2025-26
HINCHINBROOK LOCAL GOVERNMENT AREA **BIOSECURITY PLAN**

Contents

Acronyms

BPWG	Biosecurity Plan Working Group
BQ	Biosecurity Queensland
CSIRO	Commonwealth Scientist Industrial Research Organisation
CVA	Conservation Volunteers Australia
DPI	Department of Primary Industries
NRMMRRD	Department of Natural Resources and Mines, Manufacturing and Regional & Rural Development
FBPA	Forrest Beach Progress Association
FNQROC	Far North Queensland Regional Organisation of Councils
FPQ	Forestry Plantations Queensland
GBRMPA	Great Barrier Reef Marine Park Authority
GAC	Girringun Aboriginal Corporation
GA	Greening Australia
HCPSL	Herbert Cane Productivity Services Limited
HEV	High Environmental Value
HLGABP	Hinchinbrook Local Government Area Biosecurity Plan
HRCLG	Herbert River Catchment Landcare Group
HSC	Hinchinbrook Shire Council
JCU	James Cook University
QPWS	Queensland Parks & Wildlife Service
NQDT	North Queensland Dry Tropics NRM
SRA	Sugar Research Australia
Terrain NRM	Terrain Natural Resource Management
DTMR	Department of Transport and Main Roads
USQ	University Southern Queensland

Definitions

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

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

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 Biosecurity Risk dealing with biosecurity matter or a carrier; or carrying out an activity relating to biosecurity matter or a carrier.

A **Carrier** is any animal or plant, or part of any animal or plant, or any other thing capable of moving biosecurity matter from a place to another place; or contains biosecurity matter that may attach to or enter another animal or plant or another thing. A thing in this context is alive, dead or inanimate and includes a human.

A **Contaminant** is anything that may be harmful to animal or plant health or pose a risk of any adverse effect on a biosecurity consideration.

The Act uses the term **Deal With** in the context of dealing with biosecurity matter or a carrier. The Act clarifies that to "deal with" includes: to keep or possess, experiment with, produce, breed, propagate, use, grow, feed, culture, distribute, import, transport, dispose of, buy or supply.

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

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

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

Introduction

The Hinchinbrook Local Government Area Biosecurity Plan (HLGABP) provides strategic direction for the management of priority weeds and pest animals (invasive biosecurity matter) on all land tenure within the Hinchinbrook local government area and has been developed for the entire community.

The Plan will:

- Prioritise invasive biosecurity matter to reduce impacts and prevent spread and introduction within Hinchinbrook Shire based on best practice pest management principles;
- Identify the roles and responsibilities of stakeholders involved and provide direction on priority pest management activities;
- Outline everyone's obligation to minimise the impact of biosecurity risks on people, the economy and the environment;
- Clearly identify resources for effective management of pests and outline the priorities so that resources are managed efficiently; and
- Ensure appropriate management of invasive biosecurity matter and improved scope and opportunities for monitoring and evaluating the Plan.

Vision

The HLGABP guides the planning and response to biosecurity issues across the entire Hinchinbrook region for the next five to 10 years.

The Plan's Vision is **to reduce the impacts and prevent the introduction and spread of invasive plants and animals within the Hinchinbrook Shire Council area through a cooperative approach from all stakeholders and the community.**

Desired Outcomes

The HLGABP maps out three desired outcomes to assist stakeholders and the community to deliver the Plan's vision. The outcomes are supported by goals and strategic actions and are designed to be achievable within a two to five-year timeframe.

The desired outcomes include success measures and indicators to assist the Biosecurity Plan Working Group (BPWG) to track their progress.

No.	Desired Outcome
1	The community is informed and knowledgeable of their General Biosecurity Obligation (GBO) and has ownership of invasive plant and animal management.
2	All stakeholders are committed to undertake coordinated management of invasive plants and animals.
3	The introduction of new invasive plants and animals is prevented, and the spread of existing issues are managed.

The desired outcomes are detailed in a series of tables which guide annual review and reporting to track their progress that can be found in **Appendix A.**

The HLGABP is proudly supported by:

HINCHINBROOK SHIRE COUNCIL
terrain NATURAL RESOURCE MANAGEMENT
FNQROC
HCPSL Herbert Cane Productivity Services Ltd.
Queensland Government

Key Values and Assets

Understanding what is important to the stakeholders and the community is essential to identifying how key values of the region may be impacted by invasive plants and animals. The risk assessment process used for invasive species in this Biosecurity Plan considers the likelihood and extent of the impact/s a biosecurity issue might present on four broad categories of values.

Conservation and Biodiversity Assets and Values

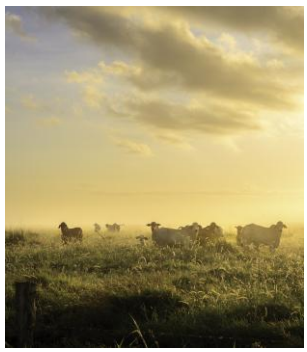
Conservation and biodiversity assets and values represent the natural environment. They can range from landscapes and features, such as our national parks and reserves, through to remnant or restored patches of forest or even individual trees. These assets might contain or support rare plants, animals and communities or may simply provide important places for natural processes to take place.

Water Resource Assets

Water resource assets represent natural and artificial waterways and can include storage systems such as lakes, dams and impoundments through to natural water courses and wetlands. Water resources and assets can be valuable as natural environments, or may have value for water supply, recreation or economic benefit such as fisheries.

Agriculture and Industry Assets

Agriculture and industry assets represent primary production and the economy. These assets may include highly modified or intensive production systems, through to relatively natural systems used in the rangelands. An industry such as honey production may use both native forests and intensive agricultural systems. Other industries might be based in urban or industrial systems.



Community and Residential Assets

Community and residential assets are places important to people — where they live, work or play daily. These may include densely settled urban community areas and environments, through to areas around homesteads and houses in rural areas. Most community and residential assets also include natural or semi-natural areas and habitats by way of gardens, urban bushland or waterway reserves.

Culture and Country

The Biosecurity Plan Working Group acknowledges the many people and cultures who have helped shape our community over time.
We acknowledge the Traditional Owners of the lands across the Shire—the Nywaigi, Warrgamay, and Bandjin peoples—and recognise their deep and enduring connection to country. Their stories, knowledge, and custodianship continue to enrich the identity of our region. We also pay tribute to the generations of people from diverse backgrounds and cultures who have made Hinchinbrook their home, bringing with them traditions, skills, and values that contribute to our shared way of life. We recognise the service and sacrifice of our local defence personnel—past and present—whose commitment has helped safeguard the freedoms and values we uphold today. Council is committed to fostering an inclusive, respectful, and resilient community—one that values all those who have helped shape the Hinchinbrook of today and continue to contribute to its future.

Background

History of Pest Management Planning in Hinchinbrook

Hinchinbrook Shire Council recognised the need for a Pest Management Plan (PMP) for the Hinchinbrook Shire in July 1997. The original Hinchinbrook Shire Council PMP was adopted in 1999 and since then, an active Pest Management Working Group (PMWG) has reviewed and updated the Plan.

In 2010 the Hinchinbrook PMWG was initiated and brought together stakeholders involved in industry, catchment management, pest management and biodiversity conservation. In 2011 these stakeholders were involved in a workshop on developing the prioritisation and management zoning within this Plan. The workshop participants utilised the *FNQROC Risk Assessment and Planning Framework* to build on the preceding PMP, and align with the *FNQROC Regional Pest Management Strategy*.

Transition to the *Biosecurity Act 2014*

With the introduction of the *Biosecurity Act 2014* by Biosecurity Queensland, all local government area PMPs were superseded by Local Government Area Biosecurity Plans, effective as of 1 July 2016.

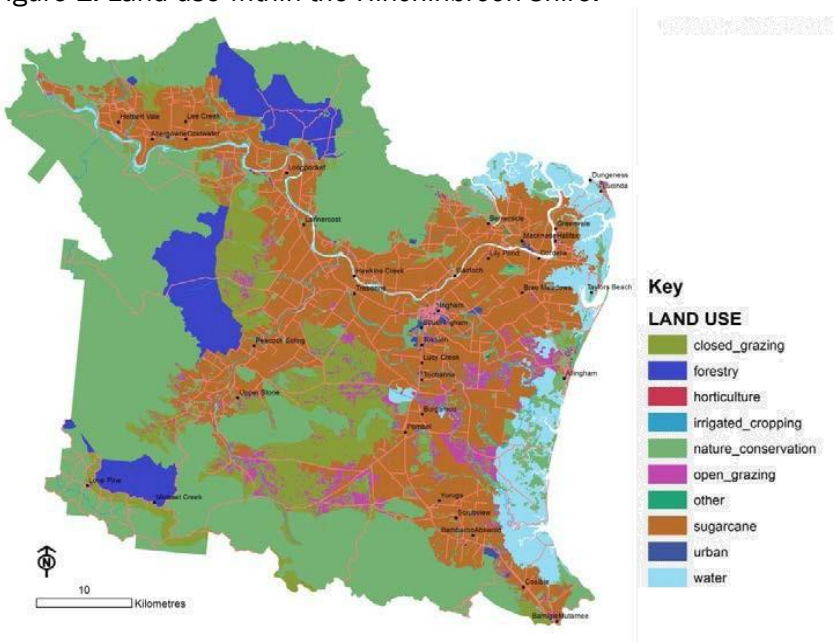
To better reflect this change in legislation, the PMWG transitioned to the BPWG, with the membership of the working group remaining largely the same. A series of workshops resulted in the production of this HLGABP, retaining the intent of the PMP while meeting the requirements of the Queensland *Biosecurity Act 2014.*

Who are the stakeholders in this Plan?

