

Biosecurity Plan 2021-25

for invasive Plants and Animals



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Executive Summary

The Gladstone Regional Council Biosecurity Plan 2021-2025 is a resource aimed at providing information on the management of Invasive Plants and Animals within our local region.

The input of obligated stakeholders from across all sectors of the community is essential and has been drawn on through the development of the Gladstone Regional Council Biosecurity Plan 2021-2025.

This Plan outlines Gladstone Regional Council's guideline for managing Invasive Plants and Animals within its borders, including collaboration with neighbouring councils. The intent being that the Plan can be applied to Biosecurity Management across all types of land.

The Plan identifies impacts, challenges and success indicators of Invasive Plant and Animal management and explains the legislative foundation or management of Invasive Species.

The concept of a General Biosecurity Obligation (GBO) is discussed, as well as providing an overview of Council's main function in administering the *Biosecurity Act 2014* (the Act) at a local government level.

Voluntary compliance is the ultimate desired outcome. This can be achieved through education and awareness. The Plan uses plain language to outline the requirements and possible management actions to complying with the Act, and the expectations on all parties involved.

While a GBO applies equally to everyone, it is useful to create critical partnerships to ensure a holistic approach in Biosecurity Management.

Due to the impact and costs for control, neither Council nor individual landholders will ever be likely to have enough resources to eradicate all invasive species. Some discussion is given to the basis behind appropriately allocating resources, and the various strategies that can be applied to best enable effective biosecurity management with the available resources, as well as the investigation of emerging technology.

Finally, the Plan contains strategic actions to ensure that the intent of the Plan can be achieved, and that its effectiveness can be measured.

As per Delegations under *Biosecurity Act 2014*, endorsed by Gladstone Regional Council Chief Executive Officer.



Leisa Dowling

1 December 2020

Introduction

Background

Invasive plants, animals and disease are recognised as significant threats to Australia's unique biodiversity, agricultural productivity, can impact on human health and interfere with recreational and cultural uses and values of an area. The management of these species is a challenge and requires strong commitment, cooperation and collaboration from landowners and stakeholders. While the primary responsibility sits with the landowner a nil-tenure approach, involving affected stakeholders, in planning and implementing an agreed solution is considered best practice.

In Queensland, the *Biosecurity Act 2014* (the Act) provides the legal framework for managing the impacts of invasive species, including weeds and pest animals. The Act mandates that all local governments in Queensland prepare and adopt a Biosecurity Plan that outlines a strategic direction for the management of invasive species within their respective local government area.

This document, the Gladstone Regional Council Biosecurity Plan 2021-2025 (the Plan), will fulfil this requirement. The Plan also provides management strategies for other species identified as having significant local impacts.

Gladstone Region

Gladstone Regional Council (GRC) was formed in 2008 by the amalgamation of Gladstone City and Calliope and Miriam Vale Shires and covers an area of 10,484 km². The Gladstone Region is the gateway to the Southern Great Barrier Reef and includes the iconic Town of Seventeen Seventy Agnes Water and is one of the largest, bulk commodity ports in the world.



Figure 1 Geographical Map of GRC Area

The Gladstone Region is known for its industry, agriculture, infrastructure, natural resources, including the Great Barrier Reef, rainforests, rivers, coastline and wetlands, and is a tourist destination frequented by cruise ships and is famous for fishing and boating.

The major land use of the Gladstone region, at just under 8,000 km² (~75%), is rural, with zones of state environmental significance (MSES) protected areas, nature refuges, National Parks, forestry, parks and reserves ('Parkland') occupying substantial areas. In 2018-2019, the Central Queensland agricultural sector, encompassing the Gladstone Region, contributed \$1.4 billion to agricultural production. Additionally, the region's coastal environment is estimated at generating over \$193.4 million each year from tourism related activities (Australian Bureau of Statistics 2020).

Legal Requirements

Biosecurity Act 2014 commenced 1 July 2016 replacing the *Land Protection (Pest and Stock Route Management) Act 2002* and governs actions for the control and management of invasive species. For the purpose of this plan the term, *invasive species* includes all invasive plants and animals (both restricted and prohibited matter) listed in Schedule 1 and 2 of the *Biosecurity Act 2014*.

General Biosecurity Obligation - GBO

All Queenslanders have a general biosecurity obligation (GBO) under Queensland's *Biosecurity Act 2014*. The GBO means you need to ensure your activities do not spread a pest (invasive plant or animal), disease or contaminant.

Everyone is responsible for managing biosecurity risks that are:

- *under their control and*
- *they know about or should reasonably be expected to know about.*

Under the GBO, individuals and organisations whose activities pose a biosecurity risk must

- *take all reasonable and practical steps to prevent, control or minimise each biosecurity risk.*

A biosecurity risk is the risk that exists when you deal with:

- *any pest, disease or contaminant*
- *something that could carry a pest, disease or contaminant (e.g. animals, plants, soil, equipment).*

Local Government Subordinate Local Laws

Under the *Queensland Local Government Act 2009*, a local government may by resolution agree to adopt a subordinate local law for the declaration of a locally emerging invasive pest within its Local Government Area, which is not listed under the *Biosecurity Act 2014*.

Under *Subordinate Local Law No. 3 (Community and Environment Management) 2011*, a person must not introduce, propagate, breed or provide harbour to a declared local pest. The *Subordinate Local Law No. 3 (Community and Environment Management) 2011* details the current locally declared species.

Policy Context

The Plan has been developed to comply with Government policies, programs and regulations including the Queensland *Biosecurity Act 2014* and the Queensland Biosecurity Strategy 2018-2023 with a focus on related invasive species management strategies.

Commonwealth Strategies

In November 2019 the *Australia's Strategy for Nature 2019-2030* replaced Australian's *Biodiversity Conservation Strategy 2010-2030* and continues to be an umbrella policy for all Commonwealth, State and Territory government biodiversity related approaches including the *Australian Weeds Strategy 2017-2027* and the *Australian Pest Animal Strategy 2017-2027*.

These Strategies recognise invasive species as a key threat to the conservation of biodiversity and outlines the importance of joint action to reduce threats and their impacts.

Currently 32 invasive flora species have been listed as Weeds of National Significance (WoNS) by the Australian Government. WoNS category assists in identifying high risk species and listing is provided in Invasive Species Management Program.

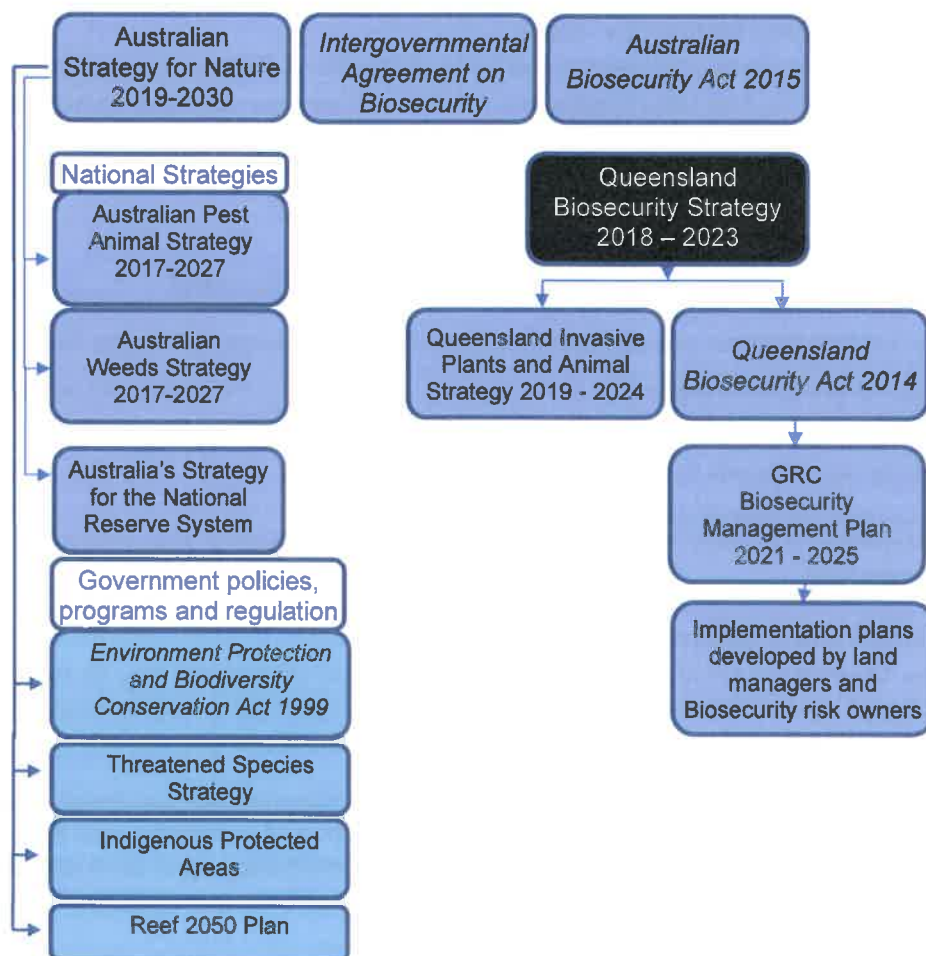


Figure 2 How the Strategy contains and coordinates actions to manage nature and biosecurity risk

