native grasslands. **Economic** Invades productive pastures.

Invasion characteristics (perennial tussock grass)	Management Goal and Expectations
Mexican feather grass is not known to be present in the Gympie region. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of arriving in the region due to current and potential distribution and/or an existing high risk pathway. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/mexican-feather-grass.	**Goal** **Prevent entry – no known infestations** **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring of occupied land and activities to prevent entry. **GRC** Education of all stakeholders to prevent entry.

Pond Apple (*Annona glabra*)

Category	Potential Entry Points	Impacts and threats
Restricted category 3	Extensive infestations in wet tropics, isolated infestation recorded in Nambour.	**Environmental** Invades fresh, brackish and saltwater areas. Forms dense stands in swamp areas; thickets capable of replacing ecosystems. Colonises undisturbed areas. Has greatest effect on melaleuca wetlands, Heritiera littoralis mangrove communities, riparian areas, drainage lines, coastal dunes and islands.

Invasion characteristics (semi-deciduous tree)	Management Goal and Expectations
Pond apple is not known to be present in the Gympie region. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of arriving in the region due to current and potential distribution and/or an existing high risk pathway. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/pond-apple.	**Goal** Prevent entry – no known infestations **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring of occupied land and activities to prevent entry. **GRC** Education of all stakeholders to prevent entry.

Red Witchweed *(Striga asiatica [Syn. S. Lutea, S. hirsuta])*

Category	Potential Entry Points	Impacts and threats
Probibited	Seeds spread primarily within soil (which can adhere to machinery or vehicles or other contaminated produce such as mulch or seeds). Seeds can be a contaminant of imported grain, pasture seeds or present in soil adhering to imported machinery.	**Economic** Affects corn (maize), millet, rice, sugar cane and sorghum. Has potential to become serious pest. USA has spent more than $250 million on eradication in Carolinas. In Africa, heavy infestations can reduce grain crop yields by up to 70 per cent.
Invasion characteristics (parasitic plant)		**Management Goal and Expectations**
Red witchweed is not known to be present in the Gympie region. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of arriving in the region due to current and potential distribution and/or an existing high risk pathway. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/prohibited/red-witchweed.		**Goal** Prevent entry – no known infestations **Expectations** **Landholder** All sightings to be reported to Biosecurity Queensland on 132 523. Consistent monitoring of occupied land and activities to prevent entry. **GRC** Education of all stakeholders to prevent entry.

Senegal Tea (*Gymnocoronis spilanthoides*)

Category	Potential Entry Points	Impacts and threats
Restricted category 3	Infestations recorded in nearby Councils. Spread easily in waterways and by contaminated machinery (boats, vehicles).	**Environmental** Forms floating mats, blocking irrigation ditches, shallow dams and waterways. Invades and degrades natural wetlands.

Invasion characteristics (perennial aquatic weed)	Management Goal and Expectations
Senegal tea is not known to be present in the Gympie region. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of arriving in the region due to current and potential distribution and/or an existing high risk pathway. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/senegal-tea.	**Goal** Prevent entry – no known infestations **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring of occupied land and activities to prevent entry. **GRC** Education of all stakeholders to prevent entry.

Siam Weed (*Chromolaena odorata*)

Category	Potential Entry Points	Impacts and threats
Restricted category 3	Found in coastal areas with rainfall greater than 600mm/year. Spread easily in the wind, waterways and by contaminated machinery.	**Environmental** Quickly invades and smothers native vegetation. Out-competes native vegetation. Increases frequency and intensity of bushfires. **Economic** Out-competes pastures and crops. Poisons stock. **Social** Causes skin problems and asthma in allergy-prone people.

Invasion characteristics (dense tangling bush)	Management Goal and Expectations
Siam weed is not known to be present in the Gympie region. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of arriving in the region due to current and potential distribution and/or an existing high risk pathway. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/siam-weed.	**Goal** Prevent entry – no known infestations **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring of occupied land and activities to prevent entry. **GRC** Education of all stakeholders to prevent entry.

Tropical Soda Apple (*Solanum viarum*)

Category	Potential Entry Points	Impacts and threats
Prohibited	First detected in Queensland in November 2010 near Coominya. Currently small number of isolated infestations in Queensland. Spread linked to movement of cattle.	**Environmental** Invades and replace pasture, including improved pasture. Leaves are unpalatable to livestock (although fruit are readily eaten). Provides an alternative host for at least six viruses that affect various vegetables.

Invasion characteristics (multi branched perennial shrub)	Management Goal and Expectations
Tropical soda apple is not known to be present in the Gympie region. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of arriving in the region due to current and potential distribution and/or an existing high risk pathway. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/prohibited/tropical-soda-apple.	**Goal** Prevent entry – no known infestations **Expectations** **Landholder** All sightings to be reported to Biosecurity Queensland on 132 523. Consistent monitoring of occupied land and activities to prevent entry. **GRC** Education of all stakeholders to prevent entry.

Willows (other than weeping)
(*All Salix spp (other than babylonica, calodendron, humboldtiana and reichardtii*))

Category	Potential Entry Points	Impacts and threats
Restricted category 3	Currently found in southern Queensland. Spread by fragments of stems or twigs breaking off and growing new roots in water.	**Environmental** Invades riverbanks and wetlands. Roots spread into beds of watercourses, slowing water flow, reducing aeration and causing flooding and erosion. **Economic** Has aggressive root system in urban environments, which readily damages footpaths and drains.

Invasion characteristics (multi stemmed tree/shrub)		Management Goal and Expectations
Invasive willows (other than those stated) are not known to be present in the Gympie region. They have a high to very high weed risk (highly invasive and high threat) and a high likelihood of arriving in the region due to current and potential distribution and/or an existing high risk pathway. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/willow.		**Goal** Prevent entry – no known infestations **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring of occupied land and activities to prevent entry. **GRC** Education of all stakeholders to prevent entry.

Red Eared Slider Turtle *(Trachemys scripta elegans)*

Category	Potential Entry Points	Impacts and threats
Restricted Class 2, 3, 4, 5, 6	Red-eared sliders have been distributed through the illegal pet trade in South East Queensland, but are now believed to have been eradicated here.	**Environmental** Affects range of aquatic prey, including rare amphibians. Can take over waterbird nests for basking sites, and damage and prey on eggs and hatchlings. Out-competes native turtle species for food and space in waterways. Carries pathogens and diseases that can kill native turtles and other aquatic wildlife. **Social** Captive red-eared sliders have been a source of salmonella infection in humans in USA.
Invasion characteristics		**Management Goal and Expectations**
Red eared slider turtles are not known to be present in the Gympie region. They have a high to very high pest risk (highly invasive and high threat) and a high likelihood of arriving in the region due to potential distribution and/or an existing high risk pathway. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/slider-turtle.		**Goal** **Prevent entry – no known infestations** **Expectations** **Landholder** All sightings to be reported to Biosecurity Queensland on 13 25 23 within 24 hours. Must not release into the environment, Take all reasonable and practical steps to minimise risk of escape. **GRC** Education of all stakeholders to prevent entry.

Barbary Sheep (*Ammotragus lervia*)

Category	Potential Entry Points	Impacts and threats
Restricted Class 2, 3, 4, 5, 6	Not yet recorded in Queensland. Can be a popular target for recreational hunting.	**Environmental** Can damage grassland ecosystems. Can spread weed seeds. **Economic** Can compete with cattle, goats and sheep for food. If established, control programs are costly and resource-intensive. **Social** Can be traffic hazard. Can damage fences.

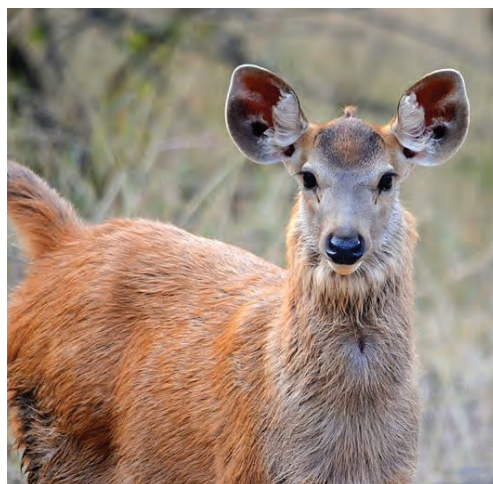| Invasion characteristics	Management Goal and Expectations
Barbary sheep are not known to be present in the Gympie region. They have a high to very high pest risk (highly invasive and high threat) and a high likelihood of arriving in the region due potential distribution. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/barbary-sheep.	**Goal** Prevent entry – no known infestations **Expectations** **Landholder** All sightings to be reported to Biosecurity Queensland on 13 25 23 within 24 hours. Must not release into the environment, Take all reasonable and practical steps to minimise risk of escape. **GRC** Education of all stakeholders to prevent entry.

Blackbuck Antelope *(Antilope cervicapra)*

Category	Potential Entry Points	Impacts and threats
Restricted Class 2, 3, 4, 5, 6	Small population was released in Cape York but subsequently eradicated. Can be a popular target for recreational hunting.	**Environmental** Can damage grassland ecosystems. Can spread weed seeds. **Economic** Can compete with cattle and sheep for food. If established, control programs are costly and resource-intensive. **Social** Can be a traffic hazard. Can damage fences.