Invasive biosecurity matter impacts on the whole community and so we are all stakeholders in reducing the spread and mitigating the impacts they have on our economy, environment and well-being. The term stakeholder is used throughout the Plan to refer to all persons, who are in any way involved in dealing with pests and weeds; from the suburban homeowner to government agencies and industry groups. The BPWG represents the broader stakeholder groups and interests from across the community and aims to outline reasonable and practical actions all stakeholders can take to discharge their GBO.

This approach draws on industry group considerations, expert pest management advice and increases the likelihood of the HLGABP meeting the needs of the Hinchinbrook community. Anyone who has a keen interest in pest management should contact HSC or their industry organisation to find out how to get involved.

Figure 1: Land use within the Hinchinbrook Shire.



Overview of the Biosecurity Act 2014

The Act

In accordance with Section 53 of the Act, Councils must develop and make publicly available a biosecurity plan outlining management priority for invasive species. Local government play an important role in the management of invasive biosecurity matter, with other biosecurity related issues administered by the state. Local Government Area Biosecurity Plans are not required to deal with parasites, viruses, and aquatic animal diseases.

The Act provides guidance on the management of non-native flora and fauna species and uses the term 'biosecurity matter' to describe all non-human living things. Biosecurity matter is further divided into prohibited matter and restricted matter.

Prohibited matter

Prohibited matter includes a range of invasive plants and invasive animals in the Act that have the potential to have significant impacts and are currently not present or known to be present in Queensland. It is illegal to deal with prohibited matter within Queensland and anyone becoming aware of prohibited matter should report it immediately to the Department of Primary Industries on 13 25 23 or dpi.qld.gov.au.

Restricted matter

Restricted matter is biosecurity matter that is present in Queensland and is likely to have a detrimental impact. There are specific actions that are required to limit restricted matter's impact by reducing, controlling or containing it. Plant and animal species in the HLGABP refer to seven restricted matter categories.

Category	Action
1	Category 1 must be reported to a Queensland Government inspector within 24 hours.
2	Category 2 must be reported to a Queensland Government inspector, or a local government authorised officer.

Category	Action
3	Category 3 must not be distributed. This means it must not be released into the environment unless the distribution or disposal is authorised by a regulation or under a permit.
4	Category 4 must not be moved.
5	Category 5 must not be possessed or kept unless it is under a permit issued in accordance with the Act or another act.
6	Category 6 must not be fed except for the purpose of preparing for or undertaking a control program.
7	Category 7 must be destroyed and disposed of as soon as practicable in accordance with Queensland Government requirements.

See www.dpi.qld.gov.au/business-priorities/biosecurity/invasive-plants-animals for a detailed list of restricted invasive plants in Queensland.

Reducing biosecurity risks

Typically, biosecurity risks can be reduced by managing pests (such as weeds and pest animals) and diseases that may have negative impacts on neighbouring properties. This may include:

- Carefully examining animals before transporting them to ensure they are not carrying pests or diseases that could affect agricultural industries;
- Spelling animals for a minimum of seven days when moving from infested areas to allow seed to pass; and
- Closely inspecting pot plants and potting mix before transporting them to ensure they aren't carrying pest ants or weeds.

Farm biosecurity plans

Industry groups have recognised the importance of farm biosecurity plans in mitigating the risk of the introduction of pests and diseases. In some circumstance it is a requirement; for example, an on-farm biosecurity plan is essential for maintaining a Johne's Beef Assurance Score (J-BAS) and is now a requirement for the Livestock Production Assurance (LPA) program.

A farm biosecurity plan forms an agreement outlining the responsibilities and actions of relevant parties regarding the survey, control and containment of pest plants and animals. These plans assist landholders to:

- Demonstrate their general biosecurity obligation is being met;
- Set and achieve goals through a series of actions;
- Manage pests effectively and efficiently;
- Ensure best practice control methods are being employed; and
- Support funding applications for pest management.

Instruments for the delivery of the HLGABP

HSC's Invasive Plants and Animals Surveillance Program and Prevention and Control Program are instruments under the Act that allow officers additional powers of entry.

The Invasive Plants and Animals Surveillance Program is intended to assist in undertaking proactive surveillance to determine the presence or absence of stated invasive biosecurity matter, monitor compliance with the Act or the effect of measures taken in response to a biosecurity risk.

The Prevention and Control Program was developed to assist in the delivery of HSC's "Key Projects" aimed at managing or reducing or eradicating a limited number of high priority pests that currently pose a significant risk.

Understanding General Biosecurity Obligation

General Biosecurity Obligation

The success of this Plan depends on the GBO of individuals, industry and government to be proactive in preventing, managing and addressing biosecurity risks that relate to them.

The GBO requires management responses to be matched to the level of harm or risk posed and enables risks to be prioritised and responses customised to suit local conditions. This includes taking all reasonable and practical measures to manage invasive species and to prevent spread to neighbouring properties by taking proactive steps to prevent incursions or incidents.

Meeting general biosecurity obligations

The minimum actions required to satisfy the obligations of pest plant and animal management are to:

- Provide and maintain access for pest control programs;
- Know the priority pest plants and animals in the HLGABP and their control methods;
- Participate in baiting and trapping programs;
- Reduce priority weeds;
- Develop a property pest management plan or a farm biosecurity plan when required; and
- Prevent the spread of declared weeds by focusing control efforts on watercourses, roadways and property boundaries.

Non-compliance with general biosecurity obligation

Not complying with a GBO is an offence under the *Biosecurity Act 2014*.

A Biosecurity Queensland Officer or a member of Council's Biosecurity Team can issue a biosecurity order requiring specific action to be taken within a reasonable timeframe. This formal compliance action ensures an individual, business or other organisation improves the way they manage biosecurity risks.

Reasonable and practical measures

Below are some examples of what reasonable and practical measures might be expected of individuals and organisations to be taken in order to reduce a biosecurity risk and fulfil their GBO. The biosecurity action plans provide species-specific instructions and directions for how you might a reduce or otherwise manage the higher priority biosecurity risks to the Hinchinbrook Shire.

	Reasonable and practical measures
Individuals and Organisations	• Be aware of the priority risks to your or your industry and local government area. • Report new or suspected pests to your industry contact, Council or Biosecurity Queensland (BQ). • Do not move soil, produce, raw materials or machinery that has, or could contain, biosecurity risks such as weed seeds, eggs, spores or other contaminants. • Prevent spread of biosecurity matter off your property by controlling weeds prior to the flowering period. Pay special attention to high-risk areas (watercourses/roadways/boundaries). • Reduce the density and distribution of priority weeds on your property. • Monitor and record the presence of, and damage caused by, feral animals on your property (e.g. FeralScan App). • Participate in coordinated feral animal control programs. • Provide/maintain access for management programs.
Primary Producers: **Sugar cane, bananas, crops**	• Survey for pest weeds/animals during routine maintenance. • Maintain vehicle/machinery hygiene protocols. Establish and use clean down facilities.

	Reasonable and practical measures
	• Spot spray, manually remove, bag seed heads, and use fire or other control methods to reduce infestations. • Erect property and site-specific signage to manage biosecurity risks. • Manage weeds outside of production areas, e.g. on watercourses and roadways. • Participate in baiting and trapping programs. • Reduce the density or distribution of priority weeds.
Primary Producers: **Wet and/or dry grazing**	• Conduct routine checks of boundaries and high-risk areas. • Survey for weeds/animals during routine maintenance. • Maintain vehicle/machinery hygiene protocols. Establish and use clean down facilities. • Spot spray, manually remove, bag seed heads, and use fire or other control methods to reduce infestations. • Erect property and site-specific signs. • Conduct chopper rolling, slashing, boom or aerial spraying. • Develop a property pest management plan and/or a farm biosecurity plan. • Install pest appropriate fencing.
Landholders: **Fruit production**	• Conduct crop/risk area checks. • Survey for weeds/animals during routine maintenance. • Ensure equipment leaving or entering properties are clean of contaminants. • Establish and use clean down facilities. • Spot spray, manually remove, bag seed heads, and use fire or other control methods to reduce infestations. • Erect property and site-specific signs. • Provide/maintain access for programs. • Provide ground cover management. • Develop a property pest management plan and/or farm biosecurity plan. • Install pest appropriate fencing. • Participate in baiting and trapping programs. • Reduce the density or distribution of priority weeds.
Landholders: **Rural residential, lifestyle and urban residential**	• Research information on new stock lines before introducing them. (Contact HSC if you are unsure). • Do not stock or trade invasive species or known environmental weeds. • Manually remove weeds and bag seed heads. • Erect property and site-specific signs. • Report unusual plants and animals. • Dispose of green waste and nursery waste to a local approved transfer station.
Nursery industry and plant sellers	• Keep informed of invasive weeds and new threats. • Report unusual plants and animals. • Dispose of green waste and aquarium plants/ animals to a local approved transfer station. • Select locally suitable garden plants. • Cooperate with, and participate in, local area pest and weed management programs. • Report recurrence of priority pest and weeds after control efforts. • Develop property pest management plan and/or a farm biosecurity plan.