State Strategies

The *Queensland Biosecurity Strategy 2018-2023* outlines the State Government approach to maintain the resilience of Queensland's biosecurity system. The strategy embraces six themes that will provide guidance for a collaborative approach to build a resilient system with common goals that deal effectively with the complexity of biosecurity.

The *Queensland Invasive Plant and Animal Strategy 2019 - 2024* (the Strategy) was developed to "establish a state-wide strategic planning framework that will address the impacts of invasive plants and animals currently within Queensland and to reduce the incidence of new exotic species entering Queensland."

The Strategy identifies several desired outcomes for invasive species management activities within Queensland. These desired outcomes are reflected throughout the Plan, forming the core outcomes within the General Strategic Program (refer to Table 1).

Regional Strategies

The GRC local government area is incorporated within two natural resource management agencies: the Fitzroy Basin Association and the Burnett Mary Regional Group. These two groups have developed independent strategies which incorporate invasive species management, and both play an active role in invasive species management planning and control activities throughout the region through the provision of funding.

Local Strategies

The Plan aligns with Council's vision defined in the Corporate Plan 2018-2023. Our strategy seeks to facilitate cooperative management involving all stakeholders within the Gladstone Region and includes neighbouring local governments. The General Strategic Program contains the strategic actions and success indicators.

This Plan is for the entire Gladstone Region to guide legislative responsibilities for invasive plant and animal management. The strategies work towards the aspirations, concerns, values and goals of Gladstone rural and regional communities.

Strategies include developing management plans and providing access to experts and resources and the opportunity to be proactive on issues of concern to the community.

The Plan aims to ensure available resources target the highest priority invasive species in an effective and efficient manner, both on Council controlled land and through education, awareness, compliance and enforcement on all other land.

The Gladstone Regional Council Biosecurity Plan 2021-2025 will replace the Gladstone Regional Council Biosecurity Plan 2016-2020.

Purpose

The purpose of managing invasive species is to reduce or eliminate the biosecurity risk that they pose. This document provides the process and framework, including roles and responsibilities, from which Council, government agencies, industry, community groups and private landholders can work from to achieve invasive species objectives within the region.

The Gladstone Regional Council Corporate Plan 2018 – 2023 sets out the strategic direction and priorities of our vision “Connect. Innovate. Diversify”. The Biosecurity Plan contributes to:

- *Strategic Goal 1. ‘Our community is engaged, involved and proud. They say, “Gladstone Regional Council is easy to deal with and understands my needs”. We will be seen by the community to be efficient, financially and socially responsible and provide value for money. We will know people are confident in our engagement processes and actively participate in providing their feedback and contributing to community decisions.*
- *Strategic Goal 2. ‘To take a leadership role in protecting the environment, using resources efficiently and improving the health and safety of the community.’*
- *Strategic Goal 4. ‘To create a culture that minimizes risk and maintains compliance by strengthening governance, risk management, and compliance awareness, processes, reporting and accountability.’*
- *Strategic Goal 5. ‘We have a reputation for being easy to deal with and delivering value for money customer service.’*

Council endeavours to lead and promote excellence of our service values to provide benefits to our community, through planned reoccurring and reactive work.

Scope

The plan:

- Ensures that resources are strategically invested to achieve effective outcomes through:
 - invasive species management activities; and
 - engagement and compliance functions within the region to achieve the Plan’s desired outcomes.
- Incorporates mechanisms for monitoring, evaluating and reporting on the effectiveness of the strategic actions implemented.
- Applies to all land and waterways within the boundaries of GRC local government area.
- Includes all land owned or controlled by the Queensland Government, Council, utilities, private companies and individuals.
- Provide management strategies for locally significant invasive species that are not listed under the Act and identified as a priority through an assessment process.

This plan does not consider the management of domestic animals, public health pests (e.g. vermin, mosquitoes, biting midges and cockroaches), cane toads, marine pests and native nuisance animals and plants. Nor does the plan consider pathogens of humans, domestic animals, livestock or plants. Federal and State authorities are responsible for responding to marine pests and other introduced pathogens.

Development and Approval Process

During the development of the Plan, the following activities were undertaken:

Internal Stakeholder Working Group

Suitably qualified and experienced GRC Officers, from the Pest Management Unit within the Biosecurity and Environmental Health Group, reviewed and updated the Plan. The Pest Management Unit then consulted and engaged with all of Council Departments.

External Stakeholder Working Group

To ensure that the Plan adequately reflected external stakeholder's values and interests, an external stakeholder working group was established to provide advice on the draft plan.

The external stakeholder working group incorporated a variety of stakeholders who actively participate in invasive species management activities across the Gladstone region including:

- State Government
- Neighbouring Local Governments
- Local Industry and Businesses
- Local Community Groups

All members of the external stakeholder working group participated in the drafting phases of the Plan and invited to complete an evaluation form. The results of the evaluation are reviewed by GRC and incorporated into the Plan where appropriate.

Community Consultation Period

The community were invited to provide feedback relevant to Biosecurity during the engagement period.

GRC advertised and engage through Market Stalls, GRC's Conversations platform, media promotion, at local stores. The survey was available for 5 weeks.

All submissions received during the public submission period were reviewed, considered and incorporated into the Plan where appropriate.

Implementation

Biosecurity Plan Review and Review Panel

To assist in the implementation of the Plan and to determine its effectiveness at achieving the listed strategic actions, a Biosecurity Plan Review Panel will be created.

The Biosecurity Plan Review Panel will meet on a biannual basis and will determine the success of the General and Invasive Species Management Program by scoring against the listed success indicators for each strategic action.

The Biosecurity Plan Review Panel will comprise of key stakeholders who nominated:

- Discovery Coast Environment Group
- Gladstone Area Water Board
- Gladstone Port Corporation
- GRC Manager of Biosecurity and Environmental Health;
- GRC Team Leader Biosecurity;
- Queensland Parks and Wildlife Services

Plan Duration

The Plan will be in effect for a period of 5 years. During this time, the strategic actions set out in the Invasive Species Management Program, are to be carried out to the fullest extent practicable. The success of the Programs will be reviewed by the Biosecurity Plan Review Panel on a biannual (2 yearly) basis.

Stakeholder Roles and Responsibilities

All people have a GBO however for the Plan stakeholders have been categorised. They include Council, government agencies, industry and businesses, community groups and private landholders, illustrated in Figure 3. In delivering our programs, we acknowledge the Traditional Custodians of this country and their enduring connection to the land and waters.

The Invasive Species Management Program outlines the management objectives for Invasive plants and Animals that stakeholders are responsible for. The Management actions generally will help achieve compliance of discharging the GBO. Additionally, it is beneficial and helpful for all stakeholders to document in a Biosecurity Management Plan/Biosecurity Plan, Property Pest Management Plan what the management objectives and actions to demonstrate work towards their GBO.

