



**Burdekin**  
Shire Council

# Burdekin Shire Biosecurity Plan 2020-2025



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**Acronyms**

BSC	Burdekin Shire Council
WoNS	Weed of National Significance
ESA	Environmentally Significant Areas
DAF	Department of Agriculture and Fisheries
DES	Department of Environment and Science
DNRM	Department of Natural Resource Management
NQDT	NQ Dry Tropics
QPWS	Queensland Parks and Wildlife Service
RPMG	Regional Pest Management Group
TMR	Department of Transport and Main Roads
BBIFMAC	Burdekin Bowen Integrated Floodplain Management Advisory Committee
BPS	Burdekin Productivity Services
WRC	Whitsunday Regional Council
CRC	Charters Towers Regional Council
TCC	Townsville City Council

## **Executive Summary**

Burdekin Shire Council Biosecurity Plan 2020-2025 (the Plan) provides a strategic direction for the management of invasive biosecurity matter (plants and animals) in the Burdekin Shire. The plan establishes local priorities and sets out actions that aim to minimise the environmental, economic, social and human health impacts of invasive biosecurity matter and brings all sectors of a local community together to manage invasive biosecurity matter in the shire.

This plan will replace the previous Burdekin Shire Biosecurity Plan 2016-2019. This plan is now aligned with the operational and financial cycle from July 1, 2020 to June 30, 2025. The Plan has been developed by engaging stakeholders and community to achieve greater acceptance and understanding of the issue of pest management.

The Plan has identified six strategies for Council and the stakeholders participating in the Plan:

1. Awareness and education
2. Informed decision making
3. Prevention, early detection, containment, and eradication
4. Strategic planning framework and management
5. Effective integrated management systems
6. Commitment and partnership

The role of Council within the Plan is to appropriate actions that are consistent with its Corporate Plan, key strategic areas, and strategies.

The roles of Stakeholders within the Plan are to encourage community ownership of pest management throughout the Shire by contributing towards prevention and early intervention, community awareness, and knowledge of pest plants and animals.

The Plan is an informative reference for land managers and provides information to the wider community on Council's commitment to protecting the natural environment.

## **1.0 Purpose**

The purpose of the Plan is to provide a strategic direction for the management of invasive biosecurity matter (plants and animals) in the Burdekin Shire. The plan establishes local priorities and sets out actions that aim to minimise the environmental, economic, social and human health impacts of invasive biosecurity matter and brings all sectors of a local community together to manage invasive biosecurity matter in the shire.

## **2.0 Scope**

To manage risks associated with invasive biosecurity matter on all land and waterways within the boundaries of the Burdekin Shire Council. This includes all land owned or controlled by the State, Council, utilities, private companies and individuals.

The Plan will remain current for 5 years from the date of adoption. Whilst there is no mandatory requirement to review the Plan under the *Biosecurity Act 2014*, the progress of the Plan will be reviewed formally every 12 months by the Council and updates provided to all stakeholders

The Council will consider:

- Program goals and objectives
- Outputs and outcomes in key areas
- Monitoring changes against a baseline
- Stakeholder commitments and roles.

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

### **3.0 Links to Council's Corporate Plan 2017-2022**

Burdekin Shire Council's Corporate Plan 2017-2022 sets the strategic direction and priorities for our organisation for the next five financial years.

#### **Strategic Areas – Environment**

4.1 Balancing the needs of the community and the environment

4.2 A sustainable environment

#### **Strategies:**

4.1.2 Support community education programs that contribute to improves environmental and community outcomes

4.1.3 Protect and enhance the natural environment

4.1.4 Work in partnership with organisations and the community to support projects to protect and enhance environmentally sensitive areas

4.2.2 Partner with and consult key stakeholders' groups and government departments for a sustainable environment

#### **Evaluation measures:**

Adoption and implementation of environmental best practice

Compliance with statutory obligations

Delivery of community education programs

### **4.0 Invasive species management in Burdekin Shire**

The Burdekin Shire Council (BSC) covers an area of approximately 5,053 square kilometres and encompasses a diverse range of agricultural and grazing land, wetlands, rivers, estuaries and national park areas to the north.

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.

Table 1. Impacts of invasive plants and animals on our valued environments, lifestyles and livelihoods in the Burdekin shire.

	Terrestrial biodiversity and conservation environments	Agriculture and production areas	Community and residential areas
What are these?	Vegetated areas across the Burdekin shire managed for conservation	Agriculture, horticulture, tourism and other production areas	Areas where the community lives, works and plays
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	Compete with livestock Contribute to loss of production Prey on and threaten livestock Destroy infrastructure Carry diseases, weed seed and parasites that can impact on livestock and agricultural activities	Destroy infrastructure Cause traffic hazards Prey on native and domestic animal species

Source: (adapted from Sunshine Coast Council Local Government Area Biosecurity Plan 2017)

## 4.1 Vision and Strategy

<b>Vision</b>					
To minimise the impact of invasive biosecurity matter on the environment, the economy, human safety and social amenity.					
<b>Strategy</b>					
Awareness and education	Informed decision making	Prevention, early detection, containment and eradication	Strategic planning framework and management	Effective integrated management systems	Commitment and partnership
<b>Objectives</b>					
<p>To provide accurate, accessible and timely information on invasive biosecurity matter.</p> <p>To increase stakeholder's awareness of invasive biosecurity matter and their impacts and individuals capacity to identify and manage them.</p> <p>To have appropriately skilled and knowledgeable officers able to respond effectively to invasive biosecurity matter.</p>	<p>To collect, use and make available reliable data relevant to invasive biosecurity matter management.</p> <p>To further the understanding of the biology, ecology and impacts of invasive biosecurity matter.</p>	<p>To prevent the introduction of new invasive biosecurity matter.</p> <p>To minimise the spread of invasive biosecurity matter to new areas.</p> <p>To contain invasive biosecurity matter within containment areas.</p> <p>To detect and eradicate new and specific invasive biosecurity matter.</p>	<p>To maintain and enhance a planning framework for invasive biosecurity matter management.</p> <p>To implement, evaluate and review integrated invasive biosecurity matter management programs.</p> <p>To resource invasive biosecurity matter management programs efficiently and adequately.</p>	<p>To adopt and develop new, and improve existing, invasive biosecurity matter management practices.</p> <p>To reduce populations and impacts of invasive biosecurity matter.</p> <p>To protect environmental significant areas from invasive biosecurity matter.</p>	<p>To establish and maintain long term stakeholder commitment to invasive biosecurity matter management.</p> <p>To establish roles and responsibilities for invasive biosecurity matter.</p> <p>To ensure compliance with the <i>Biosecurity Act 2014</i>.</p>
<b>Outcomes</b>					
Stakeholders are informed, knowledgeable and have ownership of invasive biosecurity matter management.	Reliable information is the basis for decision making.	Introduction, spread and establishment of invasive biosecurity matter is prevented.	Strategic directions are developed and maintained.	Effective and integrated management systems are developed and widely implemented.	All stakeholders are committed to and undertake coordinated management of invasive biosecurity matter.

## 4.2 Invasive species assessment framework

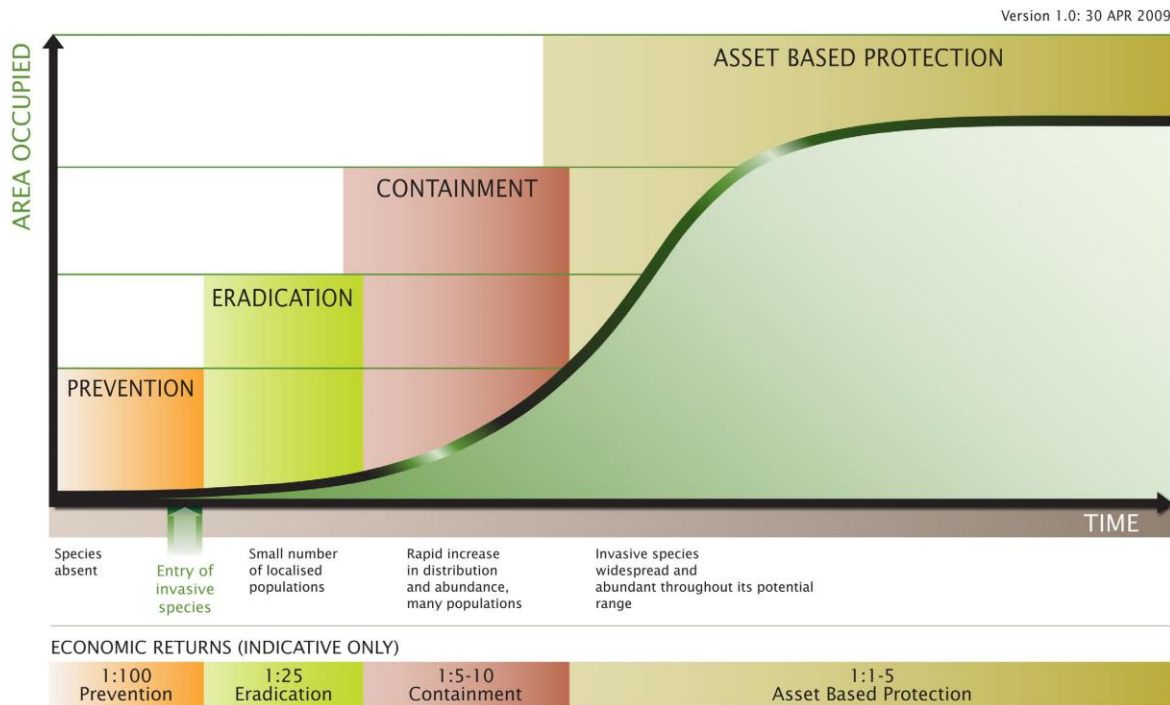
An Invasive Species Assessment Framework is used to assess impact, analyse risk and determine realistic management targets for invasive species within the Burdekin Shire area.