	Reasonable and practical measures
	• Install pest appropriate fencing. • Reduce the density or distribution of priority weeds and further advise customers of potential invasive plants that are not controlled.

Key Projects and Programs

The following key projects and programs from across the Hinchinbrook Shire area highlight the partnerships and programs that are currently underway and will be continued over the duration of this plan.

Species based projects

Pond Apple Eradication Project	
Goal	Monitor all infestations within the Hinchinbrook region and control recruitment with the aim to eradicate from the Hinchinbrook Shire.
Performance Indicator	No new locations detected, and existing sites progressed towards eradication.
Strategic Actions	• Conduct annual monitoring programs to locate and map pond apple within the Hinchinbrook Shire. • Ensure that all infestations located are controlled before reproduction. • Promote individual landholders and other departments to control Pond apple on their lands. • Conduct annual task forces at key infestations. • Facilitate public awareness programs such as displays at local field days and run toolbox talks etc. with landholders in high-risk areas. • Issue Biosecurity orders to non-compliant landholders as required. • Identify funding opportunities to support the project.
Project Partners	HSC, HRCLG, QPWS, BQ, and landholders.

Siam Weed Project	
Goal	Delimit all infestations within the Hinchinbrook region. Identify assets most at risk and educate the community on identification and best management practice.
Performance Indicator	The community can identify and effectively manage Siam weed. Assets most vulnerable to Siam weed are protected from impacts.
Strategic Actions	• Conduct annual surveys to locate and map Siam weed within the Hinchinbrook Shire. • Promote individual landholders and other departments to control Siam weed and reduce risk of spread. • Facilitate public awareness programs including displays at local field days and toolbox talks with landholders in high-risk areas. • Assess risk associated with sand extraction and quarry operations. • Issue Biosecurity Orders to non-compliant landholders as required. • Identify funding opportunities to assist the project. • Support biocontrol research and on-ground operations (e.g. Gall Fly release) to assist in the control and spread of Siam.
Project Partners	HSC, BQ, QPWS, TMR, HCPSL, FPQ and landholders.

Mikania Vine (National Tropical Weeds Eradication Program)	
Goal	In partnership with Tropical Weeds to locate and control all infestations within the Shire and monitor progress to eradication.

Mikania Vine (National Tropical Weeds Eradication Program)	
Performance Indicator	Scheduled surveys of Hinchinbrook region completed with all Mikania vine located, mapped and treated to ensure no reproductive events.
Strategic Actions	• Conduct bi-annual surveys to locate Mikania vine within the Hinchinbrook Shire. • Ensure that all infestations located are controlled prior to seeding. • Promote all individuals to report any Mikania vine detections. • Invite other agencies to participate in control activities and educate industry extension officers. • Facilitate public awareness programs such as displays at local field days and run toolbox talks with landholders in high-risk areas. • Issue notices to non-compliant landholders as required. • Educate community on potential impacts of Mikania vine to ensure importance of eradication target is maintained. • Investigate opportunity to use drones for survey and control as technology improves.
Project Partners	HSC, National Tropical Weeds Eradication Program, HCPSL and landholders.

Singapore Daisy Control Project	
Goal	Locate and control all infestations within the Hinchinbrook region with the aim to restore the desired vegetation in areas at risk.
Performance Indicator	Surveys of known areas completed with all Singapore daisy located, mapped and treated with no new spread.
Strategic Actions	• Conduct annual surveys at all known locations and high-risk sites. • Ensure that all infestations located are controlled. • Facilitate public awareness programs such as displays at local field days and run toolbox talks with landholders in high-risk areas. • Issue biosecurity orders to non-compliant landholders as required. • Restore creek and riverbank vegetation following removal of Singapore Daisy.
Project Partners	HSC, Terrain NRM, HRCLG, TMR, QPWS and landholders.

Hygrophila Eradication Project	
Goal	Eradicate Hygrophila from the Hinchinbrook region.
Performance Indicator	Surveys of known areas within the Shire completed with all Hygrophila located, mapped and treated. No spread or new detections.
Strategic Actions	• Conduct annual surveys of all known Hygrophila infestations. • Ensure that all infestations or outbreaks are located and treated. • Promote individual landholders and other departments to support the control Hygrophila on their lands. • Facilitate public awareness programs such as displays at local field days and run toolbox talks etc. with landholders in high-risk areas if new infestations are discovered in future. • Issue biosecurity orders to non-compliant landholders as required. • Identify funding opportunities. • Participate in priority pest operation committee meetings.
Project Partners	HSC, TMR, BQ and landholders.

Thunbergia Eradication Project	
Goal	Eradicate all infestations of Thunbergia in the Hinchinbrook region and restore the native vegetation in areas at risk to erosion.
Performance Indicator	Surveys of known areas are complete. All infestations are mapped and treated with no spread.
Strategic Actions	• Conduct annual surveys to locate Thunbergia within the Hinchinbrook Shire. • Ensure that all infestations located are removed. • Facilitate public awareness programs such as displays at local field days and run toolbox talks with landholders in high-risk areas. • Issue biosecurity orders to non-complying landholders as required. • Identify funding opportunities to restore creek and riverbank vegetation following removal of this species. • Stop any local distribution between plant collectors or garden enthusiasts.
Project Partners	HSC, Terrain NRM, BQ, TMR, QPWS and landholders.

Acaciella glauca (Redwood) Eradication Project	
Goal	Monitor the active infestation with the aim to eradicate.
Performance Indicator	Survey at risk areas. All seedlings of Acaciella glauca are located, mapped and treated with no reproductive events and exhaustion of seed bank. Ensure no disturbance of site to stop spread.
Strategic Actions	• Conduct extended monitoring of the at-risk area. • Ensure that all plants are controlled prior to seeding. • Promote dual ownership and management of the infestation (TMR & HSC). • Facilitate public awareness programs such as displays at local field days and run toolbox talks with landholders in high-risk areas. • Investigate the opportunity to burn off the site periodically to stimulate germination.
Project Partners	HSC, BQ and TMR.

Animal Pest Specific Projects

Hinchinbrook Community Feral Pig Management Program	
Goal	Maintain the Hinchinbrook Community Feral Pig Management Program to minimise the environmental, social and economic impact of feral pigs.
Performance Indicator	A reduction in economic losses to agriculture caused by feral pigs. Manage populations and impacts to acceptable levels relevant to local land usages.
Strategic Actions	• Develop/review the management plan to ensure it clearly identifies the project scope, cost: benefit, actions, monitoring/evaluation. • Review and new 10-year strategy completed February 2021. • Promote partnerships between key stakeholders to implement the actions of the management plan. • Provide a 1080 baiting service and ongoing bait supply for all program partners • Promote program at relevant symposia, forums and conferences. • Assist in the registration of 1080 to ensure continued usage with desired bait materials. • Provide advice on best management practice to the community. • Support research and facilitate public awareness programs to communicate the programs activities and outcomes.

Hinchinbrook Community Feral Pig Management Program	
	• Promote individuals and other departments to control feral pigs on lands under their control. • Identify funding opportunities to ensure this program is funded well into the future.
Project Partners	HSC, Wilmar, Terrain NRM, HCPSL, FPQ, NRMMRRD, QPWS and landholders.

Wild Dog Program	
Goal	Deliver a coordinated Wild Dog Management Program in the Hinchinbrook Shire.
Performance Indicator	Program implemented with reduction in wild dog complaints received and economic damage to livestock reported.
Strategic Actions	• Provide a bi-annual 1080 baiting service where appropriate. • Provide advice on best management practices. • Encourage landholder participation in coordinated action across effected areas and or collect data (e.g. FeralScan App). • Control wild dogs on council-controlled lands. • Promote individual landholders and other departments to control wild dogs on lands under their control. • To maintain currency of authorised officers. • Training of landholders to undertake best practice wild dog trapping.
Project Partners	HSC, QPWS, NRMMRRD, BQ and landholders.

Area Specific Projects

Upper Cattle Creek Rehabilitation Project	
Goal	Enhance biodiversity values and reduce impacts of flooding on infrastructure and agriculture.
Performance Indicator	Improved water quality and natural function of Cattle Creek. Reduced impacts on infrastructure and agriculture from flooding events and drainage issues.
Strategic Actions	• Conduct ongoing survey, map and control priority aquatic weed species in the system. • Promote partnerships between key stakeholders. • Facilitate public awareness programs to communicate the programs activities and its outcomes. Investigate opportunities to expand project area to other landholders. • Ensure all landholders and key stakeholders continue to fund the ongoing management of this system.
Project Partners	HSC, Terrain NRM, HRCLG and landholders.