Australian Government	<ul style="list-style-type: none"> • Provides National framework, legislation, policies and programs to minimise the risk and impacts of Biosecurity. • Responsibility includes border protections and emergency response
Queensland Government	<p>Comprises: All State Government Departments</p> <ul style="list-style-type: none"> • Biosecurity Queensland • Department of Economic Development • Office of the Coordinator-General <p>These agencies are responsible for the management of invasive species</p>
Local Government	<ul style="list-style-type: none"> • Gladstone Regional Council • Banana Shire Council • Bundaberg Regional Council • Rockhampton Regional Council • North Burnett Regional Council <p>Must develop, adopt and implement Biosecurity Plans, control invasive species on land under their control; undertake education, awareness, support, compliance and enforcement.</p>
Industry and Business	<p>Includes manufacturing, construction & agriculture industries, small business, utilities and public services, for example:</p> <ul style="list-style-type: none"> • Gladstone Ports Corporation • Queensland Alumina Limited • NRG • Gladstone Area Water Board • Rio Tinto <p>There are various businesses in the Gladstone region and some that have a more direct role in Biosecurity, for example: Nursery, Produce Stores, Landscape businesses etc.</p> <p>All parties are responsible for invasive species management on their land.</p>
Private Landholders	<ul style="list-style-type: none"> • Includes members of the general community who occupy private land. • Private landholders are responsible for the management of invasive species on their private property.
Community Groups	<p>For example:</p> <ul style="list-style-type: none"> • Capricornia Catchments • Burnett Mary Regional Group • Gidarjil • Fitzroy Basin Association • Discovery Coast Environmental Group <p>These groups are an important source of funding and contributions for invasive species management activities in the region.</p>

Figure 3: Stakeholders roles and responsibilities relevant to the GRC Biosecurity Plan

Invasive species impacts in the Gladstone region

Invasive plants and animals have a significant impact on the environment, the economy (agriculture) and the community including human health and social amenity.

Environmental Impact

Invasive plants and pest animals' impact on biodiversity and the health of natural ecosystems.

Negative Environmental impacts include:

- Potential to drastically out-compete native species, transform ecosystems and impact on biodiversity in a broad range of natural areas, including areas of intact high value vegetation
- Direct predation
- Loss of food and shelter for native species
- Potential to invade disturbed systems and impact on ecosystems that may be already degraded
- Potential to develop a presence in natural areas
- Increase fuel loading and fire intensity posing a threat to native vegetation
- Spread of disease

Economic Impact

Invasive plants and pest animals directly impact on business enterprises, particularly primary industries, including losses to production and costs of control including land management costs to governments and utilities.

The Gladstone region supports a range of agricultural enterprises which provide a variety of products to both domestic and international markets.

Negative Economic impacts include:

- Destruction of pastures and crops
- Toxic to livestock
- Reduces regional agricultural output
- Increased control expenses
- Increased maintenance including irrigation system, drainage lines and creeks.
- Degraded water quality
- Predation of livestock by feral animals
- Soil and vegetation disturbance/loss
- Increase fire hazard (high biomass grasses)



Image: Belyache bush (*Jatropha gossypifolia*)

Human Health Impact

Invasive plants and pest animals may have direct health and safety impacts on people, including injury and infection risks.

Negative Human Health impact include:

- Potential for injury to people :
 - dog bite
 - wild dog attack
 - respiratory problems
 - allergic (anaphylactic) reaction
- Increased risk of motor vehicle accidents e.g. deer on road causing car accident
- Danger of drowning due to entanglement in areas of heavy infestation of e.g. Salvinia
- Spread of disease

Social Amenity Impact

Invasive plants and pest animals directly impact on people's use of town and peri-urban landscapes for access, recreation, cultural use and aesthetics.

Negative Social Amenity impact includes:

- Potential to form solid stands of weeds or dense populations of pest animals across the region
- Can out-compete or destroy gardens/pets and native plants/animals
- Impact on community natural area and nearby creeks, rivers and bushland
- Could impact amenity values or damage infrastructure including cultural heritage sites
- May provide shelter for vermin and pest animals
- Reduce recruitment of native species over time
- Potential to move into degraded areas in and around townships/communities including into riparian areas, bushland and gardens
- May affect access, appearance or increase management requirements
- High potential for pest to be replaced with other pests or weeds after treatment
- Likely to affect appearance or bring about complaints from residents or neighbours



Image: Fox (*Vulpes vulpes*)

Invasive Species Pathways

Transported livestock and fodder, contaminated crop and pasture seed, contaminated machinery and recreational vehicles, stormwater flows and waterways are recognised as pathways for the spread of invasive species.

Our region has both Local and State roads that provide transport connectivity for people and business in and within the State and Country. Invasive species in these networks have a high likelihood of spreading both into and from the Gladstone region.

Council monitor and maintain the control of invasive plant species on our local road network while the Department of Transport and Main Roads are responsible for the management of State roads and relevant State Government Departments are responsible for their land.

Gladstone Regional Council covers an area of 10484km² and own and operate two (2) washdown facilities installed for the purpose of preventing the spread of weed and seeds. Neighbouring Local Government, Banana Regional Council, also has washdowns for vehicles and machinery prior to leaving their region.

Additionally, washdown facilities within the Gladstone Region have not been included within the scope and duration of this plan.

Water catchments provide habitat for a range of native flora and fauna species and some of which are directly connected to the World Heritage listed Great Barrier Reef Marine Park Area and declared fish habitat areas.

Natural events such as storms can mobilise unwanted seeds and contaminants through stormwater run-off further spreading the weeds and infestations. Weed control at waterways and catchments particularly at the top of catchments, when infested with invasive species will help to achieve the best results.

Challenges to Effective Invasive Species Management

Challenges in implementing effective invasive species management, in the Gladstone region include:

- The cost and effort required to deliver effective long-term control activities
- Accessibility of funds through environmental grants
- Conflicting management priorities between stakeholders limiting coordinated activities
- Close settlement patterns of properties in urban and peri-urban environment
- Absentee Landholders
- Mobility of pest animals over several tenures
- Stakeholder knowledge
- Constraints with limited data and access for safe control in sensitive areas
- Animal welfare obligations may limit use of some control methods

Note: The peri-urban environment consists predominantly of rural residential areas. These areas are typically made up of absentee owners, hobby farmers and rural living.

Contributions to Success

To ensure that the Plan is effectively implemented, all stakeholders need to cooperate and coordinate their efforts towards the strategic actions outlined in this document. Contributions include but not limited to:

- Strong communication linkage can improve the planning and coordination of effective invasive species management activities across the region
- Access to accurate and live knowledge of the distribution and impact of invasive species across the landscape
- Developing and implementing long term plans to include regular assessments and follow up control
- Access to innovative technology to provide enhanced biosecurity outcomes



Image: Rubber vine (*Cryptostegia grangiflora*)



Image: Parthenium weed (*Parthenium hysterophorus*)

General Strategic Program

The General Strategic Program outlines several broad strategic actions that have been developed to meet the desired outcomes identified in the *Queensland Invasive Plant and Animal Strategy 2019-2024*. Council will undertake these strategic actions to meet Council's GBO by managing compliance functions and adopting and promoting best management practices to minimise the risk associated with biosecurity matter in order to safeguard community values. Community feedback has been incorporated into these actions.

Table 1 General Strategic Program

1. Prevention and preparedness <i>Prevent the establishment and spread of invasive plants and animals.</i>	
Strategic Action	Success Indicator
1.1 Inclusion of the State risk-based tools incorporated into GRC documents	1.1.1 Update and implement the risk-based tools across the business
	1.1.2 Invasive species management considered in all relevant GRC projects, plans, policies and strategies
1.2 Re-evaluate priority invasive plant species and land management areas	1.2.1 Risk Assessment tool is developed and implemented to identified GRC's high priority areas for control including those identified as natural environmentally significant assets
	1.2.2 Implement Control programs on GRC land
	1.2.3 Undertake Compliance inspection and enforcement action for control
1.3 Encourage community driven approaches and partnerships to improve eradication and control methods	1.3.1 Successful completion of community involved projects and programs
	1.3.2 Provide cost/incentives schemes, services, equipment and current advice to all stakeholders
1.4 Adopt and implement risk-based eradication, mitigation and control plans	1.4.1 Scheduling control identified on GRC controlled land.
	1.4.2 GRC Property Pest Management Plans or Biosecurity Management Plans are promoted, developed and implemented on private properties
	1.4.3 Biosecurity Programs are undertaken across the GRC local government area focused on the Prevention Invasive Species (listed in Table 5)



Image: Giant Rat's Tail Grass (*Sporobolus pyramidalis*)