Invasion characteristics	Management Goal and Expectations
Blackbuck antelope are not known to be present in the Gympie region. They have a high to very high pest risk (highly invasive and high threat) and a high likelihood of arriving in the region due to potential distribution. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/blackbuck-antelope.	**Goal** **Prevent entry – no known infestations** **Expectations** **Landholder** All sightings to be reported to Biosecurity Queensland on 13 25 23 within 24 hours. Must not release into the environment, Take all reasonable and practical steps to minimise risk of escape. **GRC** Education of all stakeholders to prevent entry.

Hog Deer *(Axis porcinus)*

Category	Potential Entry Points	Impacts and threats
Restricted Class 2, 3, 4, 5, 6	Not recorded in the wild in Queensland but have been recorded in adjoining Council. Can be a popular target for recreational hunting.	**Environmental** Can damage natural environment by eating native vegetation, damaging trees, dispersing weed seeds, and fouling water. **Economic** Can damage forestry seedlings, agricultural and horticultural crops, commercial flower crops, orchards, irrigation systems, and fences. In dry seasons, can compete with sheep and cattle for pasture and supplementary feed. **Social** Can be a traffic hazard and cause car accidents in rural areas (generally not found near urban areas).
Invasion characteristics	**Management Goal and Expectations**	
Hog deer are not known to be present in the Gympie region. They have a high to very high pest risk (highly invasive and high threat) and a high likelihood of arriving in the region due to potential distribution. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/other/hog-deer.	**Goal** Prevent entry – no known infestations **Expectations** **Landholder** All sightings to be reported to Biosecurity Queensland on 13 25 23 within 24 hours. Must not release into the environment, Take all reasonable and practical steps to minimise risk of escape. **GRC** Education of all stakeholders to prevent entry.	

American Corn Snake *(Elaphe guttata)*

Category	Potential Entry Points	Impacts and threats
Prohibited	Not recorded in the wild in Queensland. Traded through the illegal pet market.	**Environmental** Eats native species. Out-competes native species for resources. Could spread exotic reptile diseases.

Invasion characteristics	Management Goal and Expectations
American corn snakes are not known to be present in the Gympie region. They have a high to very high pest risk (highly invasive and high threat) and a high likelihood of arriving in the region due to potential distribution. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/prohibited/american-corn-snake.	**Goal** **Prevent entry – no known infestations** **Expectations** **Landholder** All sightings to be reported to Biosecurity Queensland on 13 25 23 within 24 hours. Must not release into the environment, Take all reasonable and practical steps to minimise risk of escape. **GRC** Education of all stakeholders to prevent entry.

Sambar Deer *(Rusa unicolor syn. Cervus unicolor)*

Category	Potential Entry Points	Impacts and threats
Restricted Class 2, 3, 4, 5, 6	Not recorded in the wild in Queensland. Traded through the illegal pet market.	**Environmental** Can damage natural environment by eating native vegetation, damaging trees, dispersing weed seeds, and fouling water. **Economic** Can damage forestry seedlings, agricultural and horticultural crops, commercial flower crops, orchards, irrigation systems, and fences. In dry seasons, competes with cattle for pasture and supplementary feed. **Social** Can be traffic hazard and cause car accidents in rural areas.

Invasion characteristics	Management Goal and Expectations
Sambar deer are not known to be present in the wild in the Gympie region. They have a high to very high pest risk (highly invasive and high threat) and a high likelihood of arriving in the region due to potential distribution. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/sambar-deer.	**Goal** Prevent entry – no known infestations **Expectations** **Landholder** All sightings to be reported to Biosecurity Queensland on 13 25 23 within 24 hours. Must not release into the environment, Take all reasonable and practical steps to minimise risk of escape. **GRC** Education of all stakeholders to prevent entry.

Ferret *(Mustela furo, M. putorius)*

Category	Potential Entry Points	Impacts and threats
Prohibited	Occasional sighting of lone species have been recoded throughout Queensland and adjoining Council area. Traded through the illegal pet market.	**Environmental** Eats native species. **Economic** Transmits disease to stock and humans. Eats chickens and eggs. **Social** Can inflict painful bites that require medical treatment.

Invasion characteristics	Management Goal and Expectations
Ferrets are not known to be present in the wild in the Gympie region. They have a high to very high pest risk (highly invasive and high threat) and a high likelihood of arriving in the region due to potential distribution. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/prohibited/ferret.	**Goal** Prevent entry – no known infestations **Expectations** **Landholder** All sightings to be reported to Biosecurity Queensland on 13 25 23 within 24 hours. Must not release into the environment, Take all reasonable and practical steps to minimise risk of escape. **GRC** Education of all stakeholders to prevent entry.

Parthenium (*Parthenium hysterophorus*)

Category	Potential Entry Points	Impacts and threats
Restricted category 3 Weed of National Significance	Introduced to Gympie region through contaminated fodder. Seeds spread by water, vehicles, machinery and stock. Also spread by feral and native animals, and in feed and seed.	**Environmental** Invades disturbed bare areas along roadsides, heavily stocked areas around yards, and watering points. **Economic** Invades pastures, reduces beef production. Costs cropping industries millions of dollars per year, competes with crops for nutrients and space. **Social** Pollen contains potent allergens that can cause reactions such as dermatitis and hay fever.

Invasion characteristics (annual herb)	Management Goal and Expectations
Parthenium has been recorded at Kandanga and Calico Creek but is not known to be present in great amounts in the greater Gympie region (other than Wide Bay Creek and Barambah Creek catchments). It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing in the region due to current and potential distribution and/or existing high risk pathways. Parthenium can set viable seed within two weeks of germination, making it highly invasive. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/parthenium.	**Goal** Eradication (areas other than Wide Bay Creek) **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area.

Bitou Bush *(Chrysanthemoides monilifera subsp. rotundata)*

Category	Potential Entry Points	Impacts and threats
Restricted category 2, 3, 4, 5 Weed of National Significance	Spreads rapidly by birds eating fruit and passing seed.	**Environmental** Out-competes and often eliminates native flora on coastal dunes. Forms dense green blankets preventing native seedlings from growing. Destroys habitats of many native birds and animals.

Invasion characteristics (perennial shrub)	Management Goal and Expectations
Bitou bush has been recorded in the Rainbow Beach foreshore and is not known to be present elsewhere in the Gympie region. It is subject to an eradication program lead by Biosecurity Queensland. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing in the region due to current and potential distribution and/or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/bitou-bush.	**Goal** Eradication **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area.

Rubbervine *(Cryptostegia grandiflora)*

Category	Potential Entry Points	Impacts and threats
Restricted category 3 Weed of National Significance	Rubbervine is regarded as one of the worst weeds in Australia because of its invasiveness, impacts and potential for spread. Seeds spread by wind and water.	**Environmental** Smothers riparian vegetation and forms dense thickets. Infestations expand outward from waterways, hillsides and pastures. Decreases biodiversity and impedes stock and native animal movement. **Economic** Poisonous to livestock. Presents difficulties for mustering stock.

Invasion characteristics (climbing vine)	Management Goal and Expectations
Rubbervine is currently present in the Booubyjan district and is not known to be present elsewhere in the Gympie region. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing in the region due to current and potential distribution and/or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/rubber-vine.	**Goal** Eradication **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area.

Hymenachne (*Hymenachne amplexicaulis*)

Category	Potential Entry Points	Impacts and threats
Restricted category 3 Weed of National Significance	Infestations recorded in nearby Councils. Seeds spread by water movement and migratory aquatic birds.	**Environmental** Affects drains, lagoons, wetlands, creeks and rivers. Increases flooding by reducing flow capacity of drainage networks. Interferes with wildlife habitats. **Economic** Interferes with irrigation and infrastructure. **Social** Degrades water quality for recreational purposes.

Invasion characteristics (perennial grass, wetlands)	Management Goal and Expectations
Hymenachne has historically been recorded in the Amamoor and Curra districts and is not known to be present further in the Gympie region. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing in the region due to current and potential distribution and/or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/hymenachne.	**Goal** Eradication **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area.

Bellyache Bush *(Jatropha gossypiifolia)*

Category	Potential Entry Points	Impacts and threats
Restricted category 3	Garden sales. Known infestations in adjoining Councils. Seeds spread by fruit eating birds, water, livestock and machinery.	**Environmental** Out-competes native vegetation. Takes over extensive sections of river frontage, reducing biodiversity. Poisonous to native animals. **Economic** Increases mustering costs. Reduces pasture growth. Poisonous to stock. **Social** All parts are poisonous to humans.

Invasion characteristics (thorny shrub/small tree)	Management Goal and Expectations
Bellyache bush has previously been recorded in the Chatsworth area and is not known to be present further throughout the Gympie region. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing in the region due to current and potential distribution and/or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/bellyache-bush.	**Goal** Eradication **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area.