Palm Creek Projects	
Goal	Protect, enhance and restore the biodiversity values of this creek systems.
Performance Indicator	Improved water quality and increased biodiversity values in this creek system as a result of reduce aquatic weed cover. Reduced impacts on infrastructure and agriculture from flooding events and drainage issues.
Strategic Actions	• Conduct ongoing survey, map and control priority aquatic weed species in this system. • Promote partnerships between key stakeholders.

Palm Creek Projects	
	• Facilitate public awareness programs to communicate the program activities and its outcomes. • Identify funding opportunities to assist in resourcing the long-term management of this system. • Restoration of riparian zones through revegetation.
Project Partners	HSC, Terrain NRM, Wilmar, HRCLG, GA and Traditional Owner Groups (i.e. GAC).

Southern Coastal Aggregation (Coolbie)	
Goal	Restore, protect and enhance the biodiversity values of these creek systems to connect Halifax Bay to Paluma Range National Parks.
Performance Indicator	Improved connectivity, water quality and increased biodiversity values in these creek systems as a result of reduce aquatic weed cover, removal of fish barriers and improved riparian condition.
Strategic Actions	• Conduct ongoing survey, mapping and control priority weed species in this system. • Promote partnerships between key stakeholders. • Facilitate public awareness programs to communicate the program activities and its outcomes. • Identify funding opportunities to assist in resourcing the long-term management of these systems. • Restoration of riparian zones through revegetation.
Project Partners	HSC, Terrain NRM, HRCLG, Traditional Owner Groups (i.e. GAC), JCU, BQ and landholders.

TYTO Wetlands Reserve Project	
Goal	Implement a management program that promotes the conservation and visitor values of the wetlands.
Performance Indicator	Management program implemented with the enhancement or restoration of the reserve occurring. Keeping invasive species at levels which retain conservation and visitor values.
Strategic Actions	• Review the management plan, which clearly identifies the project scope, activities to undertake and how these actions will be evaluated. • Manage roaming domestic dogs entering the wetlands and injuring native animals. • Plant or promote native species where invasive weeds have been removed • Conduct ongoing survey, map and control priority weed species in this reserve. • Facilitate public awareness programs to communicate the programs activities and its outcomes annually. • Identify funding opportunities to assist in resourcing the long-term management of the reserve to deliver against the desired goals.
Project Partners	HSC.

Council Controlled Land Projects	
Goal	Implement an annual work plan for Council reserves to reduce the spread and minimise the impacts that invasive biosecurity matter has on the biodiversity and community values.
Performance Indicator	Invasive plants and animals on Council reserves are controlled to maintain biodiversity and community values.

Council Controlled Land Projects	
Strategic Actions	• Systematically develop and implement a work plan for Council controlled land that clearly identifies the project scope, vision, objectives and activities undertaken and how these actions will be evaluated. • Ensure high priority pest species found on these lands are being controlled. • Continually identify areas where rehabilitation of vegetation can be carried out to improve the resilience of natural habitat and reduce the need for weed control into the future. • Build partnerships with Traditional Owners to develop co-design and co-management arrangements.
Project Partners	HSC, HRCLG, GAC and community.

Main Road Corridor Project	
Goal	Implement an annual work plan that aims to reduce the spread of declared pests along TMR road corridors.
Performance Indicator	Work plan implemented with reduction of invasive biosecurity matter identified.
Strategic Actions	• Produce an annual work plan for Main Roads Corridors that clearly identifies the project scope, activities undertaken and how these actions will be evaluated. • Ensure high priority pest species found on these lands are being controlled annually. • Ensure deliverables of State Land Pest Management Framework are achieved.
Project Partners	HSC and DTMR.

Unallocated State Land Management Program	
Goal	Implement an annual work plan to reduce the risk of spread and impact of invasive biosecurity matter on state managed reserves.
Performance Indicator	Program developed, implemented and reviewed annually resulting in reduction of risks and impacts of identified invasive biosecurity matter.
Strategic Actions	• Produce an annual work plan for unallocated state land that clearly identifies the project scope, objectives and activities undertaken and how these actions will be evaluated. • Ensure high priority pest species found on these lands are being controlled. • Ensure deliverables of State Land Pest Management Framework are achieved through collaborative arrangements.
Project Partners	HSC, NRMMRRD and Traditional Owner Groups (i.e. GAC).

Coastal Reserve Protection and Management Program	
Goal	Protect, enhance and where possible, restore the high ecological and biodiversity values for habitat contained within Hinchinbrook's coastal reserve network.
Performance Indicator	The reduction of environmental impacts through the long-term removal of invasive plants and animals. The protection of littoral 'Beach Scrub' vegetation within the reserve is maintained or improved. Support adaptation of dunal systems with changing environmental conditions.
Strategic Actions	• Map and control all priority weed species present within the reserve. • Where appropriate, maintain the dedicated beach access points to reduce 4WD damage on the coastal vegetation.

Coastal Reserve Protection and Management Program	
	• Develop management plans that clearly identifies the management priorities, objectives and activities which will deliver the desired outcomes for the community. • Promote partnerships between key stakeholders to implement the actions of the management plan. • Objectives should align with other relevant legislative tools and best practice management. Facilitate public awareness programs to communicate the programs activities and its outcomes to all stakeholders, including local community groups and Traditional Owners. • Implement an annual works program which engages the local community. • Identify funding opportunities to assist HSC and the community in resourcing the long-term management of the Shire's coastal reserves.
Project Partners	HSC, NQDT, Community Groups, HRCLG, GAC and Terrain NRM.

Pelorus Island Littoral Rainforest Project	
Goal	Protect, enhance and restore the native vegetation and biodiversity values of Pelorus Island.
Performance Indicator	The recovery of the island's native vegetation through the reduction of weeds species and the long-term removal of the feral goat population.
Strategic Actions	• Map and control priority weed species present within the reserve. • Produce a management plan that clearly identifies the project scope, activities undertaken and how these actions will be evaluated. • Promote partnerships between key stakeholders to implement the actions of the management plan. • Facilitate public awareness programs to communicate the programs activities and its outcomes to all stakeholders. • Identify funding opportunities to assist HSC and the community in resourcing the long-term management of the Island.
Project Partners	HSC, Terrain NRM, QPWS, FNQROC, USQ, BQ and Orpheus Island Resort.

Port of Townsville Q-SEAS Marine Biosecurity Monitoring Program	
Goal	Port of Townsville Limited partnered with the Department of Primary Industries (DPI) – Biosecurity Queensland (Queensland Government), as part of the state-wide initiative to implement an Introduced Marine Pest Surveillance Program. This program intends to minimise the potential spread and impact of invasive marine pests in Queensland, therefore providing us with the best chance of early intervention if an introduced species is detected within Port Infrastructure in Townsville and Lucinda.
Performance Indicator	Build and improve Queensland's marine biosecurity capabilities, improve the network of marine pest resources and surveillance capacity within the Queensland Government and throughout Queensland's seaports.
Strategic Actions	• Demonstrates how marine pest biosecurity can become a shared responsibility between the Queensland Government, industry and research organisations. • Implements activities that are coordinated and collaborative, to ensure resources are targeted towards agreed national priorities that will provide lasting benefits. • Adopts a risk-based approach, with a focus on achievable outcomes.

Port of Townsville Q-SEAS Marine Biosecurity Monitoring Program	
	• Focuses on prevention and early intervention, to avoid the establishment and spread of marine pests (which is more cost-effective than ongoing impact reduction after incursion).
Project Partners	The Port of Brisbane Pty Ltd (PBPL), Gladstone Ports Corporation (GPC), North Queensland Bulk Ports (NQBP) Mackay, Port of Townsville Limited (POTL) and Ports North (PN), Biosecurity Queensland (BQ) within the Department of Primary Industries (DPI).

Priority Invasive Plants and Animals in the Hinchinbrook Region

Invasive plants and animals which occur within the Hinchinbrook region were prioritised by the BPWG using a standardised Biosecurity Risk Assessment and Planning Framework.

The overall results of the risk assessment are included in **Appendix B**.

The priority invasive plant and animal issues identified by the BPWG (highlighted) have biosecurity action plans which provide specific directions for management in addition to the relevant Biosecurity Regulation and the General Biosecurity Obligation.