2. Monitoring and Assessment <i>Standardise information on invasive plants and animals to form the basis for effective decision-making.</i>	
Strategic Action	Success Indicator
2.1 To collect data, of invasive plants and animals, and store in a central location.	2.1.1 Promote the use of QLD State Centralised monitoring system (If developed)
	2.1.2 Promote the use of other monitoring systems i.e. Feral Scan
	2.1.3 Collate GRC business information in central locations (GIS & Pathway)
2.2 To investigate suitable integrative data collection technology	2.2.1 Implementation of new technology to improve mapping and real time data
2.3 Adopt and implement risk-based Biosecurity programs for specific invasive plants and animals	2.3.1 Implement a Biosecurity program targeting priority invasive species
	2.3.2 Review and implement reporting requirements
2.4 Contribute to research regarding invasive plants and animals	2.4.1 Monetary contributions or on-ground research is undertaken/participated in
	2.4.2 Invasive species research needs are identified and communicated to DAF and other stakeholders
2.5 Re-evaluate invasive species utilising the risk-based tool to update priority species	2.5.1 Update risk and priority tool to align with State and amend the invasive species list.
3. Awareness and education <i>Increase the number of stakeholders who understand their role in, and best practice of, the management of invasive plants and animals.</i>	
Strategic Action	Success Indicator
3.1 Information is provided on invasive plants and animals and the GBO to the community in areas not previously targeted	3.1.1 Four local public education and awareness campaigns including field days and at new locations (Nursery, Produce, Tondoon Botanic Gardens etc.)
	3.1.2 Consider new and utilise existing media platforms to provide information to the community on invasive species and management
	3.1.3 Stakeholders are assisted with on-ground invasive species identification and planning activities
3.2 Improve communication with other groups to improve best practice and discourage activity and behaviour that contributes to or maintains the impacts of invasive species	3.2.1 Engage with GRC business and other identified groups within the Gladstone Region (e.g. Gidarjil, Discovery Coast Environmental Group, CPMG, FBA, BMRG)
	3.2.2 Continue and maintain current communication networks with all stakeholders
3.3 Communicate and deliver high quality and best practice, information and skills on current methods of management of invasive plants and animals	3.3.1 GRC Officers attend relevant sessions (workshops, training, symposiums etc) and communicate the learnings to all stakeholders
	3.3.2 Promotion of best practice, information and skills workshops and training to all stakeholders

4. Effective management systems Develop and implement integrated practices for managing and minimising the impacts of invasive plants and animals.	
Strategic Action	Success Indicator
4.1 Communicate and promote best practice approaches for the management of invasive plants and animals	4.1.1 Delivery of Education and Awareness programs
	4.1.2 Changes to invasive species best management practice is monitored and communicated to stakeholders through awareness campaigns, training workshops, forums and other consultation
4.2 Develop control programs for council land that are consistent with sustainable management practices	4.2.1 Develop a risk-based tool for inspections of Council land
	4.2.2 Develop Control following inspections of GRC land
4.3 Review compliance and enforcement documents to align with risk-based tools	4.3.1 Implement compliance processes
4.4 Investigate the use of innovative technology to provide enhanced biosecurity outcomes	4.4.1 Purchase, implementation and training in the use of innovative technology (i.e. Drones, remote traps) to provide accurate and real time data
5. Strategic planning framework and management Develop risk-based strategic directions that maximise stakeholder responsibility in managing invasive plants and animals.	
Strategic Action	Success Indicator
5.1 Promote the Plans strategies and themes for Stakeholders information and use	5.1.1 Stakeholders engaged in the development of this Plan and invited to actively participate in invasive species management. The Plan is readily available on GRC website for stakeholders to refer to.
5.2 Invasive species are prioritised based on impacts & risks, current distribution and viability of control	5.2.1 Adopt the State's risk-based tool
	5.2.2 Implement the tool to inform control management plans
5.3 Invasive species management considered in all relevant GRC projects, plans, policies and strategies	5.3.1 Development applications under the <i>Planning Act 2009</i> consider invasive species
	5.3.2 GRC codes, policies, management plans and operational procedures are reviewed to ensure compliance with the Plan
5.4 Networking with neighbouring Local Government Areas (LGA), Community Groups and DAF	5.4.1 Coordinated approach to invasive species
	5.4.2 Investigate funding opportunities
5.5 Invasive Species management within the GRC local government area is adequately resourced	5.5.1 Advocate for sufficient budgeting and internal resources to achieve desired outcomes of the Plan and management objectives

6. Commitment roles and responsibilities <i>Gain commitment from all land managers, Industries, communities and governments to a coordinated approach to managing invasive plants and animals.</i>	
Strategic Action	Success Indicator
6.1. Promotion and uptake by stakeholders of Council assistance and services relating to Biosecurity	6.1.1 Sustained number of stakeholders engaged in our programs
	6.1.2 Promotion of existing incentives and assistance programs
6.2 Investigation of a nil-tenure approach with neighbouring LGA for control of invasive plants and animals	6.2.1 Report on the viability and options for this approach
	6.2.2 Investigate and report on coordinated approach with existing land neighbours
6.3 Promote the economic and environmental benefits and impacts of invasive animals to encourage co-investment	6.3.1 Inclusion of the economic and environmental impacts and benefits of control in awareness campaigns e.g. lessons learnt, case studies
	6.3.2 Providing relevant information to all stakeholders to improve management outcomes



Image: African Fountain Grass (*Pennisetum setaceum*)

Invasive Species Management Program

The Invasive Species Management Program applies to all landholders and stakeholders and outlines the objectives and management actions specific to invasive species management within the region. Each strategic action identifies success indicators and the stakeholder responsible for delivering the action.

Invasive species have been divided into the following management categories to provide a goal to work toward, direction and prioritise control actions:

- Prevention
- Eradication
- Containment
- Natural Asset Protection

Management objectives describe appropriate strategic weed and pest animal management outcomes for a species and are based on the generalised invasion curve (Figure 4).

GENERALISED INVASION CURVE SHOWING ACTIONS APPROPRIATE TO EACH STAGE

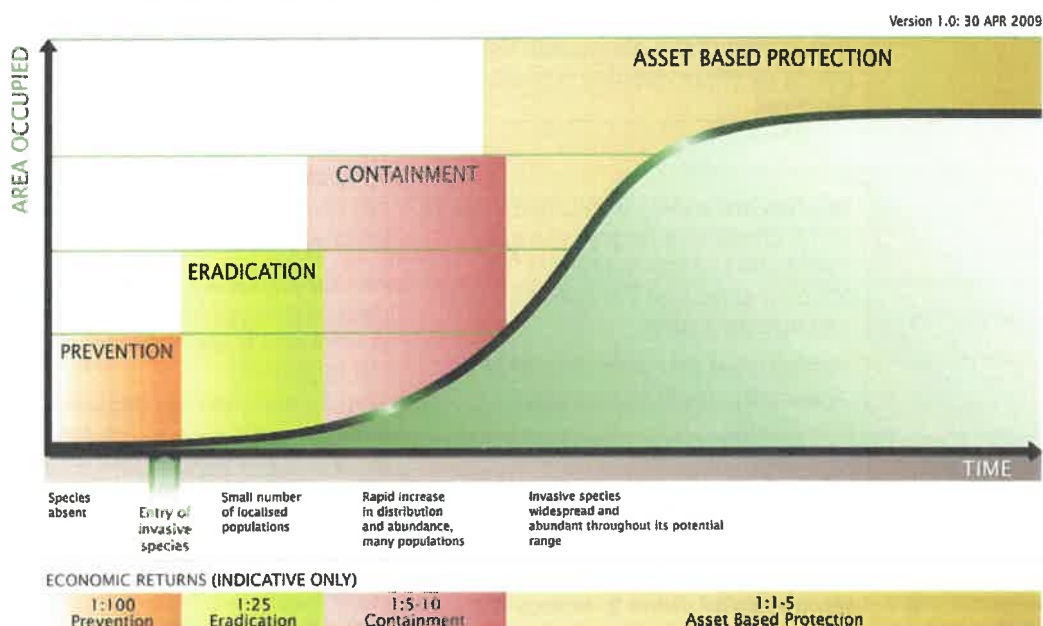


Figure 4: The invasion curve describes the four stages of invasive species invasion and the most appropriate management objective for each stage (Agriculture Victoria 2020)

The Invasive Species Management Program below does not remove or override the obligations for invasive species management under the *Biosecurity Act 2014*. Obligations relating to the management and reporting of Prohibited and Restricted Matter must still be adhered to.