In the preparation of this plan, a prioritisation process commissioned by LGAQ for the management of invasive plants and animals legislated for management under the Act and invasive plants and animals deemed to pose a significant local threat was undertaken. The process is defined in Appendix 2.

The prioritisation assessment consisted of a comparative risk assessment determined by assessing the invasiveness, impacts and potential distribution for each species and an assessment on the feasibility of control which was determined based on control costs, current distribution, and effectiveness of control options.

Management objectives describe appropriate strategic weed and pest animal management outcomes for a species and are based on the generalised invasion curve as per the figure below. The invasion curve describes the four stages of invasive species invasion and the most appropriate management objective for each stage (Agriculture Victoria 2020).

GENERALISED INVASION CURVE SHOWING ACTIONS APPROPRIATE TO EACH STAGE



**The management objectives are defined in detail in Table below.**



Management objective	Description
<b>Limited action</b>	<p>The species has low feasibility for control and targeted action is not likely to reduce the risk.</p> <p>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.</p> <p>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.</p>
<b>Asset Protection</b>	<p>Aims to reduce the overall economic, environmental, and/or social impacts of the species. It may include targeted management that aims to prevent spread of the species to key sites/assets of high economic, environmental, and/or social value.</p>
<b>Containment</b>	<p>Aims to prevent the ongoing spread of the species in the management area. For containment, both the core infestations where species occurs (core infestation) and the area where it is absent but could spread (exclusion zone), should be identified.</p> <p>Within an <b>exclusion zones</b> actions may include:</p> <ul style="list-style-type: none"> <li>- Manage species as per eradication objective.</li> </ul> <p>Within a <b>core infestation</b> actions may include:</p> <ul style="list-style-type: none"> <li>- managing species as per best practice to reduce impacts on priority assets (similar to as you would in an asset protection zone)</li> <li>- practice good hygiene to prevent spread outside of core infestation</li> <li>- aim for significant reduction in density through high level initial control and sustained management.</li> </ul>
<b>Eradication</b>	<p>Aims to completely remove the species from the management area. Actions may include preventing movement of species into eradication zones, surveillance/mapping to identify all populations/individuals and destroying all populations/individuals (e.g. seeds, spores, eggs etc.).</p>
<b>Prevention</b>	<p>Species are not present in the area. Aims to prevent the species arriving and establishing. Actions may include preventing entry into area, ongoing surveillance (including nursery inspections), training and awareness activities for the community to enable early detection.</p>
<p><b>This process allows an objective assessment to be made on an invasive plant and animal threat rather than simply react to its presence and appearance</b></p>	

### 4.3 Identified Invasive biosecurity matter for management in the Burdekin Shire

Note: See Appendix 2 for Risk scoring matrix, Appendix 3 for Risk scores, Appendix 4 for Fact Sheets

Invasive/Restricted Pest Plant	Categories under the Act	Management option
Arrowhead ( <i>Sagittaria platyphylla</i> )	Restricted 3	Prevention
Limnocharis ( <i>Limnocharis flava</i> )	Restricted 2, 3, 4 &5	Prevention
Cabomba ( <i>Cabomba spp.</i> )	Restricted 3	Prevention
Cha-Om ( <i>Senegalia pennata sp. insuavis</i> )	Prohibited invasive	Eradication
Water Mimosa ( <i>Neptunia oleracea</i> )	Restricted 2,3,4 &5	Eradication
Harrisia Cactus ( <i>Harrisia sp</i> )	Prohibited invasive	Eradication
Cat's Claw Creeper ( <i>Macfadyena unguis-cati</i> (L.) A.H.Gentry)	Restricted 3	Eradication
Siam Weed ( <i>Chromolaena odorata</i> )	Restricted 3	Containment
Gamba Grass ( <i>Andropogon gayanus</i> )	Restricted 3	Containment
Singapore Daisy ( <i>Sphagneticola trilobata</i> )	Restricted 3	Containment
Asparagus fern ( <i>A aethiopicus 'Sprengerii', A.africanus and A.plumosus</i> )	Restricted 3	Containment
Itch Grass ( <i>Rottboellia cochinchinensis</i> )	Locally declared	Containment
Giant Rats Tail Grass ( <i>Sporobolus pyramidalis, S. natalensis</i> )	Restricted 3	Containment
Captain Cook Tree/Yellow Oleander ( <i>Thevetia peruviana</i> )	Restricted 3	Containment
African tulip tree ( <i>Spathodea campanulate</i> )	Restricted 3	Containment
Sicklepod ( <i>Senna obtusifolia, S.hirsuta, S. tora</i> )	Restricted 3	Asset Protection
Water Hyacinth ( <i>Eichhornia crassipes</i> )	Restricted 3	Asset Protection
Parkinsonia ( <i>Parkinsonia aculeata</i> )	Restricted 3	Asset Protection
Leucaena ( <i>Leucaena leucocephala</i> )	Locally declared	Asset protection
Water Lettuce ( <i>Pistia stratiotes</i> )	Restricted 3	Asset Protection

Invasive/Restricted Pest Plant	Categories under the Act	Management option
Bellyache Bush ( <i>Jatropha gossypifoliar</i> )	Restricted 3	Asset Protection
Lantana ( <i>Lantana camara</i> )	Restricted 3	Asset Protection
Grader Grass ( <i>Themeda quadrivalvis</i> )	Locally declared	Asset Protection
Aleman Grass ( <i>Echinochloa polystachya</i> )	Locally declared	Asset Protection
Rubbervine ( <i>Cryptostegia grandiflora</i> )	Restricted 3	Asset Protection
Hymenachne ( <i>Hymenachne amplexicaulis</i> )	Restricted 3	Asset Protection
Prickly Acacia ( <i>Acacia nilotica</i> )	Restricted 3	Asset Protection
Salvinia ( <i>Salvinia molesta</i> )	Restricted 3	Asset Protection
Parthenium Weed ( <i>Parthenium hysterophorus</i> )	Restricted 3	Asset Protection
Chinee Apple ( <i>Ziziphus mauritiana</i> )	Restricted 3	Asset Protection
Invasive/Restricted Pest Animal	Categories under the Act	Management Option
Rusa deer ( <i>Cervus timorensis</i> )	Restricted 3,4 & 6	Prevention
Yellow crazy ants ( <i>Anoplolepis gracilipes</i> )	Restricted 3,4 & 6	Prevention
Fox ( <i>Vulpus vulpus</i> )	Restricted 3,4,5 & 6	Asset Protection
Feral cat ( <i>Felis catus</i> )	Restricted 3,4 & 6	Asset Protection
Feral pigs ( <i>Sus scrofa</i> )	Restricted 3,4 & 6	Asset Protection
Wild dog ( <i>Canis familiaris</i> , <i>C.familiaris dingo</i> , <i>C.lupus familiarus</i> , <i>C.lupus dingo</i> )	Restricted 3,4 & 6	Asset Protection
Chital deer ( <i>Axis axis</i> )	Restricted 3,4 & 6	Eradication in Rita Island zone, Containment in Majors creek area
<p>Note: Your obligations for each category under the Act                      Category 1 &amp; 2: These two categories have specific urgent reporting requirements. Matter in category 1 must be reported to an inspector within 24 hours. Matter in category 2 must be reported to an inspector or authorised person within 24 hours. An inspector or authorised person can be contacted at Biosecurity Queensland on 13 25 23.</p>		

Invasive/Restricted Pest Plant	Categories under the Act	Management option
<p>Category 3: You must not distribute this restricted matter. This means it must not be given as a gift, sold, traded or released into the environment unless the distribution or disposal is authorised in a regulation or under a permit. Deliberate human distribution or disposal is a key source of spread into other areas of the state.</p> <p>Category 4: You must not move this restricted matter to ensure that it is not spread into other areas of the state.</p> <p>Category 5: You must not possess or keep this restricted matter under your control as these pests have a high risk of negatively impacting the environment. You may only keep this restricted matter under a permit of the Act or another Act.</p> <p>Category 6: You must not possess or keep this restricted matter under your control and must not feed this category of restricted matter as feeding may cause their numbers to increase and negatively impact the economy or the environment. Feeding for the purpose of preparing for or undertaking a control program is exempted.</p> <p>Category 7: If you have these noxious fish in your possession, you must kill the restricted matter and dispose of the carcass in the authorised manner prescribed in regulation.</p>		

#### 4.4 Priority Species and Management actions

Following are the priority species under this Plan which will be actively managed as per the management options.