Kudzu *(Pueraria montana var. lobata, Syn. P. lobata)*

Category	Potential Entry Points	Impacts and threats
Restricted category 3	Spread over long-distance by people moving live plants. Transported and planted for stock fodder, as herb and as garden ornamental. Seed pods spread by sticking to clothing or animal fur.	**Environmental** Out-competes and smothers native vegetation. **Economic** Damages buildings, overhead wires and other structures. Out-competes and smothers tree crops.
Invasion characteristics (perennial vine)		**Management Goal and Expectations**
Kudzu has historically been recorded in the Tagigan and Mooloo areas. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing in the region due to current and potential distribution and/or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/kudzu.		**Goal** **Eradication** **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area.

Prickly Acacia *(Vachellia nilotica)*

Category	Potential Entry Points	Impacts and threats
Restricted category 1	Seeds spread primarily by livestock through ingesting mature pods (long-distance movement possible by livestock transport). Minor spread by mud on vehicles and water movement.	**Environmental** Degrades soil by facilitating erosion. Threatens biodiversity through transformation of natural grasslands into thorny scrub and woodland. **Economic** Decreases pastures and out-competes them for water. Forms dense thorny thickets that interfere with mustering, stock movement and access to water. Damages tyres (thorns).
Invasion characteristics (thorny shrub/small tree)		**Management Goal and Expectations**
A single prickly acacia was recorded in the Goomeri district and was subsequently removed. It is not known to be present further throughout the Gympie region. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing in the region due to current and potential distribution and/or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/prickly-acacia.		**Goal** **Eradication** **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area.

Water Lettuce (*Pistia stratiotes*)

Category	Potential Entry Points	Impacts and threats
Prohibited	Known infestations in adjoining Councils. Spread easily in waterways and by contaminated machinery (boats, vehicles) and via the aquatic plant industry.	**Environmental** Restricts water flow and increases water loss. Large infestations damage wildlife habitats. Serves as breeding ground for mosquitoes. Transforms aquatic ecosystems. Shades out native aquatic plants. Reduces oxygenation of water. **Economic** Interferes with irrigation and stock watering. **Social** Large infestations interfere with boating, swimming and fishing.

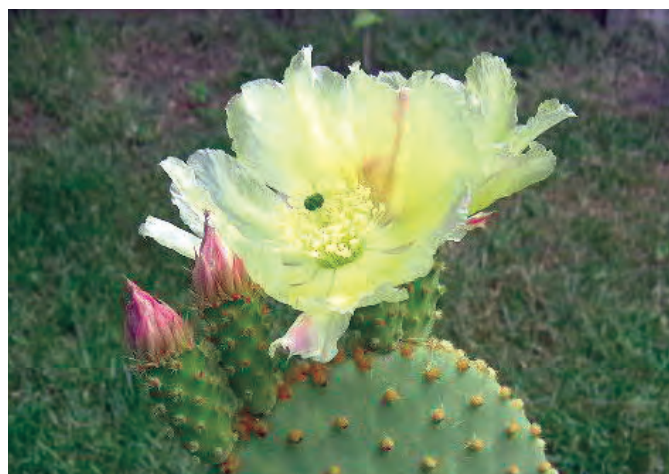| Invasion characteristics (floating waterweed)	Management Goal and Expectations
Water lettuce has historically been recorded in the North Deep Creek and Chatsworth areas and is not known to be present further throughout the Gympie region. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing in the region due to current and potential distribution and/or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/prickly-acacia.	**Goal** Eradication **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area.

Honey Locust *(Gleditsia triacanthos incl. cultivars and varieties)*

Category	Potential Entry Points	Impacts and threats
Restricted category 3	Known infestations in adjoining Councils. Seed spread by grazing stock, floodwaters, and ornamental plantings. Isolated infestations associated with disused piggeries.	**Environmental** Out-competes and replaces native vegetation. Provides haven for introduced pests such as foxes, cats and rabbits. **Economic** Sharp spines can injure livestock and damage equipment and vehicles. Forms dense thickets, particularly along waterways, preventing stock access to water. **Social** Sharp spines can injure humans and wildlife.
Invasion characteristics (thorny shrub/small tree)		**Management Goal and Expectations**
Honey locust has been recorded in the Mooloo, Langshaw and Booubyjan areas and is not known to be present further throughout the Gympie region. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing in the region due to current and potential distribution and/or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/honey-locust.		**Goal** Eradication **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area.

Hairy Sicklepod (*Senna hirsuta*)

Category	Potential Entry Points	Impacts and threats
Restricted category 1	Known infestations in adjoining Councils. Seeds can spread by water, animals, footwear, machinery and vehicles.	**Environmental** Invades disturbed areas such as roadsides, fence lines, creek banks, grazed pastures and rainforest edges.

Invasion characteristics (perennial flowering shrub)	Management Goal and Expectations
Hairy sicklepod has been recorded in the Chatsworth area and is not known to be present further throughout the Gympie region. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing in the region due to current and potential distribution and/or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/hairy-senna.	**Goal** Eradication **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area.

Bunny Ears (*Opuntia microdasys*)

Category	Potential Entry Points	Impacts and threats
Restricted category 2, 3, 4, 5	Known infestations in adjoining Councils. Spread by movement of broken plant segments or dumping of garden waste. Easily transported by animals, people, water and vehicles.	**Environmental** Forms extensive, dense stands, much like prickly pear cactus. **Economic** Reduces agricultural productivity over large areas of arid and semi-arid grazing land.

Invasion characteristics (dense shrub, pad-like stems)	Management Goal and Expectations
Bunny ears plants have been recorded in the Chatsworth area and are not known to be present throughout the Gympie region. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing in the region due to potential distribution and/or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/bunny-ears.	**Goal** Eradication **Expectations** **Landholder** All sightings to be reported within 24 hours to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area.

Blackbird *(Turdus merula)*

Category	Potential Entry Points	Impacts and threats
Not declared, however everyone has a general biosecurity obligation (GBO) to take reasonable and practical steps to minimise the risks associated with invasive plants and animals under their control.	A sighting of blackbirds has been recorded at Imbil, however further populations of blackbirds are not known to be present in in the Gympie region.	**Environmental** Can spread weed species, including blackberry. Is aggressive and competes with native species. **Economic** Damages a variety of soft fruits, including figs, grapes, olives, berries and stone fruit.

Invasion characteristics	Management Goal and Expectations
Blackbirds are widely naturalised in New Zealand and southern Australia, but have only been detected in Queensland in recent years. They are found in rainforest, wet sclerophyll, mallee, riverine communities, coastal dune communities, wet mountain ash gullies and dry eucalyptus woodlands, and on offshore islands and also thrive in urban habitats such as gardens, urban bushland, parks, horticultural areas and orchards. It has a high to very high pest risk (highly invasive and high threat) and a high likelihood of establishing in the region due to current and potential distribution. Further information can be found at: https://www. business.qld.gov.au/industries/farms-fishing-forestry/ agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/other/blackbird.	**Goal** Eradication **Expectations** **Landholder** All sightings to be reported to GRC on 1300 307 800 or council@gympie.qld.gov.au. Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area.

Fireweed (*Senecio madagascariensis*)

Category	Containment zone	Impacts and threats
Restricted category 3	Adjacent to the rail corridor and the new Bruce Highway. Isolated infestations have been recorded throughout the region and are targeted for eradication.	**Economic** Competes with pasture species. Toxic to livestock, particularly cattle and horses, causing illness, slow growth and poor conditioning, which can result in death. May taint meat and milk.

Invasion characteristics (perennial herb)	Management Goal and Expectations
Seeds spread by wind, stock, in pasture seed, hay, turf, mulch and with stock transport. Fireweed has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing throughout the region due to current and potential distribution and/or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/fireweed.	**Goal** **Containment** **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Control on GRC managed lands and roads and reserves.

Weedy Sporobolus Grasses

(*Giant Rats Tail Grass,*
American Rats Tail Grass,
Giant Parramatta Grass,
Sporobolus pyramidalis,
S. natalensis, jacquemontii, fertilis)

Category	Containment zone	Impacts and threats
Restricted category 3	Containment strategy (western zone).	**Economic** Quickly dominates pastures, particularly after overgrazing or soil disturbance. Causes losses in carrying capacity and decreases production by up to 80 per cent. Loosens teeth of cattle and horses that graze on it.
Invasion characteristics (tussocky grass)		**Management Goal and Expectations**
Seeds spread by wind, stock, in pasture seed, hay, turf, mulch and with stock transport. Weedy sporobolus grasses have a very high weed risk (highly invasive and high threat) and a high likelihood of establishing throughout the western part of the Gympie Region due to current and potential distribution and/or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/giant-rats-tail-grass.		**Goal** **Containment** **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Control on GRC managed lands and roads and reserves.

Water Hyacinth (*Eichhornia crassipes*)

Category	Containment zone	Impacts and threats
Restricted category 3	Containment strategy.	**Environmental** Destroys native wetlands and waterways, killing native fish and other wildlife. Depletes water bodies of oxygen. Increases water loss. Provides breeding ground for mosquitoes. **Social** Large infestations stop movement of boats by clogging engine water-cooling systems. Degrades quality of swimming and makes fishing impossible. Interferes with and damages infrastructure.