Invasive Species Management Objective

Description of the management objectives categories is provided in Table 2 and includes limited action category in consideration of the feasibility of control identified through the risk prioritization assessment tool. These management objectives will inform the reasonable and practical measures to meet your GBO.

Table 2 Invasive Species Management Objective Categories and Compliance Focus

Management Objective	Description	Management Action
Prevention	Species are not present in the Gladstone Region. Aims to prevent the species arriving and establishing Monitoring to preventing entry into the region.	Ongoing surveillance, training and awareness activities to enable early detection.
Eradication	Species are present in limited distribution and abundance in the Gladstone Region. Aims to completely remove the species from the management area. <i>Elimination of the biosecurity risk posed by these species is reasonably practical.</i>	To eradicate all known infestations. Prevent movement of species into eradication zones, surveillance, mapping and destroying e.g. seeds, seedbank, spores etc.
Containment	Species are widely distributed in parts of the Gladstone Region but not everywhere. Aims to prevent the ongoing spread of the species in the management area. <i>Minimisation and containment of the biosecurity risk is reasonably practicable.</i>	Contain the core infestation where species occur and managed as per best practice to reduce impacts on priority assets. Aim for significant reduction in density through high level initial control and sustained management. Identify and manage the area where it could spread (exclusion zone and manage as per eradication objective).
Natural Asset Protection/ Local Control	Species are widely distributed with low feasibility. Aims to reduce the overall economic, environmental, and/or social impacts of the species. The species would only be targeted for coordinated control in the management area if its local presence makes it likely to spread to areas where it ranks as a higher priority. <i>Minimisation of the biosecurity risk posed to high priority natural assets is considered reasonable and practical.</i>	Limit the impact upon local assets e.g. targeted management that aims to prevent spread of the species to key sites/assets of high economic, environmental, and/or social value. Landowners/managers and people carrying out activities must still meet their General Biosecurity Obligation for these species. This includes meeting the prescribed prohibited or restricted matter obligations and reducing the likelihood of spread outside of the property.

Prioritising Invasive Plants and Animals

A risk prioritisation process has been developed to identify species of highest risk and the management objectives to reduce this risk, activities that land managers can do to meet those management objectives and methods the ensure measures are followed to the achieve the management objectives.

The process involves four (4) main steps:

1. Develop a baseline
2. Assess the risk
3. Assess the feasibility
4. Identify and confirm the management objective

The process evaluated the following elements:

1. **Impact** – the economic, environmental, social amenity and human health effects the species has.
2. **Invasiveness** – the species’ ability to spread, reproduce and become established.
3. **Potential distribution** – how far the weed or pest animal could spread (considering climate, soil and habitat preference etc.).
4. **Current distribution** – how large is the infestation/population.
5. **Cost of control** – the cost of control activities.
6. **Effectiveness of control options** – how effective are management options and what is the risk of the species being reintroduced to areas under management.

Investment of resources and control actions will be guided by the management category of the invasive species.

For each management category several strategic outcomes and associated measures has been developed to assist land managers (current and prospective) in meeting their GBO. This information must be read in conjunction with the relevant Strategic Program for invasive species management category, *Prevention, Eradication, Containment and Natural Asset Protection* listed in the following section.

Table 3 Strategic Outcomes and Associated Measures

Strategic Outcomes	Measures include but not limited to
Land managers (current and prospective) are alert to the fact that invasive species may be found in the area.	<ul style="list-style-type: none"> • Be aware of invasive species listed in the Plan (<i>what they look like, when they might flower and seed etc.</i>). • Have unfamiliar plants/animals found on your property (or property you are considering purchasing)/region identified. • Inspect high risk invasion/introduction pathways (<i>e.g. roadsides, stockyards and watering points</i>).
The risk of the weed (e.g. plant or reproductive parts of plants) or pest animal being introduced to the land/an area is reduced.	<ul style="list-style-type: none"> • Identify priority assets for targeted management and develop a property/ pest management plan. • Carry out hygiene procedures on vehicles, machinery, equipment and clothing (<i>e.g. wash down, brush down, visual inspections</i>). • Spell stock moved from another area that is/might be infested with a species included on the invasive species <i>e.g. keep stock in a holding area</i>.

Table 3 Continued: Strategic Outcomes and Associated Measures

Strategic Outcomes	Measures include but not limited to
Continued - The risk of the weed (e.g. plant or reproductive parts of plants) or pest animal being introduced to the land/an area is reduced.	<ul style="list-style-type: none"> • Source stock feed and garden products from areas that are not infested with species from the invasive species and/or request a weed hygiene declaration.
Targeted surveillance is undertaken to identify existing and new incursions of eradication and containment species listed in the Plan.	<ul style="list-style-type: none"> • Delimitation - conduct detailed surveillance and mapping to locate all populations and determine extent. • Carry out area/property surveillance activities or targeted inspections (e.g. checking properties on a regular basis) and inspect high risk invasion/ introduction pathways.
The plant and or reproductive plant part or pest animal cannot be distributed. This includes selling, trading, giving away or releasing into the wild.	<ul style="list-style-type: none"> • Check that plant or pest animal you are acquiring is not listed in this Plan. • Establish a buffer zone to minimise direct spread. • Exclude stock from contaminated areas. • Do not provide plants, reproductive parts of plants, or pest animals that are eradication targets to any other person • Suppliers must ensure that products they distribute are accurately labelled and not included in State government lists. • All plant and reproductive plant parts are removed, fully and continuously suppressed and destroyed following best practice methods [contact GRC Officer or DAF website for details]. • Manage pest animals identified for eradication in accordance with an eradication/containment plan. • Establish an on-going monitoring program to measure progress. • Ensure that control and disposal methods are approved and do not result in further spread.
Land managers reduce the impact of the weed or pest animal on priority assets.	<ul style="list-style-type: none"> • Identify priority assets for targeted management and develop a property/pest management plan. • Manage weed or pest animal in accordance with best practice control methods to reduce impacts on productivity, environmental values or amenity. <p>Actions may include:</p> <ul style="list-style-type: none"> • Maintain competitive vegetation/crops/pastures • Implement a biological control program, • Conduct chemical treatment or physical removal/burial of outliers etc., • Get involved in a pest animal baiting and maintain fencing, • Actively manage infestations, • Slashing / mechanical control.
An authorised/ relevant authority is notified if an invasive species listed in the Plan is found.	<ul style="list-style-type: none"> • Contact Biosecurity Queensland [HOTLINE 132523]. • Contact the GRC Biosecurity/Pest Management officer.

The strategic program for each invasive species management category, *Prevention, Eradication, Containment* and *Natural Asset Protection* has been developed and identifies the strategic actions, associated success indicators and the responsible stakeholders.

The identified invasive species for each category has been tabulated with reference to the WoNs, presence in neighbouring government area and prescribed Biosecurity Act restricted matter categories as follows:

Category 1 - Must be reported to Biosecurity Queensland within 24 hours

Category 2 - Must be reported to an authorised person within 24 hours

Category 3 - Must not be supplied to another person or be released into the environment unless authorised

Category 4 – Must not move to ensure that it does not spread into other areas of the State

Category 5 – Must not possess or keep this restricted matter under your control

Category 6 - Must not feed

Category 7 – Must dispose of noxious fish (whole carcass - no parts removed) in the ground above the high tide water mark or in a waste disposal receptacle.