Invasive/Restricted Pest Plant	Categories under the Act	Management option
Siam Weed ( <i>Chromolaena odorata</i> )	Restricted 3	Containment
Gamba Grass ( <i>Andropogon gayanus</i> )	Restricted 3	Containment
Water Hyacinth ( <i>Eichhornia crassipes</i> )	Restricted 3	Asset Protection
Parkinsonia ( <i>Parkinsonia aculeata</i> )	Restricted 3	Asset Protection
Water Lettuce ( <i>Pistia stratiotes</i> )	Restricted 3	Asset Protection
Bellyache Bush ( <i>Jatropha gossypifoliar</i> )	Restricted 3	Asset Protection
Lantana ( <i>Lantana camara</i> )	Restricted 3	Asset Protection
Grader Grass ( <i>Themeda quadrivalvis</i> )	Locally declared	Asset Protection
Aleman Grass ( <i>Echinochloa polystachya</i> )	Locally declared	Asset Protection
Rubbervine ( <i>Cryptostegia grandiflora</i> )	Restricted 3	Asset Protection
Hymenachne ( <i>Hymenachne amplexicaulis</i> )	Restricted 3	Asset Protection

Prickly Acacia ( <i>Acacia nilotica</i> )	Restricted 3	Asset Protection
Salvinia ( <i>Salvinia molesta</i> )	Restricted 3	Asset Protection
Parthenium Weed ( <i>Parthenium hysterophorus</i> )	Restricted 3	Asset Protection
Chinee Apple ( <i>Ziziphus mauritiana</i> )	Restricted 3	Assest Protection
<b>Invasive/Restricted Pest Animal</b>	<b>Categories under the Act</b>	<b>Management Option</b>
Feral pigs ( <i>Sus scrofa</i> )	Restricted 3,4 & 6	Asset Protection
Wild dog ( <i>Canis familiaris</i> , <i>C.familiaris dingo</i> , <i>C.lupus familiarus</i> , <i>C.lupus dingo</i> )	Restricted 3,4 & 6	Asset Protection
Chital deer ( <i>Axis axis</i> )	Restricted 3,4 & 6	Eradication in Rita Island zone, Containment in Majors creek area

## 5.0 Stakeholders

Several stakeholders have interests in pest management in the shire. Effective engagement of all relevant parties is critical to the success of invasive biosecurity matter management programs. Responsibilities of each identified stake holder has been specified in Appendix 5.

### 5.1 Australian Government

The Australian Government provides the framework for weeds and pest animals management in Australia and coordinates, facilitates and promotes national weeds and pest animal management policies and programs.

The Australian Government also provides leadership and coordination for emergency responses to invasive biosecurity matter of national significance.

### 5.2 Queensland Government

#### Biosecurity Queensland

Biosecurity Queensland is responsible for the development and implementation of invasive biosecurity matter management policy through legislation, research and extension education programs.

The Department of Agriculture and Fisheries coordinate State responses to invasive biosecurity matter and guide, encourage and assist local governments, Natural Resource Management (NRM) groups, land holders and land managers in invasive plant and animal management.

**Other Queensland Government agencies:** DES, DNRM, TMR, QPWS, QR, Energy Queensland, Sunwater

Other Queensland Government agencies are responsible for managing invasive biosecurity matter on state-managed land and waterways in accordance with agreed local shire priorities.

### 5.3 Local Government: WRC, TCC, CRC

Local government has the responsibility to:

- Administer and enforce the *Biosecurity Act 2014*,
- Develop and enforce local government area biosecurity plans,
- Guide, encourage and assist regional NRM groups, community groups, land holders and land managers in invasive biosecurity matter management,
- Coordinate community invasive plant and animal management programs.
- Local governments are also required to manage invasive biosecurity matter on land controlled by local government.

#### **5.4 Tertiary and other education research facilities: JCU, Biosecurity**

Undertake research on invasive biosecurity matter and train and educate people in best practice in the management of invasive plants and animals.

#### **5.5 NRM groups: BBIFMAC, NQ Dry Tropics**

Promote and facilitate invasive plant and animal management on agreed local shire priorities.

#### **5.6 Community groups: Landcare, Gudjuda Reference Group Aboriginal Corporation, Burdekin Canegrowers Association**

Promote awareness of invasive plant and animal issues within the wider community and their members.

#### **5.7 Land managers (public and private): Sunwater, LBW, Wilmar, BPS, Landholders**

Follow best practice for invasive plant and animal management on land they have responsibility for in line with relevant legislation, policy, guidelines, management plans and codes of practice.

#### **5.8 Residents**

Residents have a general biosecurity obligation under the Act

## **6.0 Burdekin Shire Responsibility**

### **6.1 Awareness and education**

Effective management of invasive biosecurity matter relies on broad stakeholder knowledge of the problem and management issues. Often people are not aware of the impacts that invasive biosecurity matter has on the natural environment or primary production, or that their own actions may be contributing to the problem. Many invasive plant and animal problems are increased through lack of community knowledge and awareness.

The level of education on invasive biosecurity matter is increasing, but more targeted public education and a higher public profile are needed. Different stakeholders require different information and support to raise their awareness and their willingness to help manage invasive biosecurity matter.

Council's website contains a significant amount of information on invasive plant and animal management and provides promotional material in several formats.

Council also undertakes invasive plant and animal awareness programs at relevant events.

Council will during the lifespan of this plan:

- Provide accurate, accessible and timely information material and undertake awareness programs
- Encourage land managers to use a nil-tenure approach to invasive plant and animal management
- Provide warnings where human activities create favourable conditions for invasive plants and animals including signage at boat ramps

- Alert the public on any incursion of exotic invasive plants and animals
- Establish an awareness campaign aimed at preventing the human assisted spread of invasive plant and animal
- Investigate invasive plant and animal awareness program for schools
- Provide training to Council officers working on Council land on invasive plant awareness
- Ensure the provision of appropriately qualified and trained personnel
- Provide ongoing professional development
- Conduct educational/informative workshops on pest management

## **6.2 Informed decision making**

Reliable data is needed to ensure that invasive biosecurity matter is managed holistically and for the long term. Invasive plant and animal control require an appropriate balance between prevention, surveillance and preparedness. An increasing amount of information is available on the distribution, abundance and impact of invasive plants and animals and Council needs to keep abreast of this information so informed decisions are made.

Management practices are regularly reassessed and updated, based on the best information available, to enable the most effective and efficient application of the control options.

Council currently researches and utilises information and updates from legislation, State Government, research groups, invasive plant and animal management groups and industry to inform the program.

Council will during the lifespan of this plan:

- Collect, utilise and make available relevant data on invasive plant and animal management
- Consider invasive plant and animal behaviour (biology and ecology), impacts (social, economic and environmental) and control costs in the prioritisation of invasive plant and animal species
- Enhance spatial data relating to pest distribution and management activities on platform provided by State and NRM
- Investigate and introduce mobile technology

## **6.3 Prevention, early detection, containment and eradication**

Prevention and early intervention are generally the most cost-effective management strategy. Once an invasive species is introduced and becomes established, it is often very difficult or even impossible to eradicate and costly to control. Everyone has a role in preventing the introduction and spread of invasive plants and animals into and around our shire.

Invasive plants and animals present different levels of risk and hazard in different areas within the shire. Determining risk and hazard is essential in defining priorities for prevention and management. Preventing the expansion of current invasive plant and animal distributions and populations will greatly reduce the risk of further negative impacts.

Council is currently using biocontrol for invasive plant Siam weed, Salvinia, Chinese apple, Parkinsonia.

Council will during the lifespan of this plan:

- Develop and implement a management plan for Council land
- Develop and implement a management plan for nine lagoons in Shire -Aquatic Weed Management Plan
- Develop and implement an invasive plant hygiene plan for Council's equipment to prevent and reduce the movement of invasive plants along road corridors by Council operations
- Maintain the 1080 baiting program
- Provide free pig traps and quick spray units at minimum cost to landholders

- Investigate funding opportunities for the construction and maintenance of wash-down facilities at strategic locations within the shire
- Maintain Herbicide Subsidy Policy, Fox and Wild Dog Bounty Policy and Wild Dog Control Assistance policy.
- Work with local nurseries to raise awareness of potential invasive plants and suitable alternatives
- Develop a rapid response plan for handling and reporting new infestations of high priority invasive plant and animal
- Strive to Eradicate new incursions of identified high-risk species on Council land
- Enforce legislative provisions where reasonably practical
- Investigate incentive programs

#### **6.4 Strategic planning framework and management**

A system of setting priorities for the management of invasive plants and animals is critical to ensuring that resources are used as efficiently as possible.