Invasion characteristics (aquatic weed)	Management Goal and Expectations
Water hyacinth has been sold illegally as an ornamental plant in garden ponds. Spread through contaminated machinery and water flow. Water haycinth has a very high weed risk (highly invasive and high threat) and a high likelihood of establishing throughout the Gympie Region due to current and potential distribution and/ or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/water-hyacinth.	**Goal** **Containment (all areas except Mary Valley)** **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Control on GRC managed lands and roads and reserves.

African Boxthorn (*Lycium ferocissimum*)

Category	Containment zone	Impacts and threats
Restricted category 3 Weed of National Significance	Infestations recorded in Tansey/ Watchbox Road area.	**Environmental** Invades reserves and conservation areas. **Economic** Aggressively invades pastures and reduces useability. Invades roadsides. Forms impenetrable, spiny thickets, which can hinder stock movement and mustering. Provides habitat for pest animals such as rabbits. Attracts insects, including fruit fly, dried fruit beetles and tomato fly, which breed in the fruit. **Social** Forms impenetrable, spiny thickets that can hinder bush walking.
Invasion characteristics (perennial multi-branched shrub)		**Management Goal and Expectations**
African boxthorn is spread by birds and animals eating berries and excreting viable seed. African boxthorn has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing throughout the Gympie Region due to current and potential distribution and/ or existing high risk pathways. Further information can be found at: https://www. business.qld.gov.au/industries/farms-fishing-forestry/ agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/ african-boxthorn.		**Goal** Containment **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area.

Salvinia *(Salvinia molesta)*

Category	Containment zone	Impacts and threats
Restricted category 3 Weed of National Significance	Containment strategy (eastern management zone). Isolated infestations in the western management zone targeted for eradication.	**Environmental** Forms thick mats that can quickly cover water storage areas. Degrades water quality and destroys wildlife habitats. **Economic** Builds up and collects debris during flooding, causing bridges and fences to collapse. Reduces water flow to irrigation equipment, increasing pumping times and costs. Prevents access by stock to drinking water. **Social** Endangers children and livestock, who can become entangled in heavy infestations. Creates mosquito-breeding habitat. Interferes with recreational activities such as boating, fishing and swimming.
Invasion characteristics (free floating aquatic fern)		**Management Goal and Expectations**
Salvinia is mainly spread by people emptying aquariums and ponds into waterways. It is also spread by water currents and fouling of fishing equipment and boat trailers. Salvinia has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing throughout the Gympie region due to current and potential distribution and/ or existing high risk pathways. Further information can be found at: https://www. business.qld.gov.au/industries/farms-fishing-forestry/ agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/ salvinia.		**Goal** Containment **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Control on GRC managed lands. Coordinate salvinia biological control release program.

African Fountain Grass *(Pennisetum setaceum)*

Category	Containment zone	Impacts and threats
Restricted category 3	Containment strategy (eastern management zone). Isolated infestations in the western management zone targeted for eradication.	**Environmental** Out-competes native plants. Increases fire intensity due to high biomass. **Economic** Competes with pastures used for grazing.
Invasion characteristics (perennial tussock grass)		**Management Goal and Expectations**
African fountain grass is spread by wind, moving water, and seeds attached to fur, clothing and vehicles. And also spread by people moving plants. African fountain grass has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing throughout the Gympie Region due to current and potential distribution and/ or existing high risk pathways. Further information can be found at: https://www. business.qld.gov.au/industries/farms-fishing-forestry/ agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/ african-fountain-grass.		**Goal** Containment **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Control on GRC managed lands and roads and reserves.

Paterson's Curse *(Echium plantagineum)*

Category	Containment zone	Impacts and threats
Not declared Information and photos courtesy NSW Government.	Containment strategy (western management zone). Isolated infestations in the eastern management zone targeted for eradication.	**Environmental** Out-competes native vegetation. **Economic** Reduces pasture productivity. Toxic to stock. **Social** Some people allergic to pollen. Plant can cause skin irritation.
Invasion characteristics (winter herb)		**Management Goal and Expectations**
Paterson's curse reproduces by seed. It is commonly spread via contaminated hay and grain, livestock droppings and machinery. Paterson's curse has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing throughout the Gympie Region due to current and potential distribution and/or existing high risk pathways. Further information can be found at: http://weeds.dpi.nsw.gov.au/Weeds/Details/102.		**Goal** Containment **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Control on GRC managed lands and roads and reserves.

African Lovegrass (*Eragrostis curvula*)

Category	Containment zone	Impacts and threats
Not declared, however everyone has a general biosecurity obligation (GBO) to take reasonable and practical steps to minimise the risks associated with invasive plants and animals under their control.	Containment strategy (eastern management zone). Asset protection in western management zone.	**Economic** Quickly dominates pastures, particularly after overgrazing or soil disturbance. Causes losses in carrying capacity and decreases production by up to 80 per cent.

Invasion characteristics (perennial tussock grass)	Management Goal and Expectations
African lovegrass may be dispersed by grazing animals, slashing, vehicles, water, fodder and short distances by wind. Spread is enhanced by drought conditions and over-grazing. African lovegrass has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing throughout the Gympie Region due to current and potential distribution and/or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/other/african-lovegrass.	**Goal** Containment (eastern management zone) **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Control on GRC managed lands and roads and reserves.

Pencil Willow *(Salix chilensis, syn. S. humboldtiana)*

Category	Containment zone	Impacts and threats
Restricted category 3	Containment strategy (eastern management zone).	**Environmental** Invades native bushland along banks of rivers and creeks. **Economic** Damages footpaths and drains with aggressive root system.

Invasion characteristics (large upright tree)	Management Goal and Expectations
Pencil willow spreads from broken twigs taking root downstream. It's easily broken branches provide material for vegetative spread. Pencil willow has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing throughout the Gympie region due to current and potential distribution and/or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/pencil-willow.	**Goal** Containment **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Control on GRC managed lands and roads and reserves.

Yellow Bells (*Tecoma stans*)

Category	Containment zone	Impacts and threats
Restricted category 3	Containment strategy (eastern management zone).	**Environmental** Readily invades native bushland and roadsides.

Invasion characteristics	Management Goal and Expectations
Yellow bells is mainly spread by wind, water and suckering. Yellow bells has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing throughout the Gympie Region due to current and potential distribution and/ or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/yellow-bells.	**Goal** Containment **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Control on GRC managed lands and roads and reserves.

Lippia *(Phyla canescens)*

Category	Containment zone	Impacts and threats
Restricted Category 3 Not declared, however everyone has a general biosecurity obligation (GBO) to take reasonable and practical steps to minimise the risks associated with invasive plants and animals under their control.	Containment strategy.	**Environmental** Poses serious threat to protected wetland areas. Dense carpet-like spread prevents growth of other riparian vegetation. Resulting soil erosion decreases bank stability and degrades waterway health and quality. **Economic** Dominates pastures where ground cover reduced by overgrazing. Aggressive weed that out-competes pasture species, reducing stocking rates by up to 90 per cent.

Invasion characteristics (perennial herb)	Management Goal and Expectations
Lippia is spread by floodwater, seed dispersal, vehicles, machinery, birds and livestock. Spread appears to be related to flood events, with significant rainfall and flooding likely to result in population 'explosions'. Lippia has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing throughout the western part of Gympie Region due to current and potential distribution and/or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/other/lippia.	**Goal** Containment **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Control on GRC managed lands and roads and reserves.

Leucaena (*Leucaena leucocephala*)

Category	Containment zone	Impacts and threats
Not declared, however everyone has a general biosecurity obligation (GBO) to take reasonable and practical steps to minimise the risks associated with invasive plants and animals under their control.	Containment strategy (road reserves).	**Environmental** Forms dense thickets, hindering movement of wildlife and excluding all other plants. **Social** Forms thickets along roadsides that can decrease visibility.

Invasion characteristics (shrub/small tree)	Management Goal and Expectations
Leucaena seeds spread by cattle, wind, water and machinery. It spreads rapidly unless heavily grazed or controlled. Leucaena has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing throughout the Gympie Region due to current and potential distribution and/or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/other/leucaena.	**Goal** Containment (road reserves) **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Control on GRC managed lands and roads and reserves.

Parthemium *(Parthenium hysterophorus)*

Category	Containment zone	Impacts and threats
Restricted category 3 Weed of National Significance	Containment strategy for Wide Bay and Barambah Creek systems. Isolated infestations in the remainder of Gympie region targeted for eradication.	**Environmental** Invades disturbed bare areas along roadsides, heavily stocked areas around yards, and watering points. **Economic** Invades pastures, reduces beef production. Costs cropping industries millions of dollars per year, competes with crops for nutrients and space. **Social** Pollen contains potent allergens that can cause reactions such as dermatitis and hay fever.

Invasion characteristics (perennial herb)	Management Goal and Expectations
Extensive infestations of parthenium exist in the Wide Bay and Barambah creek systems. It has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing in the region due to current and potential distribution and/or existing high risk pathways. Parthenium can set viable seed within two weeks of germination, making it highly invasive. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/parthenium.	**Goal** Containment (within Wide Bay and Barambah creek systems) **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Control on GRC managed lands and roads and reserves.