Multiple categories may apply to restricted matter and the associated requirements of each category must be applied

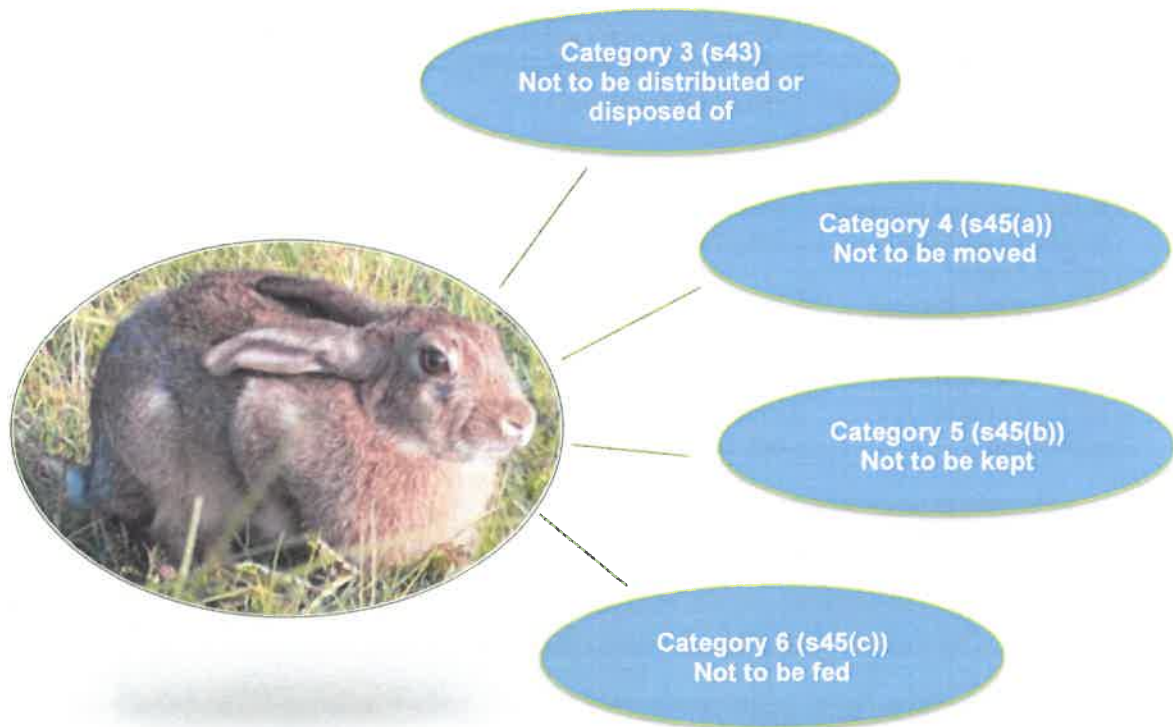


Figure 5: Restricted matter categories 3 to 6 apply to rabbits (*Oryctolagus cuniculus*) under the Queensland Biosecurity Act.

Prevention Invasive Species

These species are not currently found in the Gladstone Region and pose significant biosecurity risk. Monitoring to preventing entry and establishment of these species is reasonably practical.

Table 4 Strategic Program for Prevention Invasive Species

Strategic actions	Success indicators	Responsible
Identify and eradicate prevention invasive species in major transport corridors.	Annual surveys of all major transport routes for prevention invasive species are conducted and registered in Council Systems.	GRC
Identify prevention invasive species in Council Controlled sites.	GRC's Operations Program Delivery provides their planned work schedules to the Pest Management Unit one month in advance to ensure proactive inspections for invasive species.	GRC
	Implement a schedule and conduct surveys of all priority GRC controlled land for prevention invasive species.	GRC
	Biosecurity programs are conducted that incorporate prevention invasive species.	GRC
	Emergence of prevention invasive species are identified and mapped.	All stakeholders
	Prevention Invasive Species Protocol is developed and adopted by GRC and DAF.	GRC, DAF
Identify potential new prevention invasive species in neighbouring local government areas	Annual communication occurs with neighbouring LG's regarding any new prevention invasive species infestations.	GRC, Local Governments
Increase stakeholder awareness and capacity to identify and report infestations of prevention invasive species.	Prevention invasive species are included into the Invasive Species Awareness and Extension Program.	All stakeholders
Ensure prevention invasive species are eradicated.	Newly detected prevention invasive species are immediately elevated to the Eradication Invasive Species Program.	GRC



Image: Hudson Pear (*Cylindropuntia rosea*)

Table 5 List of Identified Prevention Invasive Species

Scientific name	Common name	WoNS	Neighbouring local government area present in	Biosecurity Act Category
Plants				Restricted Matter
<i>Alternanthera philoxeroides</i>	Alligator Weed	Yes	Single infestation	Category 3
<i>Annona glabra</i>	Pond Apple		Potential Pathway - Tide movement	Category 3
<i>Cabomba spp.</i>	Cabomba	Yes		Category 3
<i>Cylindropuntia rosea</i>	Hudson Pear		North Burnett Regional Council; Banana Shire Council	Category 2, 3, 4, 5
<i>Gleditsia spp.</i>	Honey Locust		North Burnett Regional Council	Category 3
<i>Gmelina elliptica</i>	Badhara Bush		Rockhampton Regional Council	Category 3
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	North Burnett Regional Council	Category 3
<i>Mimosa diplotricha (syn Mimosa invisa)</i>	Giant Sensitive Plant		Potential Pathway - Agricultural industry	Category 3
<i>Nassella tenuissima</i>	Mexican Feather Grass		Banana Shire Council	Category 2, 3, 4, 5
<i>Opuntia spp. other than Opuntia stricta and Opuntia tomentosa</i>	Prickly Pear		Potential Pathway - Transport	Prohibited & Restricted Matter
<i>Senecio madagascariensis</i>	Fireweed		Potential Pathway - Agricultural industry	Category 3
<i>Senna obtusifolia</i>	Sicklepod		Potential Pathway - Agricultural industry	Category 3
<i>Solanum viarum</i>	Tropical Soda Apple		Potential Pathway - Agricultural industry	Prohibited Matter
<i>Tamarix aphylla</i>	Athel Pine	Yes	Banana Shire Council and Rockhampton Regional Council	Category 3
Animals				
<i>Anoplolepsi gracilipes</i>	Yellow Crazy Ant		Potential Pathway - International Port	Category 3
<i>Apis cerana</i>	Asian Honey Bee		Potential Pathway - International Port	Category 1
<i>Solenopsis invicta</i>	Fire Ants		Potential Pathway - International Port	Prohibited Matter
<i>Wasmannia auropunctata</i>	Electric Ants		Potential Pathway - International Port	Category 1

Eradication Invasive Species

These species are present in limited distribution and abundance in the Gladstone Region. Elimination of the biosecurity risk posed by these species is reasonably practical.

Table 6 Strategic Program for Eradication Invasive Species

Eradication actions	Success indicators	Responsible
Establish baseline of current distribution and control efforts of eradication invasive species.	Biosecurity Program is implemented which incorporates eradication invasive species.	GRC
	Baseline distribution and control efforts of eradication invasive species is mapped and recorded.	GRC
	Processes are developed for stakeholders to report eradication invasive species.	GRC
Eradicate eradication invasive species from GRC local government area.	Eradication invasive species, on private and public land, are given management priority and are guided by a Property Pest Management Plans.	GRC, DAF; Private Landholders
	Infestations are eradicated .	All stakeholders
Increase stakeholder awareness and capacity to identify and report eradication invasive species.	Eradication invasive species are included in the <i>Invasive Species Awareness and Extension Program</i> .	GRC
Use administrative actions to ensure stakeholders manage eradication invasive species.	<i>Compliance and Enforcement Procedures</i> reviewed and implemented; guides administrative action regarding eradication invasive species.	GRC



Image: Mesquite (*Prosopis* spp.)

Table 7 List of Identified Eradication Invasive Species

Scientific name	Common name	WoNS	Distribution in GRC	Biosecurity Act Category
Plants				Restricted Matter
<i>Anredera cordifolia</i>	Madeira vine		Scattered	Category 3
<i>Eichhornia crassipes</i>	Water Hyacinth		Scattered	Category 3
<i>Eriocereus spp.</i>	Harrisia Cactus		Isolated	Prohibited Matter
<i>Jatropha gossypifolia</i>	Bellyache Bush	Yes	Scattered	Category 3
<i>Prosopis spp.</i>	Mesquites	Yes	Isolated	Prohibited Matter
<i>Vachellia nilotica</i>	Prickly Acacia	Yes	Scattered	Category 3
<i>Ziziphus mauritiana</i>	Chinee Apple		Scattered	Category 3



Image : Prickly Acacia (*Vachellia nilotica*)

Containment Invasive Species

These species are widely distributed in parts of the Gladstone Region but not everywhere. While broad scale elimination is not feasible, minimisation and containment of the biosecurity risk posed by this species is reasonably practicable to prevent further spread. Containment is managed through an approach that identifies measure to address invasive species at a 'whole of region', 'exclusion zone' and 'core' level.