A strategic approach can only achieve common goals and priorities if there is effective communication and cooperation between land managers, NRM groups, industry, local governments, and State government departments. The plan offers a 'partnership' mechanism to achieve this level of coordination and efficiency, and the Act facilitates a risk-based approach to invasive plant and animal management.

Council has undertaken a risk assessment to determine the level of risk from invasive biosecurity matter to assist in setting priorities. The prioritisation is critical to ensuring resources are used as efficiently as possible.

Council will during the lifespan of this plan:

- Develop and implement an Exotic Incursion Response Plan when new incursion is identified in Shire
- Develop and implement a Deer Management Plan
- Develop and implement Pig Management Plan
- Integrate pest management planning with other processes
- Develop individual and/or multi-species invasive plant and animal management plans if and when required
- Ensure plans are consistent with nationally recognised codes of practice
- Investigate funding opportunities and apply for funding to support Councils programs

#### **6.5 Effective integrated management systems**

It is widely accepted that integrated pest management systems are the most effective. That is, best practice for effective control of invasive species often involves multiple control methods. Successful long-term management of invasive biosecurity matter relies on cooperation with neighbours and the coordination of control activities.

To ensure the best possible outcomes, Council advocates and adopts best practice management for all invasive plant and animal management activities.

Council will during the lifespan of this plan:

- Develop new and improve existing management practices reflecting best practice
- Develop work instructions
- Investigate additional, improved and alternative methods of control including fire
- Discourage actions that contribute to or maintain invasive plant and animal impacts in and around urban areas



- Schedule management activities to coincide with natural population fluctuations and seasonal conditions

## 6.6 Commitment and partnership

Management of invasive biosecurity matter is the shared responsibility of everyone, land managers, owners and occupiers, industry and all levels of government. Clearly defined and accepted roles and responsibilities are crucial to the success of long-term management. There is often a degree of confusion within the community about the exact responsibilities of stakeholders in invasive plant and animal management which will be addressed.

The broad scope and nature of invasive plant and animal problems demands a long-term commitment by all stakeholders. Council's Biosecurity Plan is crucial to the success of invasive plant and animal management and provides an opportunity to foster community commitment to roles and responsibilities.

Council partners with NRM and community groups, industry, local governments and State governments, when appropriate, to undertake coordinated invasive plant and animal management and educational activities.

Under the *Biosecurity Act 2014* everyone has an obligation to take all reasonable and practical measures to prevent or minimise a biosecurity risk. The legislation is backed by suitable enforcement measures which are only used when other approaches have failed.

Council will during the lifespan of this plan:

- Maintain working partnerships between stakeholders to generate a holistic approach to invasive plant and animal management and a sense of community ownership of the problem
- Communicate roles and responsibilities for invasive plant and animal management
- Identify common objectives and opportunities for sharing resources
- Liaise with neighbouring Local Councils to work collaboratively on common issues
- Support research where appropriate
- Participate in regional and State forums
- Enforce the *Biosecurity Act 2014* and relevant local laws in line with Council's enforcement policy
- Ensure compliance with legislative requirements placed on local government and pest management officers
- Commit to resourcing invasive plant and animal management actions on a priority basis including funding, staff and equipment

## 6.7 Compliance and Enforcement

Compliance is a suite of activities carried out to encourage (or sometimes enforce) land managers to take reasonable and practical measures to reduce biosecurity risk. There are many ways compliance can be supported, encouraged, or enforced as shown in figure below

Many people will comply voluntarily with regulations, which can be supported by providing information and education. Alternatively, there are people that continuously break the law, refusing to comply with regulations. Responses at this end of the spectrum include prosecution. People who sit between these extremes may need help to comply, including incentives, warnings, and penalties



Source: LGAQ commissioned tool report by Wild Matters

Wherever possible and considering the urgency and priority of pest issues, education is considered the first response. Parties should reasonably be given opportunity to discharge their GBO and meet legislative obligations.

The key questions (Appendix 5) will be asked by the Pest Management Officers when undertaking the compliance to ensure consistency and a fair decision process.

### 6.7.1 Biosecurity Orders

A biosecurity order is the main enforcement tool that may be given to a person if an authorised officer reasonably believes that a person has failed, or may fail, to discharge their GBO (s373) or other biosecurity obligations.

A person fails to discharge their GBO if they do not take 'all reasonable and practical measures' to mitigate a biosecurity risk.

A biosecurity order can direct a person to treat, control, eradicate, destroy or dispose of biosecurity matter or a carrier in a particular way, clean or disinfect something, stop using the place or remove something from the place.

A biosecurity order must be directed at ensuring the recipient discharges their GBO at the place; and may relate to a specific biosecurity matter. In addition, the biosecurity order may propose stated times

or intervals for re-entry to the place, a vehicle or another place, to check compliance with the order; or state how the recipient may show that the stated action has been taken.

### 6.7.2 Biosecurity Programs

Biosecurity programs (surveillance or prevention and control programs) have been implemented by the Department of Agriculture and Fisheries to enable proactive management of weeds and pest animals.

A Burdekin Shire Council invasive pest surveillance program is intended to provide a mechanism for undertaking proactive surveillance to determine the presence or absence of stated invasive biosecurity matter, monitoring compliance with the Act or the effect of measures taken in response to a biosecurity risk, or levels of biosecurity matter in a carrier – within Burdekin Shire Council local government area.

A Burdekin Shire Council's invasive pest prevention and control program/s are aimed at strategically managing, reducing or eradicating a limited number of high priority pests that currently pose a significant risk to the biosecurity considerations in the shire.

A copy of all Biosecurity Programs can be obtained on Council website or on request from Council customer centre and libraries at Ayr and Home Hill.

## 6.8 Plan implementation, review and performance reporting

To monitor and measure the effectiveness of the implementation of this plan, Council will prepare and maintain work plans incorporating operational requirements aimed at successfully progressing the responses. The operational actions will be assigned appropriate indicators so that performance against the outcomes can be regularly assessed. Appropriate reporting frameworks will be put in place to ensure management can monitor performance and adjust operational effort according to circumstances.

The Plan will be reviewed annually to ensure that it identifies and reflects changing priorities, operational capacity and the legislative framework and has been afforded adequate financial and staffing resources. 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 Plan, Burdekin Shire Council has a responsibility to demonstrate to its customers, stakeholders and the community that the Plan is sound and effective. Monitoring, evaluation and reporting on performance will underpin the plan and associated programs and systems.

## 7.0 Legislative framework

Council is responsible for the administration and enforcement of a range of State legislation and a local law within the Shire. The legal framework includes:

- *Biosecurity Act 2014*
- *Local Government Act 2009*
- *Local Law No. 1 (Administration) 2011*
- *Local Law No. 3 (Community and Environmental Management) 2012*
- *Subordinate Local Law No. 3 (Community and Environmental Management) 2012.*

### 7.1 Biosecurity Act 2014 and Biosecurity Regulation 2016

The purposes of the *Biosecurity Act 2014* are to:

- Provide a framework for an effective biosecurity system for Queensland that helps to minimise biosecurity risks and facilitates responding to impacts on a biosecurity consideration, including responding to biosecurity events, in a timely and effective way,
- Ensure the safety and quality of animal feed, fertilisers and other agricultural inputs,
- Help align responses to biosecurity risks in the State with national and international obligations and requirements for accessing markets for animal and plant produce, including live animal and plants,
- Manage risks associated with
  - emerging, endemic and exotic pests and diseases that impact on plant and animal industries, the built environment, companion or leisure animals, biodiversity and the natural environment, tourism, lifestyle and pleasure industries, or infrastructure and service industries,
  - the transfer of diseases from animals to humans and from humans to animals,
  - biological, chemical and physical contaminants in carriers.

The Act provides a consistent regulatory approach for the management of invasive biosecurity matter across Queensland. The Act specifically requires the local governments to have a biosecurity plan for invasive biosecurity matter for its local government area and to pay an amount each financial year to the Land Protection Fund when requested.

Under the Act everyone has a 'general biosecurity obligation'. This means everyone is responsible for managing biosecurity risks that are under their control and that they know about or should reasonably be expected to know about.

Under the general biosecurity obligation, individuals and organisations whose activities pose a biosecurity risk must:

- Take all reasonable and practical steps to prevent or minimise each biosecurity risk,
- Minimise the likelihood of causing a biosecurity event and limit the consequences if such an event is caused,
- Prevent or minimise the harmful effects a risk could have, and not do anything that might make any harmful effects worse.

## **7.2 Local Government Act 2009**

Although not specifically relating to invasive matter management the *Local Government Act 2009* provides the framework on which Council operates and includes the requirement to develop local laws.

## **7.3 Local Law No. 3 (Community and Environmental Management) 2012**

The purpose of Local Law No. 3 and its subordinate local law is to protect the environment and public health, safety and amenity within the Burdekin Shire.

The purpose is in part achieved by providing for the elimination or reduction of risks and threats from inadequate protection against animal and plant pests and allows for the declaration of an animal or plant of a specified species to be a local pest.