Invasive Plants – High Priority			
Common name	**Scientific name**	***Biosecurity Act 2014* category**	**Other programs**
African Tulip tree	*Spathodea campanulata*	3	
Aleman grass	Echinochloa polystachya	-	
Giant sensitive plant	*Mimosa diplotricha*	3	
Glush weed (Hyrgophila)	*Hygrophila costata*	3	
Grader grass	*Themeda quadrivalvia*		
Lantana	*Lantana camara*	3	WONS
Mikania vine	*Mikania micrantha*	2, 3, 4, 5	NTWEP
Navua sedge	*Cyperus aromaticus*	-	
Olive Hymenachne	*Hymenachne amplexicaulis*	3	WONS
Parthenium weed	*Parthenium hysterophorus*	3	WONS
Pond Apple	*Annona glabra*	3	WONS
Rats tail grass	*Sporobolus spp.*	3	
Redwood	*Acaciella glauca*	2, 3, 4, 5	
Salvinia	*Salvinia molesta*	3	
Siam Weed	*Chromolaena odorata*	3	
Sicklepod	*Senna obtusifolia*	3	
Singapore daisy	*Sphagneticola trilobata*	3	
Thunbergia vine	*Thunbergia grandiflora*	3	
Water hyacinth	*Eichhornia crassipes*	3	WONS
Water lettuce	*Pistia stratiotes*	3	

Invasive Plants – Medium Priority			
Common name	**Scientific name**	***Biosecurity Act 2014* category**	**Other programs**
Asparagus fern	*Asaparagus spp.*	3	WONS
Cats claw creeper	*Dolichandra unguis-cati*	3	WONS
Dutchmans pipe	*Aristolochia elegans*	3	

Invasive Plants – Medium Priority			
Guinea grass	*Megathyrsus maximus var. maximus*	-	
Hamil grass	*Panicum maximum*	-	
Woodrose	*Ipomoea tuberosa*	-	
Leucaena	*Leucaena leucocephala*	-	
Mother of millions	*Bryophyllum spp.*	3	
Prickly pear	*Opuntia spp.*	3	

Invasive Animals – High Priority		
Common name	**Scientific name**	***Biosecurity Act 2014* category**
Chital deer	*Axis axis*	3, 4, 6
Feral goat	*Capra hircus*	3, 4, 6
Feral pig	*Sus scrofa*	3, 4, 5, 6
Rabbit	*Oryctolagus cuniculis*	3, 4, 5, 6
Tilapia	*Oreochromis mossambicus*	3, 5, 6, 7
Wild dog	*Canis lupis familiaris*	3, 4, 5, 6

Invasive Animals – Medium Priority		
Common name	**Scientific name**	***Biosecurity Act 2014* category**
Feral cat	*Felis catus*	3, 4, 5, 6
Unwanted cattle	*Bos taurus*	

Pest and Weed Alerts

These alert species are not found in the Hinchinbrook Shire area but carry a high risk of arriving in the region. If you suspect you have seen any of these pests or weeds, contact Council on 07 4776 4088.

	Weed/Pest	Vicinity (LGA)	Source and Mode of Spread
	Amazon frogbit	Barron River (Tablelands, Mareeba, Cairns)	Aquariums, water
	Fireweed	Tablelands	Machinery, stockfeed, wind, roadside maintenance
	Bellyache bush	Tablelands, Charters Towers, Mareeba, Cook	Machinery, stock, raw materials
	Mimosa pigra	Northern Territory, Mackay	Boats, fishing gear, stock
	Kosters curse	Cassowary Coast, Mareeba	Machinery, vehicles, birds

	Weed/Pest	Vicinity (LGA)	Source and Mode of Spread
	Sagittaria	Ross River, Townsville	Aquariums, water
	Cabomba caroliniana	Cairns, Cassowary Coast, Townsville	Aquariums, boats, fishing gear, water
	Stevia ovata	Tablelands	Machinery, wind, water, stock, machinery
	Cecropia spp.	Cairns, Cassowary Coast, Douglas	Ornamental gardens, birds, flying fox
	Neptunia – Water mimosa	Cairns	Food gardens, water
	Madras thorn	Cairns, Cassowary Coast	Ornamental gardens
	Hiptage bengalhensis	Douglas	Ornamental gardens, wind
	Gamba grass	Tablelands, Mareeba, Cook	Machinery, stockfeed, wind, roadside maintenance
	Brillantaisia	Cassowary Coast, Cairns, Douglas	Machinery, ornamental gardens, green waste, roadside maintenance
	Tramp ants – electric ants, yellow crazy ants	Townsville, Cairns, Kuranda	Machinery, potted plants, garden and building materials, green waste
	Noxious Fish – Gambusia holbrooki	Townsville	Illegal aquariums or illegally collected bait

Biosecurity Action Plans for Priority Species

Action plans have been developed for priority pest plants and animals which occur in the Hinchinbrook region. The action plans detail specific requirements and strategies for management in addition to what is required of all people under the General Biosecurity Obligation. The action plans outline management objectives based on established principles of pest management and are designed to assist all stakeholders to:

- Understand the biology and distribution of priority pest plant and animals.
- Implement appropriate strategic actions at the most appropriate time to have the greatest impact on the targeted pest (best management practice) and ensure they meet their general biosecurity obligation.
- Plan and coordinate pest management activities with neighbouring properties by targeting common management objectives and goals within relevant geographic areas.

Figure 2: Outline of the material contained within the biosecurity Action Plans for priority species.

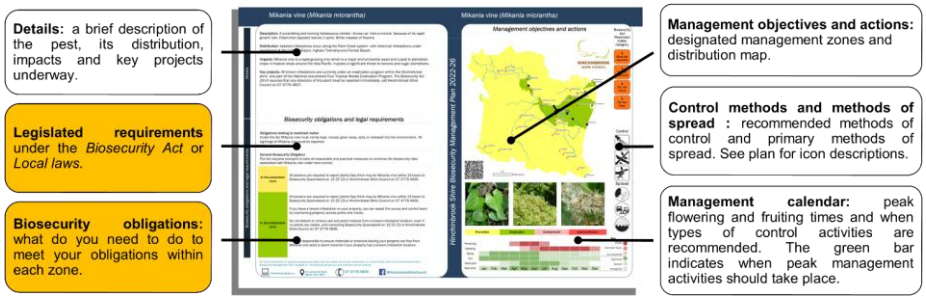
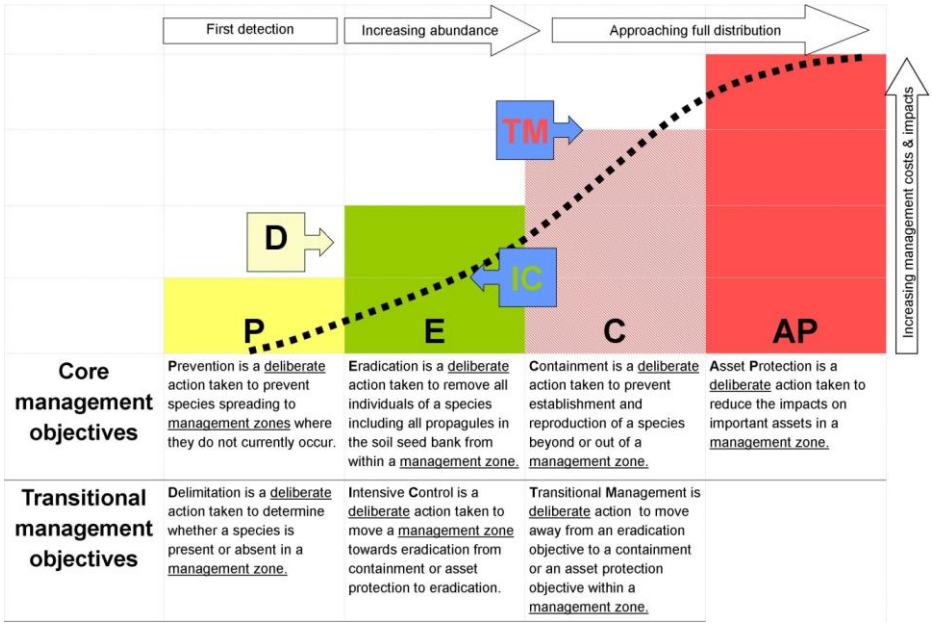


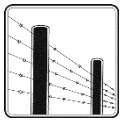
Figure 3: The invasion curve concept describes the management objectives in each of the management zones in the biosecurity Action Plans.



The action plans use catchment-based management zones to identify the location-specific management actions required for each priority pest plant and animal. The management zones are based on the pest management concept of the 'invasion curve.' The invasion curve describes how as a biosecurity issue becomes more abundant over time the management options and strategies available to manage it or its impacts also change. At each stage of the curve, as the area occupied by the pest or weed increases, the implied impact and required resources to respond also increase.

The key message is that prevention and early intervention are the most cost-effective (proactive) actions we can take. When these actions are not successful, we need to carefully consider the most strategic (reactive) management approaches to ensure local impacts and potential spread to new areas are reduced.

	Key to control methods	
	Frill or stem injection	Herbicide can be applied to woody weeds and trees via cuts or frills made close to the ground around the trunk or stem. This approach is best used when it is ok to leave the dead plant standing.
	Basal bark	Herbicide can be applied to woody weeds or vines with a low-pressure spray (which usually includes diesel or synthetic oil) to the lower stem. This method is not suited to use near or in water ways.
	Cut stump	Many vines, trees and woody weeds can be controlled by applying herbicide to the freshly cut stem. The application is made quickly with a dabber or spray before the plants vascular tissue closes over.