African Tulip Tree *(Spathodea campanulata)*

Category	Containment zone	Impacts and threats
Restricted category 3	Containment strategy.	**Environmental** Infests gullies, vegetation around waterways, and disturbed rainforest, where it out-competes native vegetation. Flowers are toxic to native stingless bees. Natural regeneration affected as bees pollinate native vegetation.
Invasion characteristics (large evergreen tree)		**Management Goal and Expectations**
African tulip trees are widespread in tropical and subtropical Queensland where it is a popular ornamental garden tree and street tree. Seeds are spread by wind and by water when plants are near waterways. Also spread by garden waste dumped in bushland'. It has a high weed risk (highly invasive and high threat) and a high likelihood of establishing throughout the region due to current and potential distribution and/ or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/african-tulip-tree.		**Goal** **Containment** **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Control on GRC managed lands and roads and reserves.

Feral Rusa Deer *(Rusa timorensis, Cervus timorensis)*

Category	Containment zone	Impacts and threats
Restricted category 3 It is an offence to allow farmed deer to escape into the wild.	Containment strategy.	**Environmental** Can damage natural environment by eating native vegetation, damaging trees, spreading weed seeds and fouling water. **Economic** Can damage forestry seedlings, agricultural and horticultural crops, commercial flower crops, orchards, irrigation systems, and fences. Sometimes selectively consumes new growth and ringbarks orchard trees, leading to reduced orchard viability. In dry seasons, competes with cattle for pasture and supplementary feed. **Social** Can be traffic hazard on suburban roads and highways.
Invasion characteristics		**Management Goal and Expectations**
Rusa deer prefer grassy plains bordered by dense brush or woodlands to retire to during daylight hours. They will graze on grass, but will also browse on other vegetation depending on season and availability of food. Preventing more deer from entering the wild is a key control strategy. Deer control is often best done as a joint exercise, involving all land managers. Feral rusa deer has a high pest risk (highly invasive and high threat) and a high likelihood of establishing further throughout the region due to current and potential distribution. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/rusa-deer.		**Goal** Containment **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Control on GRC managed lands and roads and reserves.

European Rabbit (*Oryctolagus cuniculus*)

Category	Containment zone	Impacts and threats
Restricted category 3, 4, 5, 6 It is an offence to keep domestic rabbits in Queensland without a permit.	Containment strategy.	**Environmental** Degrades native vegetation by eating seedlings, preventing vegetation from regenerating. Competes with native animals for food. Provides food for predator species, changing their population dynamics. **Economic** Reduces pasture production, including reserves for dry seasons, which also reduces livestock and wool production. Reduces crop production and product quality. Feral populations are expensive to control. **Social** Damages infrastructure, gardens and buildings.
Invasion characteristics	**Management Goal and Expectations**	
Rabbits were brought to Australia by the First Fleet as food animals, with the first feral rabbit populations recorded by the late 1820s. Introducing and selling rabbits in Queensland is illegal and penalties apply. Rabbit distribution correlates with soil types, especially types suitable for burrowing. They also occupy tussock grasses and areas littered with fallen timber and live in and under buildings, in old machinery and storage containers, and in old waste facilities. Rabbits have a high pest risk (highly invasive and high threat) and a high likelihood of establishing further throughout the Gympie Region due to current/potential distribution and existence of high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/rabbit.	**Goal** Containment **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Control on GRC managed lands and roads and reserves.	

Indian Myna Bird (*Acridotheres tristis*)

Category	Containment zone	Impacts and threats
Not declared, however everyone has a general biosecurity obligation (GBO) to take reasonable and practical steps to minimise the risks associated with invasive plants and animals under their control.	Containment strategy.	**Environmental** Reduces breeding success of some native parrot species. Competes aggressively for nesting hollows and can break eggs, kill chicks, and evict native parrots from nest boxes or tree hollows. Competes for tree hollows with other native wildlife and can kill small mammals. **Economic** Damages fruit, vegetables and cereal crops. Spreads weeds such as lantana and fireweed. **Social** Potential reservoir for diseases such as avian malaria. Large roosts and nests can cause noise, mess, potential allergies and fire hazards.

Invasion characteristics	Management Goal and Expectations
Indian mynas were introduced to Australia in the 1860's and are now abundant in suburban and agricultural regions along the east coast. Indian mynas are found throughout Queensland and live in open habitats such as parks, gardens and cleared agricultural areas. Indian mynas have a high pest risk (highly invasive and high threat) and a high likelihood of establishing further throughout the Gympie Region due to current/potential distribution. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/other/indian-myna.	**Goal** Containment **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Control on GRC managed lands and roads and reserves.

African Lovegrass (*Eragrostis curvula*)

Category	Asset protection	Impacts and threats
Not declared, however everyone has a general biosecurity obligation (GBO) to take reasonable and practical steps to minimise the risks associated with invasive plants and animals under their control.	Widespread in the western management zone, present in adjoining Council areas. Isolated infestations in the remainder of Gympie region targeted for eradication.	**Environmental** Quickly dominates pastures, particularly after overgrazing or soil disturbance. Causes losses in carrying capacity and decreases production by up to 80 per cent.

Invasion characteristics (perennial tussock grass)	Management Goal and Expectations
African lovegrass may be dispersed by grazing animals, slashing, vehicles, water, fodder and short distances by wind. Spread is enhanced by drought conditions and over-grazing. African lovegrass has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing throughout the Gympie Region due to current and potential distribution and/ or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/other/african-lovegrass.	**Goal** Asset protection (western management zone) **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Groundsel Bush *(Baccharis halimifolia)*

Category	Asset protection	Impacts and threats
Restricted category 3	Widespread throughout Gympie Region, present in adjacent Council areas. Has been subject to ongoing control program by Gympie regional Council.	**Environmental** Replaces plants and destroys native wildlife habitat. Can become abundant in vegetation along water-courses and in coastal woodlands and forest areas. **Economic** Competes with pasture species for water and nutrients. Serious weed of forestry plantations in first year of planting. **Social** Germinates in home gardens. Causes allergies induced by airborne pollen and seed fluff.

Invasion characteristics (densely branched shrub)	Management Goal and Expectations
Groundsel is particularly suited to moist gullies, saltmarsh areas and wetlands and is found in forests, disturbed sites, pastures and waste areas. Seeds spread by wind, running water, vehicles and machinery. It has a high to very high weed risk (highly invasive and high threat). It has been extensively controlled in the Gympie Region and has a high likelihood of re-establishing in the region due to current and potential distribution and/ or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/groundsel-bush.	**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

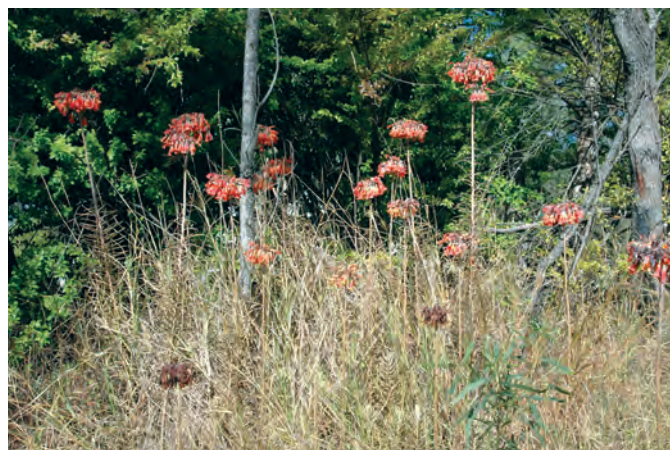# Annual Ragweed (*Ambrosia artemisiifolia*)

Category	Asset protection	Impacts and threats
Restricted category 3	Naturalised in South East Queensland. Infestations throughout the Gympie region.	**Economic** Invades and suppresses weak and overgrazed pastures, reducing productivity. Infestations can become particularly dense in overgrazed pastures. **Social** Pollen contains potent allergens that can aggravate asthma and cause respiratory allergies such as hay fever.
Invasion characteristics (fast growing, fern like plant)		**Management Goal and Expectations**
Annual ragweed often colonises bare areas on roadsides and banks of watercourses, and can invade pastures from these areas. Annual ragweed has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing further throughout the Gympie Region due to current and potential distribution and/ or existing high risk pathways. Further information can be found at: https://www. business.qld.gov.au/industries/farms-fishing-forestry/ agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/ annual-ragweed.		**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Mother of Millions

(Bryophyllum delagoense (syn. B. tubiflorum and Kalanchoe delagoensis),
B. x houghtonii (syn. B. daigremontianum x B. delagoense, K. x houghtonii))

Category	Asset protection	Impacts and threats
Restricted category 3	Widespread throughout the Gympie region. Infestations in adjoining Council areas. Isolated infestations in the remainder of Gympie region targeted for eradication.	**Environmental** Forms infestations in grasslands, open woodlands and coastal dunes. **Economic** Poisonous, with newly exposed stock especially vulnerable.