## **7.4 Strategic links to other legislation**

Local governments must ensure that the Plan does not breach the requirements of other legislation including:

- *Medicines and Poisons Act 2019*
- *Nature Conservation Act 1992,*
- *Water Act 2000,*
- *Environmental Protection Act 1994,*

- *Transport Infrastructure Act 1994,*
- *Plant Protection Act 2002 and Regulation 2002*
- *Animal Care and Protection Act 2001,*
- *Agricultural and Veterinary Chemicals (Queensland) Act 1994.*
- *Health (Drug and Poisons) Regulations 1996*

Strategic policies local governments need to consider include:

- *Queensland Biosecurity Strategy 2017-2021*
- *Queensland Government, Queensland Weed and Pest Animal Strategy 2016-20,*
- *Queensland Government, Wild dog management strategy 2011-16,*
- *Queensland Government, Feral deer management strategy 2013-2018*

## Appendix 1: Key terms and definitions – *Biosecurity Act 2014*

### **General Biosecurity Obligation**

The general biosecurity obligation applies to a person who deals with biosecurity matter or a carrier, or carries out an activity, if the person knows or ought reasonably to know that the biosecurity matter, carrier or activity poses or is likely to pose a biosecurity risk. The person has an obligation (a general biosecurity obligation) to take all reasonable and practical measures to prevent or minimise the biosecurity risk. Also, the person has an obligation (general biosecurity obligation) to prevent or minimise adverse effects on a biosecurity consideration of the person's dealing with the biosecurity matter or carrier or carrying out the activity; and to minimise the likelihood of causing a biosecurity event, or to limit the consequences of a biosecurity event caused, by dealing with the biosecurity matter or carrier or carrying out the activity; and not to do or omit to do something if the person knows or ought reasonably to know that doing or omitting to do the thing may exacerbate the adverse effects, or potential adverse effects, of the biosecurity matter, carrier or activity on a biosecurity consideration.

### **Biosecurity Matter**

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

### **Biosecurity Risk**

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

### **Biosecurity Event**

A biosecurity event is an event comprising something that has happened, is happening or may happen; and has had, is having or may have a significant adverse effect on a biosecurity consideration and was or is being caused by, or may be or

may have been caused by, biosecurity matter.

### **Biosecurity Consideration**

A biosecurity consideration is defined as being human health, social amenity, the economy or the environment.

### **Carrier**

A carrier is any animal or plant, or part of any animal or plant, or any other thing capable of moving biosecurity matter attached to, or contained in, the animal, plant or other thing from a place to another place. Or containing biosecurity matter that may attach to or enter another animal or plant, or part of another animal or plant, or another thing.

## Appendix 2: Invasive Species Assessment Framework (Commissioned by LGAQ)

The risk of a species is assessed against three criteria, or areas of interest.

### Step 1:

**1.1 Impact:** This section looks at the potential impacts of the species, including whether it reduces agricultural output; increases the cost of running an agricultural enterprise; the level of disruption it causes; its ability to outcompete other species; whether it can make people sick; its ability to change natural areas etc.

Impact scores are given across four areas: Economic, Social amenity, Human health, Environment

Impact level	Impact Area – Economic <i>This relates to how weeds and pest animals directly impact on business enterprises, particularly primary industries, including losses to production and costs of control. It also considers land management costs to governments and utilities.</i>	Score
Major	Significant reduction in regional agricultural output and increased control expenses. Control is a significant addition to existing routine weed/pest management practices. Major disruption to government land and infrastructure management. Major disruption to regional business or industry.	4
Moderate	Moderate threat to regional agricultural enterprises. Increased maintenance including drainage lines and creeks. Weed/pest threat to crop/pasture can be abated as part of routine management practices. Moderate disruption to government land and infrastructure management. Moderate disruption to regional business or industry, or localised major disruption.	3
Minor	Minor threat to farm assets throughout the property. Minor disruption to government land and infrastructure management. Minor disruption to regional business or industry, or localised moderate impacts.	2
Insignificant	Not of particular concern to agriculture under good land management practices. No or negligible disruption to government land and infrastructure management. No or negligible disruption to business or industry.	1
Don't know	Insufficient knowledge or information to identify an impact category.	2*
Impact level	Impact Area – Social Amenity <i>This relates to how weeds and pest animals directly impact on people's use of town and peri-urban landscapes for access, recreation, cultural use and aesthetics.</i>	Score
Major	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 and impact on community natural area and nearby creeks, rivers and bushland. Could impact amenity values or damage infrastructure. May provide shelter for vermin and pest animals or reduce recruitment of native species overtime.	4
Moderate	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. Requires targeted management but threat to community areas can be responded to as part of regular management.	3
Minor	Likely to affect appearance or bring about complaints from residents or neighbours. May impact the function, use or appearance of community and residential areas or require a low- level management response.	2
Insignificant	Unlikely to affect community use and enjoyment of areas. May exist in isolated areas due to dumping or urban escapes but is not likely to spread or dominate vegetation and gardens in the community.	1
Don't know	Insufficient knowledge or information to identify an impact category.	2*

Impact level	Impact Area – Human Health <i>This relates to how weeds and pest animals may have direct health and safety impacts on people, including injury and infection risks.</i>	Score
Major	Medical treatment requiring long term hospitalisation e.g. serious dog bite, serious respiratory problems. May result in human fatality/ fatalities e.g. deer on road causing car accident, wild dog killing a child, serious allergic (anaphylactic) reaction; drowning due to Salvinia.	4
Moderate	Medical treatment requiring short term hospitalisation e.g., allergic response to airborne or contact allergen.	3
Minor	Medical treatment required. Minor adverse reaction/irritation.	2
Insignificant	Not of particular concern to agriculture under good land management practices. No or negligible disruption to government land and infrastructure management. No or negligible disruption to business or industry.	1
Don't know	No or extremely insignificant injuries or discomfort.	2*
Impact level	Impact Area – Environmental <i>This relates to how weeds and pest animals impact on biodiversity and the health of natural ecosystems.</i>	Score
Major	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.	4
Moderate	Potential to invade disturbed systems and impact on ecosystems that may be already degraded.	3
Minor	Potential to develop a presence in natural areas however will not out- compete native species or alter ecosystems.	2
Insignificant	Unlikely to establish in natural areas other than in isolated infestations e.g. dumping or urban escapes. Unlikely to spread or penetrate undisturbed areas.	1
Don't know	Insufficient knowledge or information to identify an impact category.	2*

**1.2 Invasiveness:** This section looks at the natural ability of a species to spread and establish. This is scored by thinking about the species' ability to: **Establish** – is disturbance needed for a weed to establish, or can it establish in intact native vegetation or well managed production systems? **Reproduce** – does the species have a high reproduction rate? **Spread** – how does a species disperse? Can it spread long distances? Does it spread by more than one way?

Spread level	Ability to spread	Score
Very high	<p><b>Weeds:</b></p> <ul style="list-style-type: none"> <li>Can easily establish within dense vegetation, or amongst thick infestations of other weeds.</li> <li>Weeds may: <ul style="list-style-type: none"> <li>- produce seeds within one year or less</li> <li>- produce high amounts of seeds</li> <li>- spread by vegetative means including fragments, runners or bulbs</li> </ul> </li> <li>Weeds are commonly dispersed &gt;100m by natural means (e.g. birds, other animals, water, wind).</li> <li>Weeds are commonly dispersed by people (e.g. fodder contaminant, hitchhiker, garden plant)</li> </ul> <p><b>Animals:</b> Very high potential for dispersal (highly mobile species whose dispersal is not impeded by geographic or climatically unfavourable conditions, or where there is very high likelihood of deliberate or accidental human aided movement).</p>	4



High	<p><b>Weeds:</b></p> <ul style="list-style-type: none"> <li>Easily establish within more open vegetation, or amongst average infestations of other weeds.</li> <li>Weeds may: <ul style="list-style-type: none"> <li>- produce seeds between 1-3 years</li> <li>- produce moderate amounts of seeds</li> <li>- spread moderately/frequently from plant parts</li> </ul> </li> <li>Can be frequently dispersed by more than 1 dispersal methods (e.g. birds, other animals, water, wind).</li> </ul> <p><b>Animals:</b> High potential for dispersal (highly mobile species whose dispersal is not impeded by geographic or climatically unfavourable conditions, or where there is high likelihood of deliberate or accidental human aided movement).</p>	3
Medium	<p><b>Weeds:</b></p> <ul style="list-style-type: none"> <li>Mainly establish when there has been moderate disturbance to existing vegetation, which substantially reduces competition. This could include intensive grazing, mowing, raking, clearing of trees, temporary floods or summer droughts.</li> <li>Weeds may: <ul style="list-style-type: none"> <li>- produce seeds after 3 years</li> <li>- Produce low amounts of seeds</li> <li>- Spread slowly/infrequently by plant parts</li> </ul> </li> <li>Are occasionally dispersed &gt;100m by at least 1 dispersal methods (e.g. birds, other animals, water, wind)</li> </ul> <p><b>Animals:</b> Moderate potential for dispersal (species can disperse to a limited area of localised and ecologically suitable habitat).</p>	2
Low	<p><b>Weeds:</b></p> <ul style="list-style-type: none"> <li>Mainly need bare ground to establish, including removal of stubble/leaf litter. This will occur after major disturbances such as cultivation, overgrazing, hot fires, grading, long-term floods or long droughts.</li> <li>Plants: <ul style="list-style-type: none"> <li>- Don't produce seeds</li> <li>- are spread by plant parts</li> <li>- are not usually dispersed &gt;100m.</li> </ul> </li> </ul> <p><b>Animals:</b> Low potential for dispersal (species requires specific and uncommon means of dispersal and/or is sedentary).</p>	1
Don't know	Insufficient knowledge or information to identify an impact category.	2*

**1.3 Potential distribution:** It looks at the proportion of the area that is at risk from the species. This may depend on the: Climate and soil preferences of the weed. For example, some weeds may only be suited to sandy well-drained soils. and Climate and habitat preferences of the pest animal. For example, some pest animals may only be suited to higher rainfall areas.