	Key to control methods	
	Chop or grub	Many weeds can be selectively managed manually by grubbing or chopping. This approach is useful for reducing the competition from weeds while native vegetation or desirable plants re-establish.
	Drill/stem injection	Herbicide can be applied as a measured dose into evenly spaced, downward-facing holes drilled near the base of each stem. Cordless or petrol- powered drills are usually used due to their portability.
	Best practice grazing	Carefully managing stocking rates will keep healthy groundcover which provides competition for many weeds. Grazing can also be used in some situations to knock weeds down prior to control.
	Hand removal	Many weeds can be removed manually, particularly when they are at a seedling stage. Hand weeding is very selective and can be used where as little as possible disturbance is required.
	Foliar spray	Most weeds can be controlled at various life stages by applying herbicide via a spray. Sprays applicators can be low or high pressure and are suited to covering larger areas or dense infestations.
	Biocontrol	The release of carefully selected natural pests or diseases of plants and animals can control them, or to interrupt their reproduction. Biocontrol is most effective when integrated with other control tools.
	Slashing	Slashing can often be used to reduce the growth or reproduction of many weeds and is particularly useful before other control actions. Timing is critical in order to prevent the spread of seeds or fragments.
	Mechanical removal	Large scale infestations may require mechanical removal or control. Machinery can also be used to clean up after control activities but will usually require follow-up to control and prevention work.
	Fire	A well planned and timed fire can be a very effective management tool which can reduce or stimulate dormant seeds or control living plants. It is most suited to fire adapted vegetation types.
	Exclusion fencing	There are a wide range of fencing materials and designs to protect domestic and agricultural assets. Fencing can also be used manage grazing pressure or access to reduce weed or disease spread.
	Pesticide	Pesticides are used in certain situations to control anything from ants to wild dogs. There are strict usage and permitting requirements for many pesticides. They can be an effective tool over large area.
	Trapping	Trapping is widely used for feral pigs but can also be used to control wild dogs, feral cats and feral deer. Trapping is labour intensive but can very target specific when conducted using best practice tools.
	Shooting	Shooting or hunting is sometimes used to control individual animals. It is less usually less effective and even disruptive to other control strategies but is a useful tool to supplement trapping and baiting.

	Key to modes spread	
	Droppings	Many plants have evolved to use animals to spread seeds by producing tasty fruit. Seeds are eaten along with the flesh of the fruit and can be dispersed in droppings up to kilometres away.
	Illegal dumping	Deliberate or accidental spread of many plants can occur when green waste is not disposed of responsibly. Areas of bushland, creeks and farmland often suffer impacts from dumped garden plants.
	Machinery and vehicles	Slashers and earthworks equipment are most commonly blamed, for moving pests, but cars, 4wds, motorcycles, boats and caravans are all capable of moving pest plants and animals' great distances.
	People and animals	Some plants have seeds adapted to stick to and hitch a ride on passing animals and can move long distances attached to animals' fur or peoples clothing.
	Stock, raw materials & produce	Raw materials and produce including hay, animal feed, seed mixes and even livestock can contain or carry weed seed or other biosecurity risks like invasive ants, pathogens or diseases.
	Vegetative	Many plants can spread from cuttings, stem or root fragments. For some species this is their primary means of reproduction but for others it is in addition to producing seeds or spores.
	Water	Many aquatic plants rely entirely on water to spread their seeds. Others have seeds or fragments which can float for long distances and move during regular flows or on flood events.
	Wind	Many plants have seeds which are lightweight with attachments to help them glide or float on the air or in the wind. The lightweight seeds can also get caught on vehicles and clothing.

African tulip (*Spathodea campanulata*)

Details

Biosecurity obligations and legal requirements

Description: African tulip is an evergreen tree to 24 m. It has broadly oval shaped leaves with distinctive veins. Leaves are bronze coloured when young turning glossy green as they mature. Flowers are a large orange to red with frilled yellow margins on the petals. Seeds are wind dispersed and form in elongated pods up to 20cm long.

Distribution: African tulip is relatively common in urban areas, near houses and along creek lines and waterways in the Hinchinbrook shire. Dense infestations occur in some locations including Tyto Wetlands.

Impacts: African tulip is a serious environmental weed that can form dense woody thickets. Being wind dispersed it can colonise intact native vegetation and reach remote locations. It suckers readily when disturbed making it challenging to control. The flowers are toxic to native bees.

Key projects: African tulip is one of a suite of weeds managed in key area environmental areas. In July 2022, a program will commence to remove all African Tulip trees from selected creek systems from Crystal Creek north as funding allows. For further information, contact HSC on 07 4776 4740.

Biosecurity obligations and legal requirements

Obligations relating to restricted matter
Under the Act African tulip must not be given away, sold, or released into the environment. Penalties apply.
Under the Regulation African tulip may be disposed of by:

- Deep burial,
- Transporting to a waste facility securely (contact HSC 07 4776 4740),
- Sealing the matter in plastic and leaving the matter in the sun until any vegetative material being disposed has decomposed.

General Biosecurity Obligation
The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with Act African tulip under their control.

In the prevention zone	Choose appropriate and non-weedy shade trees for use in gardens and farms. Be on the lookout for African tulips distinctive orange flowers and control before dense infestations develop.
In the asset protection zone	Identify and protect key assets such as waterways, woodlands and sensitive environmental areas. Ensure machinery are free from seeds and plant material prior to beginning works or moving to new locations. Waterways and plants around settlements should be treated annually to prevent spread to adjoining environmentally sensitive areas. Manage risk of spread from your property and protect priority assets using best practice methods to control infestations where practical to do so. You are responsible to ensure materials or products leaving your property are free from African tulip seeds or plant material.

For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

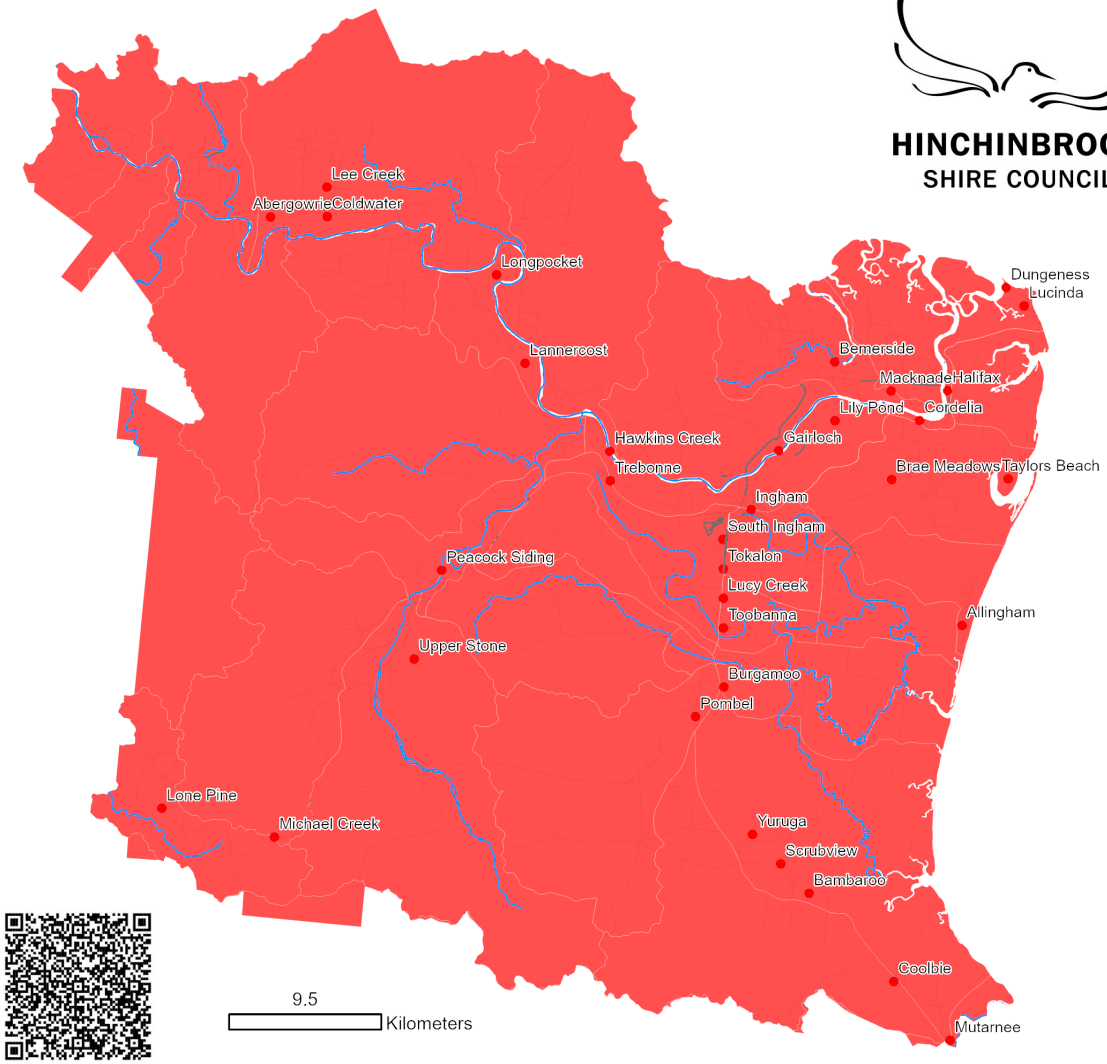
African tulip (*Spathodea campanulata*)

Management objectives and actions

Biosecurity Act Restricted matter category

3
Do not distribute

HINCHINBROOK SHIRE COUNCIL



Control

Spread

Prevention	Eradication	Containment	Asset protection

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flowering												
Seeding												
Spray												
Mechani-												
Best time												

Key

- Peak
- First/last flush
- Occasional
- Optimal
- Good
- Marginal

Aleman grass (*Echinocloa polystachya*)

Details

Description: A robust, upright perennial aquatic grass to 1-2 metres with distinctive silver blue sheen. Aleman grass grows in shallow wetlands and deep water and forms spreading rafts of floating stems. It does produce seed however is generally thought to spread by vegetative reproduction

Distribution: Aleman grass occurs in the lower Palm Creek area

Impacts: Aleman grass blocks drainage systems in cane farms and waterways. It grows in deeper water than Olive hymenachne and readily invades and outcompetes native plants in wetlands and waterways. It can prevent fish passage and breeding opportunities.