Invasion characteristics (densely branched shrub)	Management Goal and Expectations
Mother of millions establishes well in leaf litter or other debris on shallow soils in shady woodlands. It is predominantly found on roadsides, fence lines, and coastal dunes and around old rubbish dumps. It is spread by floodwater and establishes if pastures are in poor condition. It is also spread by animals, slashers, machinery and vehicles. Mother of millions has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing further throughout the Gympie Region due to current and potential distribution and/ or existing high risk pathways. Further information can be found at: https://www. business.qld.gov.au/industries/farms-fishing-forestry/ agriculture/land-management/health-pests-weeds- diseases/weeds-diseases/invasive-plants/restricted/ mother-millions.	**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Prickly Pear *(Opuntia spp. (O. elata, O. stricta, O. aurantiaca, O. monacantha, O. tomentosa and O. streptacantha))*

Category	Asset protection	Impacts and threats
Restricted category 3	Widespread throughout the western management zone. Infestations in adjoining Council areas.	**Environmental** Vigorous in hot, dry conditions, causing other plants to lose vigour or die. **Economic** Competes and invades pastures. Impedes stock movement and mustering. **Social** Can harm animals and prevent them from eating.
Invasion characteristics (densely branched shrub)		**Management Goal and Expectations**
Prickly pear prefers subhumid to semi-arid areas in warm temperate and subtropical regions. It reproduces sexually and asexually. Asexual reproduction (cloning) occurs when pads (joints, segments) or fruits on ground take root and produce shoots. Pads can survive long periods of drought before weather conditions allow them to set roots. Prickly pear has a high weed risk (highly invasive and high threat) and is likely to establish further throughout the western part of the Gympie Region due to current and potential distribution and/ or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/prohibited/prickly-pear.		**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Water Hyacinth (Mary Valley) *(Eichhornia crassipes)*

Category	Asset protection	Impacts and threats
Restricted category 3	Widespread throughout the Mary Valley. Infestations in adjoining Council areas. Infestations in the remainder of Gympie region targeted for containment.	**Environmental** Destroys native wetlands and waterways, killing native fish and other wildlife. Depletes water bodies of oxygen. Increases water loss. Provides breeding ground for mosquitoes. **Social** Large infestations stop movement of boats by clogging engine water-cooling systems. Degrades quality of swimming and makes fishing impossible. Interferes with and damages infrastructure.

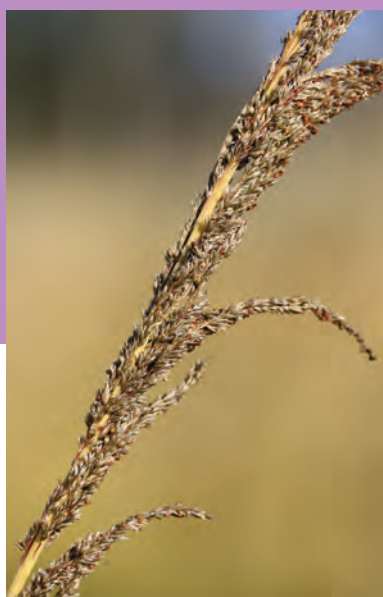| Invasion characteristics (densely branched shrub)	Management Goal and Expectations
Water hyacinth has been sold illegally as an ornamental plant in garden ponds. Spread through contaminated machinery and water flow. Water haycinth has a very high weed risk (highly invasive and high threat) and a high likelihood of establishing throughout the Gympie region due to current and potential distribution and/or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/water-hyacinth.	**Goal** Asset protection (Mary Valley) **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Madeira Vine
(*Anredera cordifolia*)

Category	Asset protection	Impacts and threats
Restricted category 3	Scattered throughout the eastern management zone. Infestations in adjoining Council areas.	**Environmental** Madeira vine is a serious environmental weed that can degrade intact native forests. Smothers trees, shrubs and understorey species. Can cause canopy collapse of mature trees. Can grow as a ground cover, disrupting native seedling germination and growth. **Economic and Social** Adds to infrastructure damage during floods by destabilising banks and creating increased resistance for floodwater, which can uproot trees. Destruction of riverside vegetation by Madeira vine has led to increased bank erosion and water turbidity issues.

Invasion characteristics (vigorous climbing vine)	Management Goal and Expectations
Madeira vine is found in bushland, edges of rainforests, waterways, disturbed sites, waste areas, parks, gardens and roadsides. It is spread by aerial tubers and sections of severed stem (seed production is rare in Australia). Madeira vine has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing further throughout the Gympie region due to current and potential distribution and/or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/madeira-vine.	**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Lantana (*Lantana camara*)

Category	Asset protection	Impacts and threats
Restricted category 3 Weed of National Significance	Widespread throughout the Gympie region. Infestations in adjoining Council areas.	**Environmental** Forms dense thickets that smother native vegetation. **Economic** Some varieties are poisonous to stock. Decreases carrying capacity **Social** Thickets are impenetrable for animals, people and vehicles.

Invasion characteristics (densely branched shrub)	Management Goal and Expectations
Lantana is found throughout coastal and hinterland Queensland. It grows in wide variety of habitats, from exposed dry hillsides to wet heavily shaded gullies. Seeds are spread mostly by people and fruit-eating birds. Seed banks remain viable for at least four years. Lantana has a very high weed risk (highly invasive and high threat) and is established throughout the Gympie region. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/lantana.	**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Weedy Sporobolus Grasses

(*Giant Rats Tail Grass,
American Rats Tail Grass,
Giant Parramatta Grass,
Sporobolus pyramidalis,
S. natalensis, jacquemontii, fertilis*)

Category	Asset protection	Impacts and threats
Restricted category 3	Widespread throughout eastern management zone of the Gympie region. Infestations in adjoining Council areas.	**Economic** Quickly dominates pastures, particularly after overgrazing or soil disturbance. Causes losses in carrying capacity and decreases production by up to 80 per cent. Loosens teeth of cattle and horses that graze on it.

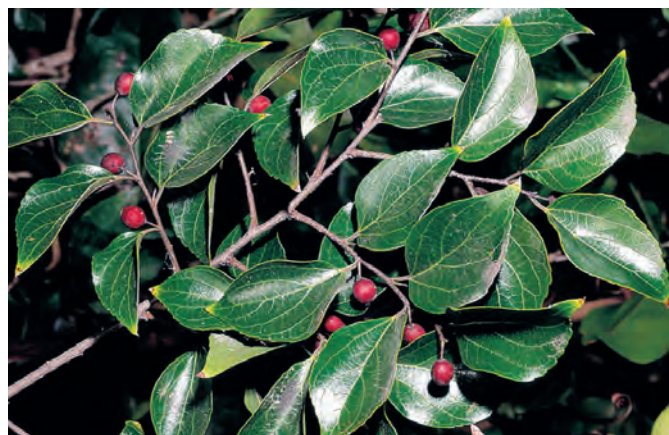| Invasion characteristics (perennial tussock grass)	Management Goal and Expectations
Seeds spread by wind, stock, in pasture seed, hay, turf, mulch and with stock transport. Weedy sporobolus grasses have a very high weed risk (highly invasive and high threat) and a high likelihood of establishing throughout the western part of the Gympie region due to current and potential distribution and/or existing high risk pathways. Further information can be found at: https://www. business.qld.gov.au/industries/farms-fishing-forestry/ agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/ giant-rats-tail-grass.	**Goal** Asset protection (eastern management zone) **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Camphor Laurel (*Cinnamomum camphora*)

Category	Asset protection	Impacts and threats
Restricted category 3	Widespread throughout the Gympie region. Infestations in adjoining Council areas.	**Environmental** Aggressively replaces native vegetation. Replaces native trees (e.g. blue gums, koalas' preferred food). Invades disturbed riparian systems. Inhibits regeneration by other plants. **Economic** Invades pastures. Pushes over fences and disrupts power facilities. Develops massive root system that can block drains and crack concrete structures.

Invasion characteristics (large evergreen tree)	Management Goal and Expectations
Camphor laurel seeds spread by birds and water. Also spread through dumping of garden waste. Trees can sucker when under stress. Camphor laurel have a very high weed risk (highly invasive and high threat) and a high likelihood of establishing further throughout the Gympie region due to current and potential distribution and/or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/camphor-laurel.	**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Chinese Celtis (*Celtis sinensis*)

Category	Asset protection	Impacts and threats
Restricted category 3	Naturalised in most of south east Queensland. Widespread throughout the Gympie region. Infestations in adjoining Council areas.	**Environmental** Forms dense infestations and prevents regeneration of native riparian vegetation. Destroys habitats of native animals.
Invasion characteristics (large evergreen tree)		**Management Goal and Expectations**
Chinese celtis forms dense infestations along creekbanks and prevents native riparian vegetation from regenerating. It also sucks up water and can affect populations of native animals through habitat destruction. Seeds spread by birds, flying foxes and water. Chinese celtis have a very high weed risk (highly invasive and high threat) and a high likelihood of establishing further throughout the Gympie region due to current and potential distribution and/or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/chinese-celtis.		**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Broadleafed Pepper Tree *(Schinus terebinthifolius)*

Category	Asset protection	Impacts and threats
Restricted category 3	Common in most of south east Queensland. Widespread throughout the Gympie region. Infestations in adjoining Council areas.	**Economic** Out-competes and replaces native grasses used in grazing. **Environmental** Forms dense thickets that can choke native plants. Establishes in disturbed bushland. Competes with ground covers and shrubs, and tolerates shade. Spreads rapidly in waterlogged or poorly drained soils. **Social** Contains toxic resins that can affect human and animal health.