Potential distribution level	Score
The species has the potential to spread to more than 70% of suitable habitat within the area	4
The species has the potential to spread to between 30-70% of suitable habitat within the area	3
The species has the potential to spread to between 10-30% of suitable habitat within the area	2
The species has the potential to spread to between < 10% of suitable habitat within the area	1
Insufficient knowledge or information to identify a potential distribution category	2*

The total score for risk is determined by multiplying the scores for each of the three criteria. The excel spreadsheet will automatically calculate the total score.



Use the score to identify the overall risk category in the following table.

Risk Score	Risk Category	Score
>23	<b>Very high</b>	A <b>feasibility assessment</b> should be performed (as per step 3) to determine the most appropriate management objective.
>15	<b>High</b>	A <b>feasibility assessment</b> should be performed (as per step 3) to determine the most appropriate management objective.
>9	<b>Medium</b>	A <b>feasibility assessment</b> should be performed (as per step 3) to determine the most appropriate management objective.
<9	<b>Low</b>	These species do not need to be assessed using the feasibility tool (refer figure 1 and text below). It is a good idea to keep a mindful watch on these species. If they begin to show invasive characteristics, they may need to be reassessed.
<5	<b>Negligible</b>	These species do not need to be assessed using the feasibility tool (refer figure 1 and text below). It is a good idea to keep a mindful watch on these species. If they begin to show invasive characteristics, they may need to be reassessed.

**2.0 Assess Feasibility:** The management feasibility of a species is assessed against three criteria, or areas of interest. These are: **Current distribution** – how large is the infestation/population? **Cost of control** – what is the cost of control activities? **Effectiveness of control options** – how effective are management options and what is the risk of the species being reintroduced to areas under management?

**2.1 Current distribution** This section assesses at how widespread the species in in the area. It looks at the overall area that is occupied, plus the pattern of distribution (e.g. widespread, scattered).

Rating	Current Distribution	Score
None	The species is not present in the area but has the potential to occur.	<b>0</b>
Low	Infestations or populations only occur in a small part of the area. Plants or animals occur as isolated outbreaks or individuals.	<b>1</b>
Moderate	Infestations or populations occur in less than half of the management areas. Plants or animals occur scattered or clumped in small populations.	<b>2</b>
High	Infestations or populations occur in more than half of the area. Plants or animals form dense infestations or populations.	<b>3</b>
Very high	Infestations or populations occur in most of the area. Plants or animals form dense infestations or populations.	<b>4</b>
Don't know	Insufficient knowledge or information to identify a category.	<b>2*</b>

(Categories adapted from the SA Weed Risk Management Guide and the SA Pest Animal Risk Management Guide).

**2.2 Cost of control:** The cost of control will influence how feasible it is to manage a weed or pest animal species. **When answering this question assume the species has reached its maximum density in the area. The cost should be for initial control of activities targeted at the species.** Initial control costs are likely to be the most expensive. Costs can vary quite a bit depending on the species, the control method and other factors (see box below).

Because of this you may need to take the average control cost for the species when scoring. This question excludes the cost of travelling to a location and assumes you have ready access to water on site, meaning there is no lengthy travel time to fill up for chemical applications. There are other factors that will influence control costs.

Category	Cost of control	Score
4	Where costs (including chemicals, labour and equipment if necessary) are greater than \$3000 per hectare.	4
3	Where costs (including chemicals, labour and equipment if necessary) are between \$1500 and \$3000 per hectare.	3
2	Where costs (including chemicals, labour and equipment if necessary) are between \$250 and \$1500 per hectare.	2
1	Where costs (including chemicals, labour and equipment if necessary) are below \$250 per hectare.	1
Don't know	Insufficient knowledge or information to identify a category.	2*

**2.3 Effectiveness of control options:** The ability to manage a weed or pest animal depends, in part, on having control options that are effective and readily available. This will give a greater chance of successfully managing the species. Control success can be affected by:

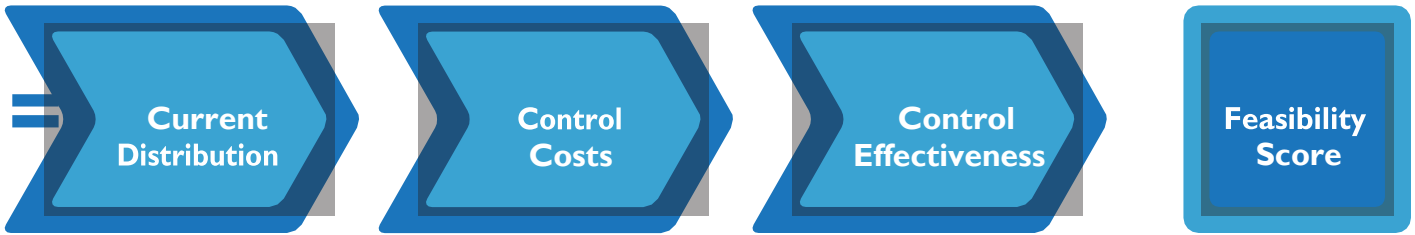
- The species' ability to tolerate or recover from treatment (what percentage of individuals survive treatment?)
- Treatments suitable for multiple situations (e.g. difficult to access areas, widespread weed infestations)
- Incomplete application of a treatment (e.g. not spraying enough herbicide onto a plant, or animals receiving a sub-lethal dose of a vertebrate pesticide or avoiding baits)
- Inappropriate timing of treatment (e.g. annual weeds germinating before or after treatment).

Control success is also influenced by whether a species can re-colonise an area after control has already happened. This can happen when:

- Weeds reproduce quickly and spread long distances by multiple mechanisms. These species will have a higher score.
- Pest animals are continuously or seasonally dispersing or escaping and can disperse medium-long distances. These species will have a greater chance of re-establishing than those that are sedentary and are not able to disperse (or only short distances).

Rating	Effectiveness of control	Score
Very high	Control options are available and are highly effective. Very low to no likelihood of the weed or pest being reintroduced into the area under management.	1
High	Control options are available and are effective. Low likelihood of the weed or pest being reintroduced into the area under management.	2
Moderate	Control options are available and are moderately effective. Some likelihood of the weed or pest being reintroduced into the area under management.	3
Low	Control options are ineffective or non-existent. High likelihood of the weed or pest being reintroduced into the area under management.	4
Don't know	Insufficient knowledge or information to identify a category.	2*

The total score for feasibility is determined by multiplying the scores for each of the three criteria



Feasibility Score	Feasibility Category
<5	Very high
>5	High
>9	Medium
>15	Low
>23	Negligible

**3. Identify and confirm management objective:** Use the risk matrix to identify a management objective and review the objective to confirm if it's realistic

RISK	FEASIBILITY OF CONTROL				
	Negligible (>23)	Low (>15)	Medium (>9)	High (>5)	Very high (<5)
Negligible (<5)	No/limited action	No/limited action	No/limited action	No/limited action	No/limited action
Low (>5)	No/limited action	No/limited action?	Asset Protection	Asset Protection	Asset Protection
Medium (>9)	Asset Protection	Asset Protection	Asset Protection	Containment	Containment
High (>15)	Asset Protection	Asset Protection	Containment	Containment	Eradication
Very high (>23)	Asset Protection	Asset Protection	Containment	Eradication	Eradication