Containment refers to:

1. Reducing the impact of the species where it occurs,
2. Trying to stop it spreading further across the landscape; and
3. Trying to gradually reduce the size of the infestation.

An example of a Containment Method involves:

Divide the management area into zones – the area with the species and the area without it. Identify the **CORE** area:

This is where the species is abundant and not eradicable.

- Weed/pest species is managed like a natural asset protection target (refer to the Natural Asset Protection/Local Control).

EXCLUSION ZONE: This is where the species is currently absent, or it is present in low density in isolated infestations (outliers) that can be removed. Weed/pest species is managed like an eradication target (refer to Eradication Invasive Species).

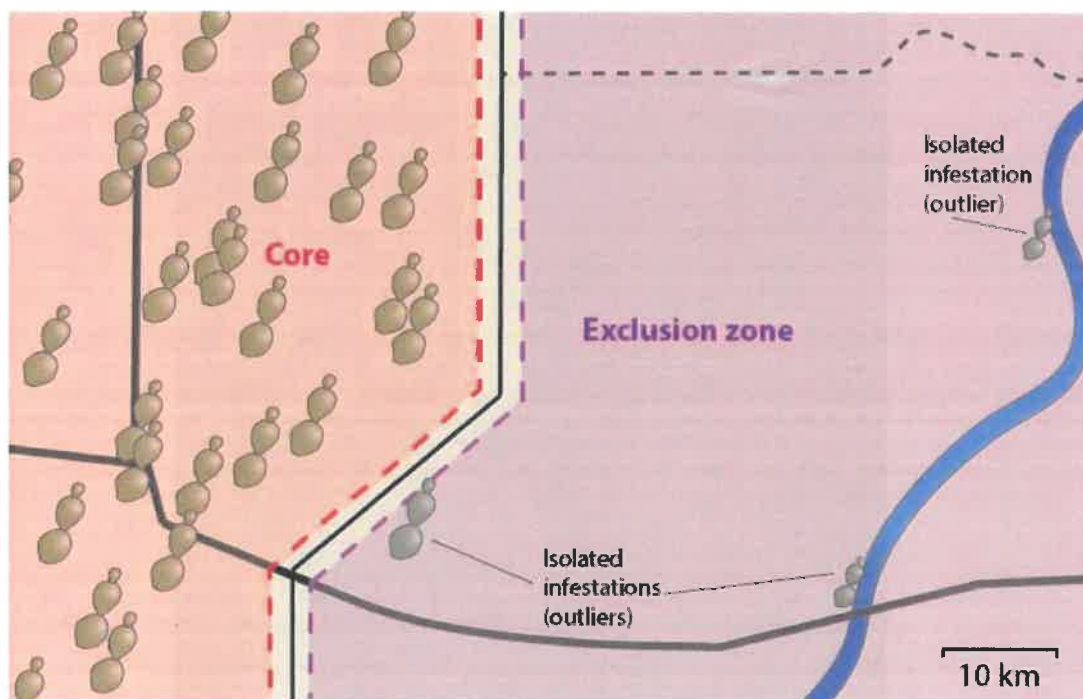


Figure 6: Example of areas identified as CORE and EXCLUSION zones for invasive species management.

Table 8 Strategic Program for Containment Invasive Species

Containment actions	Success indicators	Responsible
Improve knowledge of current distribution and control efforts for containment invasive species	Biosecurity Program is implemented which incorporates Containment invasive species.	GRC
	Baseline distribution and control efforts of Containment invasive species is mapped and recorded.	GRC
	Processes are developed for stakeholders to report Containment invasive species.	GRC
Establish and maintain local Containment lines for Containment invasive species.	Containment lines are reviewed for Containment invasive species.	GRC
	<i>Invasive Species Control Program of Works</i> developed and implemented to maintain invasive species on GRC land.	GRC
	Containment invasive species infestations are reduced.	GRC, All Stakeholders
	Property Pest Management Plans are developed and implemented on private properties.	GRC; Private Landholders
	Incentive programs promoted and accessible	GRC
	Chemical baiting services are provided to stakeholders for fauna invasive species control.	GRC
	Compliance and Enforcement Procedures reviewed and implemented; guides administrative action towards the maintenance of containment lines.	GRC
	Containment invasive species included in the Invasive Species Awareness and Extension Program.	GRC, All stakeholders



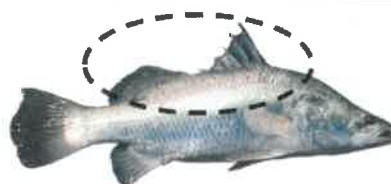
Image: Groundsel bush (*Baccharis halimifolia*)

Table 9 List of Identified Containment Invasive Species

Scientific name	Common name	WoNS	Distribution in GRC	Biosecurity Act Category
Plants				Restricted Matter
<i>Baccharis halimifolia</i>	Groundsel Bush		Scattered	Category 3
<i>Bryophyllum</i> spp.	Mother of Millions		Scattered	Category 3
<i>Cryptostegia grandiflora</i>	Rubber Vine	Yes	Widespread	Category 3
<i>Leucaena</i> sp.	Feral Leucaena		Scattered	Declared local pest
<i>Parkinsonia aculeata</i>	Parkinsonia	Yes	Scattered	Category 3
<i>Parthenium hysterophorus</i>	Parthenium	Yes	Widespread in the North	Category 3
<i>Pistia stratiotes</i>	Water Lettuce		Scattered	Category 3
<i>Salvinia molesta</i>	Salvinia	Yes	Scattered	Category 3
<i>Spathodea campanulata</i>	African Tulip Tree		Scattered	Category 3
<i>Sporobolous pyramidalis</i>	Giant Rats Tail Grass		Widespread	Category 3
<i>Sporobolus</i> spp.	Weedy Sporobolous Grasses (excluding Giant Rats Tail Grass)		Widespread	Category 3
<i>Tecoma stans</i>	Yellow Bells		Scattered	Category 3
Animals				
<i>Acridotheres tristis</i>	Indian Myna		Scattered	Declared Local Pest
<i>Canis familiaris</i>	Wild Dog		Widespread	Category 3, 4, 6
<i>Cervidae</i>	Feral Deer		Scattered	Category 3, 4, 6
<i>Felis catus</i>	Feral Cat		Widespread	Category 3, 4, 6
<i>Oryctolagus cuniculus</i>	European Rabbit		Widespread	Category 3, 4, 5, 6
<i>Sus scrofa</i>	Feral Pig		Widespread	Category 3, 4, 6
<i>Vulpes vulpes</i>	European Fox		Scattered	Category 3, 4, 5, 6
<i>Tilapia, Oreochromis & Sarotherodon</i> spp.	Tilapia	No	Scattered infestations	Category 3, 5, 6, 7



Most invasive fish have one (1) fin



Native fish have two (2) fins

Image: Example illustrating the difference between introduced species Tilapia (*Oreochromis* spp.) and native fish Barramundi (*Lates calarifer*) by the shape of the dorsal fin (Source: daf.qld.gov.au)

Natural Asset Protection/Local Control Invasive Species

These species are widely distributed across the Gladstone Region. While broad scale elimination is not feasible, minimisation of the biosecurity risk posed to high priority assets is considered reasonable and practical.

Natural asset protection aims to reduce the overall economic, environmental and/or social impacts of the weed or pest animal. It may include targeted management that aims to prevent spread to key sites/assets of high economic, environmental and/or social value.

Table 10 Strategic Program for Natural Asset Protection/ Local Control Invasive Species

Strategic actions	Success indicators	Responsible
Improve knowledge of current distribution and control efforts for Local Control Invasive Species in priority areas.	Baseline distribution and control efforts of Local Control Invasive Species is mapped and recorded on an as need basis.	GRC
	Processes are developed for stakeholders to report <i>Containment Invasive Species</i> .	GRC
Landholders adjacent to assets - increase awareness of their responsibilities and capacity to control Local Control Invasive Species .	<i>Invasive Species Awareness and Extension Program</i> developed and implemented; includes mechanisms to engage landholders adjacent to assets and promotes understanding of their responsibilities and obligations for Local Control Invasive Species .	GRC, All Stakeholders
Progressively reduce Local Control Invasive Species populations within or adjacent to assets.	Program of Works developed and implemented; includes targeted management of Local Control Invasive Species with impacts or risk to assets, ensuring that cost effective actions are incorporated, including the release of biological control agents.	GRC
	Property Pest Management Plans developed and implemented for the management of <i>Containment Invasive Species</i> on private properties adjacent to natural assets.	GRC, Private Landholders



Image: Cat's Claw Creeper (*Macfadyena unguis-cati*)

Key sites or high priority assets may include:

- a conservation area that we want to keep the species out of or if it is present, reduce its density to a level where it has minimal impact on the ecosystem;
- Agricultural land where the species impact is assessed as High Risk.