Invasion characteristics (large spreading tree)	Management Goal and Expectations
Broadleafed pepper tree has escaped gardens and invaded coastal dune lands, wetlands and streambanks. It also out-competes and replaces native grasses used in grazing. Broadleafed pepper tree has a very high weed risk (highly invasive and high threat) and is widespread throughout the Gympie region. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/broadleaved-pepper-tree.	**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Captain Cook Tree *(Cascabela thevetia, previously Thevetia peruviana)*

Category	Asset protection	Impacts and threats
Restricted category 3	Infestations throughout the Gympie region. Infestations in adjoining Council areas.	**Environmental** Forms dense thickets that can choke native plants. Establishes in disturbed bushland. Competes with ground covers and shrubs, and tolerates shade. Spreads rapidly in waterlogged or poorly drained soils. **Economic** Out-competes and replaces native grasses used in grazing. **Social** Contains toxic resins that can affect human and animal health.

Invasion characteristics (large spreading tree)	Management Goal and Expectations
The Captain Cook tree has often been planted as an ornamental tree in Australia's domestic gardens and public spaces. It is highly invasive in Queensland, especially along creek systems, and is found along roadsides and in waste areas, disturbed areas and pastures. The Captain Cook tree has a high to very high weed risk (highly invasive and high threat) and a high likelihood of establishing further throughout the Gympie region due to current and potential distribution and/or existing high risk pathways. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/captain-cook-tree.	**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Asparagus Fern *(Asparagus scandens)*

Category	Asset protection	Impacts and threats
Restricted category 3 **Weed of National Significance**	Infestations scattered widely throughout the Gympie Region. Infestations in adjoining Council areas.	**Environmental** Becomes dominant ground cover, displacing native plants, even in undisturbed systems.

Invasion characteristics (twining fern)	Management Goal and Expectations
Asparagus fern is a twining environmental weed. Infestations are scattered widely around Australia, from Albany, Adelaide, Melbourne, Sydney and Lord Howe Island. Asparagus fern has a high weed risk (highly invasive and high threat) and is widely established throughout the Gympie region. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/asparagus-fern.	**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Singapore Daisy (*Sphagneticola trilobata*)

Category	Asset protection	Impacts and threats
Restricted category 3	Infestations scattered widely throughout the Gympie region. Infestations in adjoining Council areas.	**Environmental** Spreads rapidly and smothers seedlings, ferns and shrubs. Invades environmental areas.

Invasion characteristics (vigorous ground cover)	Management Goal and Expectations
Singapore daisy is a vigorous ground cover that spreads rapidly and out-competes native plants, invades lawns, irrigated areas, and areas around drains. Singapore daisy has a high weed risk (highly invasive and high threat) and is widely established throughout the Gympie region. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/singapore-daisy.	**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Balloon Vine *(Cardiospermum grandiflorum)*

Category	Asset protection	Impacts and threats
Restricted category 3	Widespread throughout the Gympie region. Infestations in adjoining Council areas.	**Environmental** Smothers native vegetation. Prevents plants from receiving sunlight needed for photosynthesis.
Invasion characteristics (vine)		**Management Goal and Expectations**
Balloon vine is widespread in South East Queensland and northern New South Wales. It can grow in gardens and riparian areas and seeds are spread by wind and water. Balloon vine has a high weed risk (highly invasive and high threat) and is common throughout the Gympie region. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/balloon-vine.		**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Easter Cassia *(Senna pendula var. glabrata)*

Category	Asset protection	Impacts and threats
Not declared, however everyone has a general biosecurity obligation (GBO) to take reasonable and practical steps to minimise the risks associated with invasive plants and animals under their control.	Infestations scattered widely throughout the Gympie region. Infestations in adjoining Council areas.	**Environmental** Invades disturbed or modified areas. Smothers native vegetation.
Invasion characteristics (vigorous shrub)		**Management Goal and Expectations**
Easter cassia is a prolific seeder, and its seedlings come up in bushland, disturbed areas and roadsides. Seeds can be dispersed in dumped garden waste. It is also spread by water or in contaminated soil. Easter cassia has a high weed risk (highly invasive and high threat) and is common throughout the Gympie region. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/other/easter-cassia.		**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Ochna (*Ochna serrulata*)

Category	Asset protection	Impacts and threats
Not declared, however everyone has a general biosecurity obligation (GBO) to take reasonable and practical steps to minimise the risks associated with invasive plants and animals under their control.	Widespread throughout the Gympie region. Infestations in adjoining Council areas.	**Environmental** Invades disturbed or modified areas of riparian habitat.

Invasion characteristics (small shrub)	Management Goal and Expectations
Ochna was introduced to Australia in the early 1900s and has been widely planted as a garden ornamental here. Birds spread this plant into bushland, where it can become invasive and form dense thickets that are hard to remove. Spread is mainly by bird-dispersed seeds. Can also spread in dumped garden waste. Ochna has a high weed risk (highly invasive and high threat) and is common throughout the Gympie region. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/other/ochna.	**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Cats Claw Creeper

(Macfadyena unguis-cati (L.) A.H.Gentry)

Category	Asset protection	Impacts and threats
Restricted category 3 Weed of National Significance	Widespread throughout the Gympie region. Infestations in adjoining Council areas.	**Environmental** Smothers native vegetation, including growing up over trees. Changes soil chemistry.

Invasion characteristics (vigorous vine)	Management Goal and Expectations
Cats claw creeper is an aggressive climber that was once used as an ornamental plant in Queensland gardens – it can be found in gardens, over fences, along roadsides and waterways, and in disturbed rainforest. Seed is spread by water and wind and tuberous roots also spread by floods and humans. Cats claw creeper has a very high weed risk (highly invasive and high threat) and is common throughout the Gympie region. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/cats-claw-creeper.	**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Dutchman's Pipe *(Aristolochia ssp.)*

Category	Asset protection	Impacts and threats
Restricted category 3	Widespread throughout the Gympie region. Infestations in adjoining Council areas.	**Environmental** Invades rainforest habitat. Resembles natural food plants of butterflies but poisons larvae when they feed. Threatens survival of rare birdwing butterfly (*Ornithoptera richmondia*).

Invasion characteristics (vigorous vine)	Management Goal and Expectations
Dutchman's pipe is a fast-growing vine that has been widely promoted as an unusual, easily cultivated ornamental plant. It is spread by seed and dumping of garden waste. Dutchman's pipe has a very high weed risk (highly invasive and high threat) throughout the Gympie region. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/dutchmans-pipe.	**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Golden Rain Tree
(Laburnum anagyroides)

Category	Asset protection	Impacts and threats
Not declared, however everyone has a general biosecurity obligation (GBO) to take reasonable and practical steps to minimise the risks associated with invasive plants and animals under their control.	Found throughout the Gympie region. Found in adjoining Council areas.	**Environmental** No impacts at present in Queensland (potentially invasive). **Social** All parts of golden chain tree are toxic and can cause poisoning if ingested.

Invasion characteristics (deciduous tree)	Management Goal and Expectations
Golden rain tree is a popular garden ornamental that produces colourful displays of yellow flowers. While golden chain tree has naturalised in parts of Europe and New Zealand, the risk of it doing so in Queensland is relatively low. If golden rain tree does escape cultivation, it is most likely to grow wild in cooler, upland areas of South East Queensland. Golden chain tree has a medium weed risk and is found throughout the Gympie region. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/other/golden-chain-tree.	**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Feral Goat *(Capra hircus)*

Category	Asset protection	Impacts and threats
Restricted category 3, 4, 6	Populations found throughout western area of the Gympie region. Populations established in adjoining Council areas.	**Environmental** Contributes to overgrazing, which can cause soil erosion and other forms of land degradation. Reduces diversity of plant species through selective feeding. **Economic** Competes for pasture, damages fences, and reduces profitability of pastoral and agricultural industries. In many areas, negative impacts are balanced by positive impacts of harvesting for slaughter. **Social** Can transmit diseases to domestic animals.