### Appendix 3 Risk Score and Prioritisation of Pest Plants and Animals in Burdekin Shire Area

Invasive/Restricted Pest Plant	Risk Score	Categories under the Act	Management option
Arrowhead ( <i>Sagittaria platyphylla</i> )	Very High -64	Restricted 3	Prevention
Limnocharis ( <i>Limnocharis flava</i> )	Very High -64	Restricted 2, 3, 4 &5	Prevention
Cabomba ( <i>Cabomba spp.</i> )	Very High -64	Restricted 3	Prevention
Cha-Om ( <i>Senegalia pennata sp. insuavis</i> )	Very High -36	Prohibited invasive	Eradication
Water Mimosa ( <i>Neptunia oleracea</i> )	Very High -36	Restricted 2,3,4 &5	Eradication
Harrisia Cactus ( <i>Harrisia sp</i> )	Very High -24	Prohibited invasive	Eradication
Cat's Claw Creeper ( <i>Macfadyena unguis-cati</i> (L.) A.H.Gentry)	Very High -27	Restricted 3	Eradication
Siam Weed ( <i>Chromolaena odorata</i> )	Very High - 48	Restricted 3	Containment
Gamba Grass ( <i>Andropogon gayanus</i> )	High -16	Restricted 3	Containment
Singapore Daisy ( <i>Sphagneticola trilobata</i> )	High -16	Restricted 3	Containment
Asparagus fern ( <i>A aethiopicus 'Sprengeri', A.africanus and A.plumosus</i> )	Very High -16	Restricted 3	Containment
Itch Grass ( <i>Rottboellia cochinchinensis</i> )	Very High -27	Locally declared	Containment
Giant Rats Tail Grass ( <i>Sporobolus pyramidalis, S. natalensis</i> )	Very High -48	Restricted 3	Containment
Captain Cook Tree/Yellow Oleander ( <i>Thevetia peruviana</i> )	Very High -36	Restricted 3	Containment
African tulip tree ( <i>Spathodea campanulate</i> )	High - 18	Restricted 3	Containment
Sicklepod ( <i>Senna obtusifolia, S.hirsuta, S. tora</i> )	Very High - 64	Restricted 3	Asset Protection
Water Hyacinth ( <i>Eichhornia crassipes</i> )	Very High - 36	Restricted 3	Asset Protection
Parkinsonia ( <i>Parkinsonia aculeata</i> )	Very High - 36	Restricted 3	Asset Protection
Leucaena ( <i>Leucaena leucocephala</i> )	Very High - 36	Locally declared	Asset Protection
Water Lettuce ( <i>Pistia stratiotes</i> )	Very High - 64	Restricted 3	Asset Protection
Bellyache Bush ( <i>Jatropha gossypifoliar</i> )	Very High - 64	Restricted 3	Asset Protection
Lantana ( <i>Lantana camara</i> )	Very High - 36	Restricted 3	Asset Protection
Grader Grass ( <i>Themeda quadrivalvis</i> )	Very High - 64	Locally declared	Asset Protection
Aleman Grass ( <i>Echinochloa polystachya</i> )	Very High - 48	Locally Declared	Asset Protection
Rubbervine ( <i>Cryptostegia grandiflora</i> )	Very High - 64	Restricted 3	Asset Protection

Hymenachne ( <i>Hymenachne amplexicaulis</i> )	Very High - 48	Restricted 3	Asset Protection
Prickly Acacia ( <i>Acacia nilotica</i> )	Very High - 64	Restricted 3	Asset Protection
Salvinia ( <i>Salvinia molesta</i> )	Very High - 64	Restricted 3	Asset Protection
Parthenium Weed ( <i>Parthenium hysterophorus</i> )	Very High - 36	Restricted 3	Asset Protection
Chinee Apple ( <i>Ziziphus mauritiana</i> )	Very High - 64	Restricted 3	Asset Protection
<b>Pest Animal</b>		<b>Risk Assessment</b>	<b>Management Option</b>
Rusa deer ( <i>Cervus timorensis</i> )	Very High -27	Restricted 3,4 & 6	Prevention
Yellow crazy ants ( <i>Anoplolepis gracilipes</i> )	Very High -27	Restricted 3,4 & 6	Prevention
Feral cat ( <i>Felis catus</i> )	Very High - 36	Restricted 3,4 & 6	Asset Protection
Feral pigs ( <i>Sus scrofa</i> )	Very High - 48	Restricted 3,4 & 6	Asset Protection
Fox ( <i>Vulpus vulpus</i> )	Very High - 36	Restricted 3,4,5 & 6	Asset Protection
Wild dog ( <i>Canis familiaris</i> , <i>C.familiaris dingo</i> , <i>C.lupus familiaris</i> , <i>C.lupus dingo</i> )	Very High - 36	Restricted 3,4 & 6	Asset Protection
Chital deer ( <i>Axis axis</i> ) +	Very High - 36	Restricted 3,4 & 6	Asset Protection

**Note: The risk assessment was carried out as per the Process described in Appendix 2. Only Species which were identified as Very High or High Priority category were categorised for Management Options. Burdekin Shire Council will manage the species listed in the table as per the management options.**

## Appendix 4 Links to information sheets -Pest plants and animals

Pest Plant	Link
Arrowhead ( <i>Sagittaria platyphylla</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/sagittaria">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/sagittaria</a>
Limnocharis ( <i>Limnocharis flava</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/limnocharis">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/limnocharis</a>
Cabomba ( <i>Cabomba spp.</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/cabomba">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/cabomba</a>
Cha-Om ( <i>Senegalia pennata sp. insuavis</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/prohibited/cha-om">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/prohibited/cha-om</a>
Water Mimosa ( <i>Neptunia oleracea</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/water-mimosa">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/water-mimosa</a>
Harrisia Cactus ( <i>Harrisia sp</i> )	<a href="https://www.daf.qld.gov.au/_data/assets/pdf_file/0003/49179/IPA-Harrisia-Cactus-PP22.pdf">https://www.daf.qld.gov.au/_data/assets/pdf_file/0003/49179/IPA-Harrisia-Cactus-PP22.pdf</a>
Cats Claw Creeper ( <i>Macfadyena unguis-cati (L.) A.H.Gentry</i> )	<a href="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">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</a>
Siam Weed ( <i>Chromolaena odorata</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/siam-weed">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/siam-weed</a>
Gamba Grass ( <i>Andropogon gayanus</i> )	<a href="https://www.daf.qld.gov.au/_data/assets/pdf_file/0011/67466/IPA-Gamba-Grass-PP147.pdf">https://www.daf.qld.gov.au/_data/assets/pdf_file/0011/67466/IPA-Gamba-Grass-PP147.pdf</a>
Singapore Daisy ( <i>Sphagneticola trilobata</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/singapore-daisy">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/singapore-daisy</a>
Asparagus fern ( <i>A. aethiopicus 'Sprengeri', A.africanus and A.plumosus</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/asparagus-fern">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/asparagus-fern</a>
Itch Grass ( <i>Rottboellia cochinchinensis</i> )	<a href="https://www.cabi.org/isc/datasheet/47782">https://www.cabi.org/isc/datasheet/47782</a>
Giant Rats Tail Grass ( <i>Sporobolus pyramidalis, S. natalensis</i> )	<a href="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">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</a>
Captain Cook Tree/Yellow Oleander ( <i>Thevetia peruviana</i> )	<a href="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">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</a>
African tulip tree ( <i>Spathodea campanulate</i> )	<a href="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">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</a>
Sicklepod ( <i>Senna obtusifolia, S.hirsuta, S. tora</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/sicklepod">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/sicklepod</a>

Pest Plant	Link
Water Hyacinth ( <i>Eichhornia crassipes</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/water-hyacinth">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/water-hyacinth</a>
Parkinsonia aculeata ( <i>Parkinsonia aculeata</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/parkinsonia">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/parkinsonia</a>
Lantana ( <i>Lantana camara</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/lantana">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/lantana</a>
Bellyache Bush ( <i>Jatropha gossypifoliar</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/bellyache-bush">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/bellyache-bush</a>
Water Lettuce ( <i>Pistia stratiotes</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/water-lettuce">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/water-lettuce</a>
Leucaena leucocephala ( <i>Leucaena leucocephala</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/other/leucaena">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/other/leucaena</a>
Grader Grass ( <i>Themeda quadrivalvis</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/other/grader-grass">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/other/grader-grass</a>
Aleman Grass ( <i>Echinochloa polystachya</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/other/aleman-grass">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/other/aleman-grass</a>
Rubbervine grandiflora ( <i>Cryptostegia grandiflora</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/rubber-vine">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/rubber-vine</a>
Hymenachne amplexicaulis ( <i>Hymenachne amplexicaulis</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/hymenachne">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/hymenachne</a>
Prickly Acacia ( <i>Acacia nilotica</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/prickly-acacia">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/prickly-acacia</a>
Salvinia ( <i>Salvinia molesta</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/salvinia">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/salvinia</a>
Parthenium Weed ( <i>Parthenium hysterophorus</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/parthenium">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/parthenium</a>
Chinee Apple ( <i>Ziziphus mauritiana</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/chinee-apple">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/restricted/chinee-apple</a>
Pest Animal	
Rusa deer ( <i>Cervus timorensis</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/rusa-deer">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/rusa-deer</a>