Key projects: Several known outbreaks are management to reduce impacts. Delimitation is required to determine distribution beyond known sites.

Biosecurity obligations and legal requirements

Biosecurity obligations and legal requirements

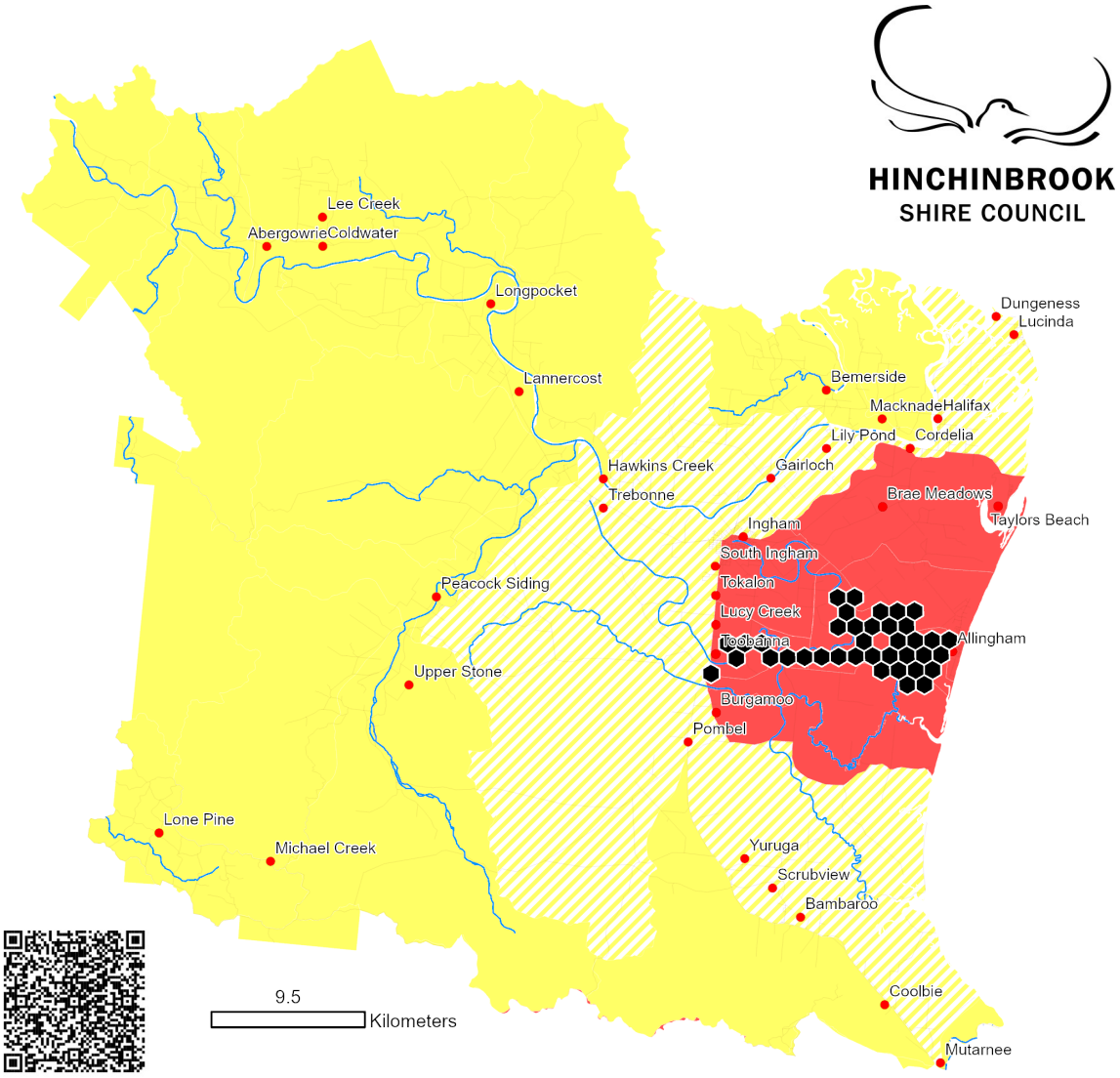
General Biosecurity Obligation
The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with Act hymenachne under their control.

In the prevention zone	Contact HSC to report any suspect plants on 07 4776 4740. Wherever practical ensure agricultural and raw materials are sourced from a reliable supplier and are from hymenachne free area.
In the asset protection zone	Identify and protect key assets such as fish passage and breeding areas, drainage infrastructure and important wetlands. Undertake best practice control of infestations to protect high value areas. Spell any stock in a holding paddock for at least 7 days before moving from known infestation areas. Ensure machinery are free from seeds and plant material when working in or near waterways and drains. Drains, wetlands and waterways should be treated annually to prevent spread to adjoining areas and to manage risk of spread from your property where practical to do so. You are responsible to ensure materials or products leaving your property are free from seed or plant material.

For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

Aleman grass (*Echinocloa polystachya*)

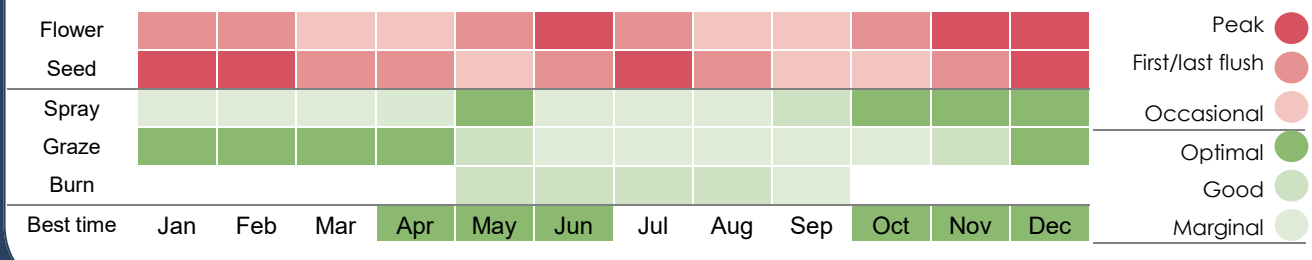
Management objectives and actions



Control

Spread

Prevention	Eradication	Containment	Asset protection



Giant sensitive plant (*Mimosa diplotricha*)

Details

Description: A shrubby or sprawling annual that has four angled branches with a line of sharp, hooked prickles along the angles. Unlike commons sensitive weed giant sensitive weed grows as a small to large shrub.

Distribution: Widespread distribution within the Hinchinbrook Shire, often associated with road and rail transport, areas of disturbance or fallow and unused land.

Impacts: GSP will choke up cane, other crops and grasslands causing loss of crop and pasture production. The seed of GSP can remain viable for many years even decades so any measures to prevent spread and establishment in new areas is worthwhile.

Key projects: A joint project between HSC, HCPSL and Terrain will be conducted in April/May annually to map, control and monitor impacts and control measures.

Biosecurity obligations and legal requirements

Biosecurity obligations and legal requirements

Obligations relating to restricted matter

Under the Act giant sensitive plant must not be given away, sold, or released into the environment. Penalties apply.

Under the Regulation giant sensitive plant may be disposed of by:

- Deep burial,
- Transporting to a waste facility securely (contact HSC 07 4776 4740),
- Sealing the matter in plastic and leaving the matter in the sun until any vegetative material being disposed has decomposed.

General Biosecurity Obligation

The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with Act giant sensitive plant under their control.