Invasion characteristics	Management Goal and Expectations
Feral goats are commonly found in rugged terrain, with the home range usually centred on a water supply. Wild dogs and dingoes are natural enemies. Feral goat populations can double every 1.6 years if not culled or controlled. To prevent increases, around 35 per cent of population must be removed each year. Feral goats have a high to very high pest risk (highly invasive and high threat) and a high likelihood of establishing further throughout the Gympie region due to current and potential distribution. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/feral-goat.	**Management Goal** Asset protection **Management Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Feral Chital Deer *(Axis axis)*

Category	Asset protection	Impacts and threats
Restricted category 3, 4, 6 It is an offence to allow farmed deer to escape into the wild.	Populations found throughout the Gympie region. Populations established in adjoining Council areas.	**Environmental** Contributes to overgrazing, which can cause soil erosion and other forms of land degradation. Reduces diversity of plant species through selective feeding. **Economic** Competes for pasture, damages fences, and reduces profitability of pastoral and agricultural industries. In many areas, negative impacts are balanced by positive impacts of harvesting for slaughter. **Social** Can transmit diseases to domestic animals.
Invasion characteristics		**Management Goal and Expectations**
Chital deer contained within a deer-proof fence (e.g. on farms or in game parks) are not declared pests. Any chital deer not within a deer-proof fence is considered feral or wild and subject to control. Farmed deer that escape captivity quickly revert to a wild state. Feral chital deer prefer woodlands, forests and clearings near waterways. Permanent water is essential and has major influence on range. Feral chital deer have a high to very high pest risk (highly invasive and high threat) and a high likelihood of establishing further throughout the Gympie region due to current and potential distribution. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/chital-deer.		**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Feral Fallow Deer *(Dama dama)*

Category	Asset protection	Impacts and threats
Restricted category 3, 4, 6 It is an offence to allow farmed deer to escape into the wild.	Scattered populations found throughout the Gympie region. Populations established in adjoining Council areas.	**Environmental** Feral deer can damage natural environment by eating native vegetation, damaging trees, dispersing weed seeds and fouling water. **Economic** Can damage forestry seedlings, agricultural and horticultural crops, commercial flower crops, orchards, irrigation systems and fences. In orchards, feral deer sometimes selectively eat new growth and ringbark trees, leading to reduced orchard viability. In dry seasons, feral deer can compete with cattle for pasture and supplementary feed. **Social** Can be hazards on suburban roads and highways. Aggressive stags can be danger to humans in built-up areas.

Invasion characteristics	Management Goal and Expectations
Fallow deer contained within a deer-proof fence (e.g. on farms or in game parks) are not restricted invasive pests. Any fallow deer not within a deer-proof fence is considered feral or wild and subject to control. Farmed deer that escape captivity quickly revert to a wild state. Feral fallow deer prefer open grassy clearings in forested areas. Most active at dawn and dusk. Feral fallow deer have a high to very high pest risk (highly invasive and high threat) and a high likelihood of establishing further throughout the Gympie region due to current and potential distribution. Further information can be found at: https://www.business. qld.gov.au/industries/farms-fishing-forestry/agriculture/ land-management/health-pests-weeds-diseases/pests/ invasive-animals/restricted/fallow-deer-feral.	**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Feral Red Deer (*Cervus elaphus*)

Category	Asset protection	Impacts and threats
Restricted category 3, 4, 6 It is an offence to allow farmed deer to escape into the wild.	Established populations found throughout the Gympie region. Populations established in adjoining Council areas.	**Environmental** Feral deer can damage natural environment by eating native vegetation, damaging trees, dispersing weed seeds and fouling water. **Economic** Can damage forestry seedlings, agricultural and horticultural crops, commercial flower crops, orchards, irrigation systems and fences. In orchards, feral deer sometimes selectively eat new growth and ringbark trees, leading to reduced orchard viability. In dry seasons, can compete with cattle for pasture and supplementary feed. **Social** Can be hazards on suburban roads and highways. Aggressive stags can be danger to humans in built-up areas.

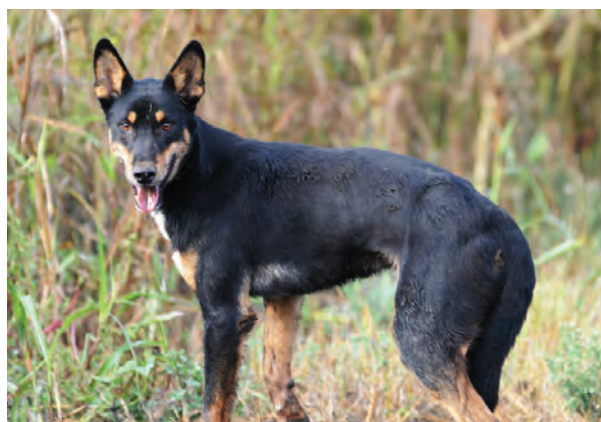| Invasion characteristics	Management Goal and Expectations
Red deer contained within a deer-proof fence (e.g. on farms or in game parks) are not restricted invasive pests. Any red deer not within a deer-proof fence is considered feral or wild and subject to control. Farmed deer that escape captivity quickly revert to a wild state. Feral red deer prefer open, grassy glades in forested areas. Red deer are grazers and browsers, eating more woody matter and tree shoots when feed is scarce. Feral red deer have a high to very high pest risk (highly invasive and high threat) and are widely established throughout the Gympie region. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/red-deer.	**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Feral Pig (*Sus scrofa*)

Category	Asset protection	Impacts and threats
Restricted category 3, 4, 6	Established populations found throughout the Gympie region. Populations established in adjoining Council areas.	**Environmental** Spreads weeds and causes soil erosion. Degrades waterholes and wetlands. Preys on wide range of native species, significantly affects marine turtle populations by eating eggs. Can carry diseases that affect native animals. **Economic** Damages almost all crops from sowing to harvest. Feeds on seed, grain, fruit and vegetable crops. Damages pasture by grazing and rooting. Can carry diseases and parasites that affect stock. **Social** Carries many diseases that affect people.

Invasion characteristics	Management Goal and Expectations
Feral pigs inhabit about 40 per cent of Australia, from subalpine grasslands to monsoonal floodplains. The greatest concentrations are in larger drainage basins, and swamp areas of coast and inland. Effective control requires integrated, collaborative approach, where all stakeholders participate in planned management program. Feral pigs have a high to very high pest risk (highly invasive and high threat) and are widely established throughout the Gympie region. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/feral-pig.	**Management Goal** Asset protection **Management Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Wild Dog *(Canis familiaris, C. familiaris dingo, C. lupus familiaris, C. lupus dingo)*

Category	Asset protection	Impacts and threats
Restricted category 3, 4, 6	Established populations found throughout the Gympie region. Populations established in adjoining Council areas.	**Environmental** Competes directly with dingoes for food and living spaces, particularly in refuge areas. Preys on small remnant populations of native species, threatening biodiversity. Hybridisation between dingoes and other wild dogs is swamping dingo gene pool. **Economic** Causes stock losses. Lowers profitability from bitten stock. Creates risk of disease being spread to domestic animals (e.g. *hydatidosis, neospora*). **Social** Can spread hydatids and has potential to spread exotic diseases that affect human beings (e.g. rabies). Can attack children/pets in urban/fringe areas, particularly if public contribute to habituation and socialisation of wild dogs.

Invasion characteristics	Management Goal and Expectations
The term 'wild dog' refers to purebred dingoes, dingo hybrids, and domestic dogs that have escaped or been deliberately released and now live in the wild. Effective control requires integrated, collaborative approach across all tenures by all stakeholders at landscape (rather than property). Wild dogs have a high to very high pest risk (highly invasive and high threat) and are widely established throughout the Gympie region. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/wild-dog.	**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

European Fox *(Vulpes vulpes)*

Category	Asset protection	Impacts and threats
Restricted category 3, 4, 6	Established populations found throughout the Gympie region. Populations established in adjoining Council areas.	**Environmental** Greatest threat to long-term survival of many small marsupial species in Australia. Can significantly affect ground-nesting birds and turtles. **Economic** Preys on lambs and kids, inflicting significant impact on sheep and goat industries. Occasionally damages irrigation systems and horticultural crops. **Social** Preys on small or young animals, lambs, poultry and livestock, despite an abundance of food. Can spread diseases to domestic animals.
Invasion characteristics		**Management Goal and Expectations**
The fox was introduced to Australia from England as a sport animal during the 1860s and became a pest species within 30 years. Today, foxes are widespread throughout most of mainland Australia. Foxes have a high to very high pest risk (highly invasive and high threat) and are widely established throughout the Gympie region. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/fox.		**Goal** Asset protection **Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.

Feral Cat *(Felis catus)*

Category	Asset protection	Impacts and threats
Restricted category 3, 4, 6	Established populations found throughout the Gympie region. Populations established in adjoining Council areas.	**Environmental** Eats small mammals, birds, reptiles, amphibians, insects and even fish. Threatens small populations of critically endangered species. Competes for prey with native predators. Carries toxoplasmosis, which is particularly harmful to marsupials **Economic** Minor costs associated with condemnation of sheep and lamb carcasses due to sarcosporidiosis and toxoplasmosis, which are carried by feral cats. **Social** Can injure/transmit disease to domestic cats. Carries parasites that can affect humans. High numbers in urban areas cause hygiene problems.

Invasion characteristics	Management Goal and Expectations
Feral cats are domestic cats living in a wild state. Although the domestic cat has a long history of associating with humans, it retains a strong hunting instinct and can easily revert to wild behaviours. Feral cats are often more muscular than house cats, and are opportunistic predators that have a major impact on native species. They are found throughout Australia. Feral cats have a high to very high pest risk (highly invasive and high threat) and are widely established throughout the Gympie region. Further information can be found at: https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/feral-cat.	**Management Goal** Asset protection **Management Expectations** **Landholder** Consistent monitoring and control to meet GBO on occupied land and undertake actions as directed by GRC. **GRC** Ensure invasive plants and animals effectively managed on all lands in local government area. Undertake control on roadsides and reserves. Encourage use of best practice techniques to manage invasive plants and animals.