Pest Plant	Link
Yellow crazy ants ( <i>Anoplolepis gracilipes</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/yellow-crazy-ant">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/yellow-crazy-ant</a>
Feral cat ( <i>Felis catus</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/feral-cat">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/feral-cat</a>
Feral pigs ( <i>Sus scrofa</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/feral-pig">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/feral-pig</a>
Fox ( <i>Vulpus vulpus</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/fox">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/fox</a>
Wild dog ( <i>Canis familiaris</i> , <i>C.familiaris dingo</i> , <i>C.lupus familiaris</i> , <i>C.lupus dingo</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/wild-dog">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/wild-dog</a>
Chital deer ( <i>Axis axis</i> )	<a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/chital-deer">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/invasive-animals/restricted/chital-deer</a>

## Appendix 4: Stakeholders Responsibilities

Agencies/NGO's	Actions	Obligation
<b>Biosecurity Working Group (Regional Pest Management Group)</b>	Maintain collaborative partnerships, advocacy and coordination across local stakeholders Seek internal/external resources Participate in risk assessment Liaise with research organisations and programs Cost and develop long term operational works programmes as required Deploy coordinated early intervention to new outbreaks as required Deliver extension and communication Deliver disaster weed spread prevention protocols when required Monitor effectiveness of BQ plan	Disseminate information to represented groups Deploy early intervention to new outbreaks Deliver extension and communication Deliver disaster weed spread prevention protocols when required Report on progress Maintain operational works programs
<b>Local Government</b>	Education Awareness Risk assessment Pest surveillance Vehicle/ equipment hygiene Visitor/user management Data collection Monitoring	Develop strategic pest plans for managed properties and procedures Fire planning & management Pest management treatment in line with pest risk on Council land
<b>Biosecurity Queensland (DAF)</b>	Education Awareness Risk assessment Aerial/ ground surveys Vehicle/ equipment hygiene Capacity building Data collection Monitoring Legislative advice and compliance Research Chemical registration	Invasive biology and management research Release and monitor biocontrol Conduct control and impact research
<b>Corridor and infrastructure managers (Power and Communications, Water and Sewage Network) Ergon, Powerlink</b>	Ensure best management practice from operations. Allocate appropriate resource, Report any outbreaks immediately Risk assessment Aerial/ ground surveys Ensure clean equipment enters clean zones, weed hygiene Adjust maintenance and design practices Signage in high risk areas	Engage contractors and stakeholders to minimise spread on easements Engage all landowners, including community stakeholders in joint management programs Allocate resources to support management activities Maintain GIS data for operational and design activities Monitoring
<b>Department of Transport and Main Roads</b>	Ensure best management practice from operations. Allocate appropriate resource, Report any outbreaks immediately Risk assessment Aerial/ ground surveys Ensure clean equipment enters clean zones. Adjust maintenance and design practices Allocate resources to prevention activities Vehicle/ equipment hygiene Signage in high risk areas	Maintain road reserves in accordance with <i>Biosecurity Act 2014</i> 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.
<b>Queensland Parks &amp; Wildlife</b>	Education Awareness Risk assessment Aerial/ ground surveys Vehicle/ equipment hygiene Visitor/user management Data collection Monitoring	Engage with neighbouring landowners in joint management programs Maintain GIS data Maintain operational works programs Fire planning & management Engage with neighbouring landowners in joint management programs
<b>Unallocated State Land</b>	Education Awareness Risk assessment Aerial/ ground surveys Vehicle/ equipment hygiene Visitor/user management Data collection Monitoring	Engage with neighbouring landowners in joint management programs Maintain GIS data Maintain operational works programs Fire planning & management Engage with neighbouring landowners in joint management programs

Agencies/NGO's	Actions	Obligation
<b>Queensland Rail</b>	Ensure best management practice from operations. Allocate appropriate resource, Report any outbreaks immediately Risk assessment Aerial/ ground surveys Ensure clean equipment enters clean zones. Adjust maintenance and design practices Allocate resources to prevention activities Vehicle/ equipment hygiene Signage in high risk areas	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.
<b>Lower Burdekin Water Sunwater</b>	Education Awareness Risk assessment Pest surveillance Vehicle/ equipment hygiene	Maintain relevant lands in accordance with <i>Biosecurity Act 2014</i> 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.
<b>NQ Dry Tropics</b>	Regional pest management group Education and awareness Distribute information and facilitate the securing of resources for management Promote management targets and activities across stakeholder networks Capacity building integration into management programs	Co-ordinate local projects with pest management priorities
<b>Natural Resource Management Bodies (BBIFMAC, Landcare)</b>	Education and awareness Capacity building Distribute information and facilitate the securing of resources for management Promote prevention targets and activities across stakeholder networks Capacity building integration into management programs	Align landscape restoration targets with pest management priorities Facilitate education and awareness programs for tourists and recreational users Engage with stakeholders Liaise with local, state and commonwealth government
<b>Indigenous, Catchment &amp; Community groups (Gudjuda Reference Group Aboriginal Corporation)</b>	Distribute information and facilitate the securing of resources for management Participate in on-ground activities Record and report on local issues and projects Actively search to make sure the area is free of target pests Report any outbreaks immediately Ensure clean equipment enters clean zones. Collaborate with management agencies where possible Report any outbreaks immediately Collaborate with pest management staff on management programs	Align landscape restoration targets with pest management priorities Implement on-ground works Facilitate education and awareness programs for tourists and recreational users Liaise with local, state and commonwealth government

## Primary Producers and community members

Sector	Actions	Obligation (GBO)
<b>Primary producers sugar cane (Canegrowers Association)</b>	<p>Headland and crop/risk area checks</p> <p>Survey for weeds/animals during routine maintenance</p> <p>Vehicle/machinery hygiene protocols</p> <p>Weed declarations when moving plant material or machinery</p> <p>Spot spraying, Manual removal, Bagging seed heads, use of fire or other control methods to reduce weed infestations and pest animal harbourage</p> <p>Property and site-specific signage identifying issue/risk</p> <p>Crop rotation and Cover cropping</p> <p>Manage off crop weeds on headlands, watercourse and adjacent roadways</p> <p>Develop strategic pest plans for managed properties</p> <p>Be aware of priority pest species in the shire.</p>	<p>Participate in feral animal control programs</p> <p>Reduce declared weeds on your property</p> <p>Prevent the spread of declared weeds by focusing on high risk spread areas such as watercourses, roadways and property boundaries</p> <p>Provide/maintain access for biosecurity programs</p>
<b>Landholders fruit production/horticulture</b>	<p>Crop/risk area checks, Survey during routine maintenance</p> <p>Ensure equipment leaving or entering your property is clean of contaminants</p> <p>Weed declarations</p> <p>Spot spraying, Manual removal, Bagging seed heads, use of fire or other control methods to reduce weed infestations and pest animal harbourage</p> <p>Property and site specific signage identifying issue/risk</p> <p>Ground cover management</p> <p>Develop strategic pest plans for managed properties</p> <p>Install pest appropriate fencing</p> <p>Reduce priority pests on your property</p> <p>Be aware of priority pest species in the shire.</p>	<p>Participate in feral animal control programs</p> <p>Reduce declared weeds on your property</p> <p>Prevent the spread of declared weeds by focusing on high risk spread areas such as watercourses, roadways and property boundaries</p> <p>Provide/maintain access for biosecurity programs</p>
<b>Nursery industry and plant sellers</b>	<p>Find out weed risk information before new stock lines are introduced</p> <p>Spot spraying, Manual removal, Bagging seed heads, use of fire or other control methods to reduce weed infestations and pest animal harbourage</p> <p>Property and site-specific signage identifying issue/risk</p> <p>Develop strategic pest plans for managed properties</p> <p>Reduce declared weeds on your property</p> <p>Be aware of priority pest species in the shire.</p>	<p>Report unusual plants and animals</p> <p>Prevent sale of state, local and problem environmental weeds</p> <p>Provide/maintain access for biosecurity programs</p> <p>Reduce declared weeds on your property</p>
<b>Landholders rural residential and lifestyle</b>	<p>Report unusual plants and animals</p> <p>Dispose of green waste responsibly</p> <p>Select locally suitable garden plants</p> <p>Participate in local area management activities</p> <p>Report recurrence of priority pest and weeds</p> <p>Develop strategic pest plans for managed properties</p> <p>Install pest appropriate fencing</p> <p>Reduce priority weeds on your property</p> <p>Be aware of priority pest species in the shire.</p>	<p>Participate in baiting and trapping programs</p> <p>Prevent the spread of declared weeds by focusing on high risk spread areas such as watercourses, roadways and property boundaries</p> <p>Provide/maintain access for biosecurity programs</p>
<b>Landholders urban and residential</b>	<p>Dispose of green waste responsibly</p> <p>Select locally suitable garden plants</p> <p>Cooperate in delivering local management priorities</p> <p>Report recurrence of priority pest and weeds</p> <p>Develop strategic pest plans for managed properties</p> <p>Install pest appropriate fencing</p> <p>Reduce priority weeds on your property</p> <p>Be aware of priority pest species in the shire.</p>	<p>Participate in baiting and trapping programs where practical</p> <p>Reduce declared weeds on your property</p> <p>Prevent the spread of declared weeds by focusing on high risk spread areas such as watercourses, roadways and property boundaries</p> <p>Provide/maintain access for biosecurity programs</p>