Natural Assets and environmentally sensitive areas can be defined as:

- Protected areas declared under the *Nature Conservation Act 1992*, the *Nature Conservation (Administration) Regulation 2006*, *Nature Conservation (Protected Areas Management) Regulation 2006* and *Nature Conservation (Protected Areas) Regulation 1994* such as National Parks and Conservation Parks.
- Areas declared under the State Planning Police as containing MSES (matters of state environmental significance) including "Wildlife habitat", "Declared Fish Habitat", and "endangered" or "of concern" Regional Ecosystems, and
- Council owned/ managed conservation reserves and natural areas (including locally significant waterbodies). These will be collated throughout the engagement process, identified by the community and supported by GRC.

Engagement identified specific concerns to the community. These have been reviewed and risk assessed to determine priority actions and locations for control and inclusion. Specifically:

- Natural Asset Protection/Local Control Invasive Species Control on Council controlled land: Grader Grass (*Themeda quadrivalvis*)
- Containment Invasive Species Control within the Gladstone Region: African Tulip Tree (*Spathodea campanulate*)
- Focus Areas:
 - Canoe Point
 - Wyndham Park
 - Workmans Beach
 - Police Creek Catchment
 - Walking trails and natural areas
 - Bush fire management priority areas
- Other Areas:
 - National Parks
 - Conservation Parks
 - Awoonga Dam

Other areas identified are the responsibility of external stakeholders. GRC will work with responsible parties through education, awareness, incentive programs and services, compliance and enforcement to reach the desired outcomes. This will also be achieved through the strategic actions in the General Strategic Program.



Image: Prickly Pear (*Opuntia stricta* and *Opuntia tomentosa*)

Table 11 Natural Asset Protection/Local Control Invasive Species

Scientific name	Common name	WoNS	Distribution in GRC	Biosecurity Act Category
Plants				Restricted Matter
<i>Agave sisalana</i>	Sisal hemp		Scattered	
<i>Ambrosia artemisiifolia</i>	Annual Ragweed		Scattered	Category 3
<i>Eragrostis curvula</i>	African Love Grass		Widespread	
<i>Hymenachne amplexicaulis</i>	Hymenachne	Yes	Scattered	Category 3
<i>Hyparrhenia rufa</i>	Thatch Grass		Widespread	
<i>Lantana</i> spp.	Lantana	Yes	Widespread	
<i>Macfadyena unguis-cati</i>	Cats Claw Creeper	Yes	Widespread in the South	
<i>Opuntia stricta</i> and <i>Opuntia tomentosa</i> .	Prickly Pear		Widespread	Category 3
<i>Pennisetum setaceum</i>	African Fountain Grass		Scattered	Category 3
<i>Praxelis clematidea</i>	Praxelis		Widespread	
<i>Schinus terebinthifolius</i>	Broadleaved Pepper Tree		Scattered	Category 3
<i>Solanum mauritianum</i>	Wild Tobacco		Widespread	
<i>Sphagneticola trilobata</i> syn. <i>Wedelia trilobata</i>	Singapore Daisy		Scattered	Category 3
<i>Stachytarpheta</i> spp.	Snake Weed		Widespread	
<i>Themeda quadrivalvis</i>	Grader Grass		Widespread	
<i>Thevetia peruviana</i>	Captain Cook Tree		Scattered	Category 3
<i>Rhinella marina</i>	Cane Toads		Widespread	

Other Invasive Species

Management objective - To provide advice to stakeholders when requested

Table 12 Strategic Program for Other Invasive Species

Strategic actions	Success indicators	Responsible
Provide advice to stakeholders when requested	Advice is provided to stakeholders when requested	GRC

Table 13 Other Invasive Species

Scientific name	Common name	WoNS	Distribution in GRC
Plants			
All other species contained in the Biosecurity Regulation, not contained in this Biosecurity Plan			
Animals			
All other species contained in the Biosecurity Regulation, not contained in this Biosecurity Plan			

Table 14 Weeds of National Significant (WoNS)

Common Name	Scientific Name	Recorded in GRC
African Boxthorn	<i>Lycium ferocissimum</i>	
Alligator Weed	<i>Alternanthera philoxeroides</i>	Yes
Asparagus Ferns	<i>Asparagus aethiopicus</i> ; <i>Asparagus scandens</i> ; <i>Asparagus africanus</i> ; <i>Asparagus declinatus</i> , <i>Asparagus plumosus</i>	Yes
Athel Pine	<i>Tamarix aphylla</i>	
Bellyache Bush	<i>Jatropha gossypifolia</i>	Yes
Bitou Bush/Boneseed	<i>Chrysanthemoides monilifera</i> subsp. <i>rotundata</i>	
Blackberry	<i>Rubus fruticosus</i> aggregate	
Bridal Creeper	<i>Asparagus asparagoides</i> ,	
Brooms	<i>Cytisus scoparius</i> ; <i>Genista monspessulana</i> , <i>Genista linifolia</i>	
Cabomba	<i>Cabomba caroliniana</i>	Yes
Cats Claw Creeper	<i>Dolichandra unguis-cati</i>	Yes
Chilean Needle Grass	<i>Nassella trichotoma</i>	
Delta Arrowhead	<i>Sagittaria platyphylla</i>	
Fireweed	<i>Senecio madagascariensis</i>	
Gamba Grass	<i>Andropogon gayanus</i>	
Gorse	<i>Ulex europaeus</i>	
Hymenachne	<i>Hymenachne amplexicaulis</i>	Yes
Lantana	<i>Lantana camara</i>	Yes
Madeira Vine	<i>Anredera cordifolia</i>	Yes
Mesquite	<i>Prosopis</i> spp.	Yes
Mimosa	<i>Mimosa pigra</i>	
Parkinsonia	<i>Parkinsonia aculeata</i>	Yes
Parthenium	<i>Parthenium hysterophorus</i>	Yes
Pond Apple	<i>Annona glabra</i>	
Prickly Acacia	<i>Vechellia nilotica</i>	Yes
Prickly Pears	<i>Austrocylindropuntia</i> spp.; <i>Cylindropuntia</i> spp.; <i>Optunia</i> spp	Yes
Rubber Vine	<i>Cryptostegia grandiflora</i>	Yes
Salvinia	<i>Salvinia molesta</i>	Yes
Serrated Tussock	<i>Nassella trichotoma</i>	
Silverleaf Nightshade	<i>Solanum elaeagnifolium</i>	
Water Hyacinth	<i>Eichhornia crassipes</i>	Yes
Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow	<i>Salix</i> spp. Except <i>S. babylonica</i> , <i>S.x calodendron</i> & <i>S.x reichardtii</i>	

Relevant Website, Web Links and Files

Gladstone Regional Council Economic Profile 2020 available at <https://economy.id.com.au/gladstone/tourism-value?sEndYear=2016>

General biosecurity obligation available at <https://www.daf.qld.gov.au/business-priorities/biosecurity/policy-legislation-regulation/biosecurity-act-2014/general-biosecurity-obligation>

Gladstone Regional Council Services and Information -

<https://www.gladstone.qld.gov.au/pests-weeds>

<https://www.gladstone.qld.gov.au/biosecurity>

<https://www.gladstone.qld.gov.au/weed-spray-equipment-hire>

<https://www.gladstone.qld.gov.au/feral-animals-1>

Value of Agricultural Commodities Produced, Australia, 2018-19 available at

<https://www.abs.gov.au/ausstats/abs%40.nsf/mf/7503.0>

Value of agricultural production available at <https://www.agriculture.gov.au/abares/research-topics/aboutmyregion/qld-central#agricultural-sector>

Qld Globe, State of Queensland 2020 available at <https://qldglobe.information.qld.gov.au/>

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