In the prevention zone	Contact HSC to report any suspect plants on 07 4776 4740. Wherever practical ensure agricultural and raw materials are sourced from a reliable supplier and are from sicklepod free area. .
In the asset protection zone	Identify and protect key assets such as pastures, crops and sensitive environmental areas. Undertake best practice control of infestations to protect high value areas. Spell any stock in a holding paddock for at least 7 days before moving from known infestation areas. Ensure machinery are free from seeds and plant material prior to beginning works or moving to new locations. Boundaries, access tracks and roads should be treated annually to prevent spread to adjoining areas or neighbouring properties. Manage risk of spread from your property and protect priority assets using best practice methods to control infestations where practical to do so. You are responsible to ensure materials or products leaving your property are free from giant sensitive plant seed or plant material

For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

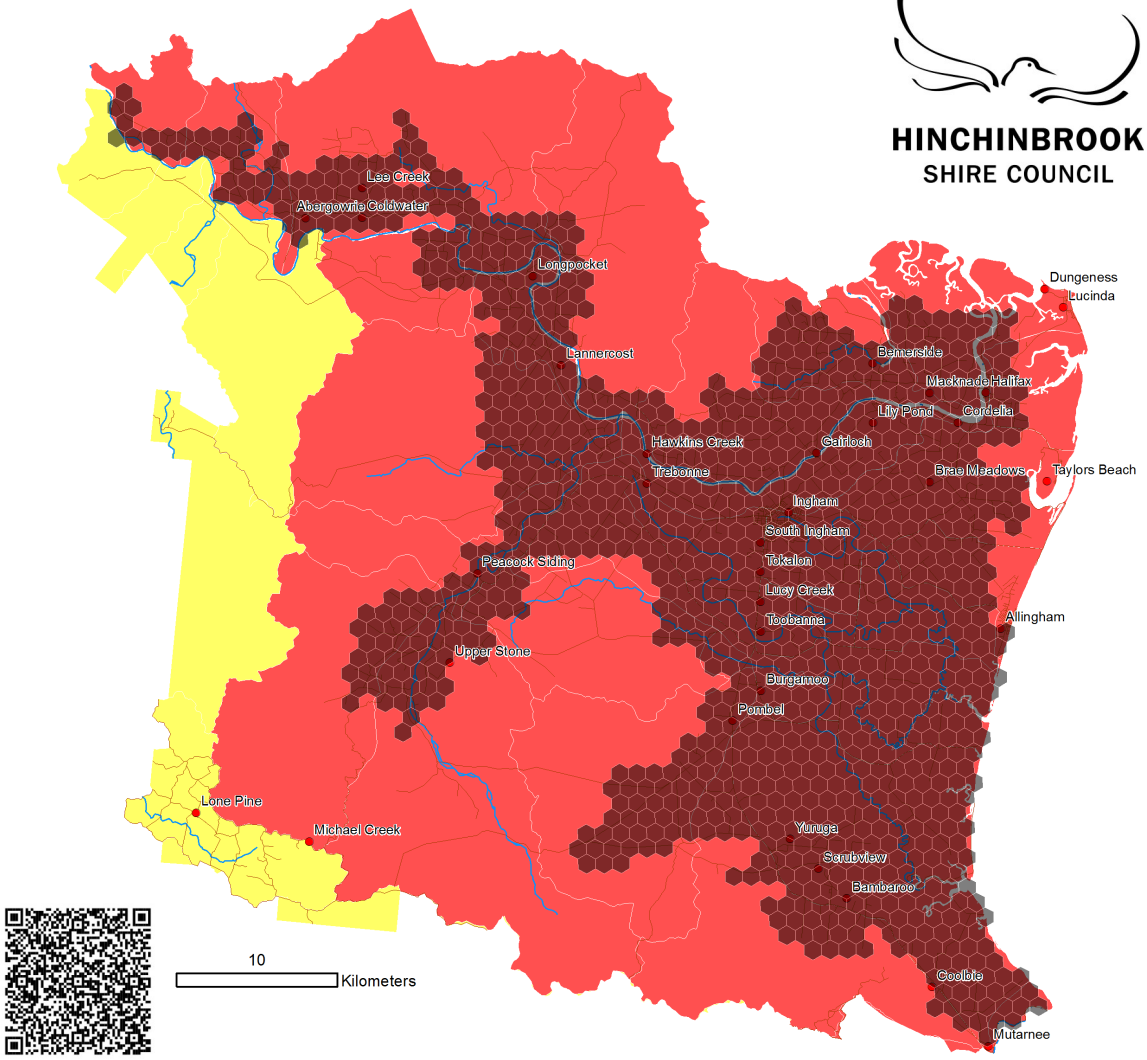
Giant sensitive plant (*Mimosa diplotricha*)

Management objectives and actions

Biosecurity Act Restricted matter category

3
Do not distribute

HINCHINBROOK SHIRE COUNCIL



Control

Spread

Prevention	Eradication	Containment	Asset protection

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flowering												
Seeding												
Spray												
Manual												
Biocontrol												
Slash												

Key

- Peak
- First/last flush
- Occasional
- Optimal
- Good
- Marginal

Grader grass (*Themeda quadrivalvis*)

Details

Description: Upright tufted annual grass to 1-2.5m. Flower stalks are stiff and cane-like with red-brown flower spikes bent downwards. A tropical and sub-tropical grass which forms dense swards and stands on roadsides and in savannah woodlands. A similar common native species, kangaroo grass, is shorter in stature, perennial and lacks tufts near the seed.

Distribution: An established weed across the drier regions of the tropics, grader grass is increasing in distribution into areas of the wet tropics, particularly along roadsides and in rangelands.

Impacts: Can invade native and improved pastures, woodlands and roadsides. Grader grass is a significant weed of roadsides where it increases management requirements and impacts on safety because of its height. It can significantly outcompete pastures, reducing productivity of grazing lands. Grader grass produces much higher fuel loads than native grasses increasing fire risk.

Key projects: The protection of important environmental and agricultural assets is a high priority. Roadside management of this species is undertaken annually to prevent spread.

Biosecurity obligations and legal requirements

Biosecurity obligations and legal requirements

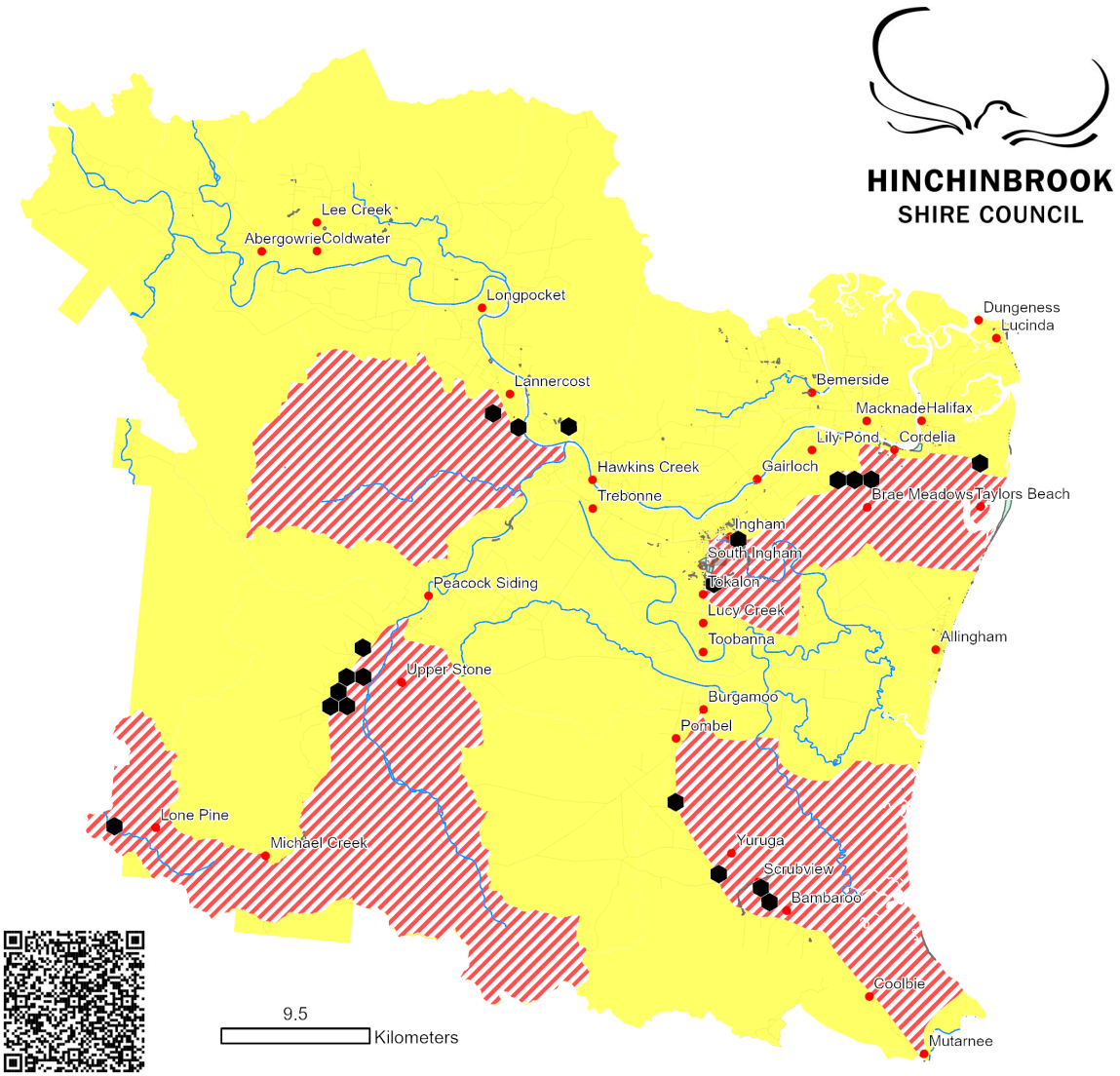
General Biosecurity Obligation
The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with Act grader grass under their control.

In the prevention zone	Contact Hinchinbrook Shire Council to report any suspect plants on 07 4776 4740. Wherever practical ensure agricultural and raw materials are sourced from a reliable supplier and are from a grader grass free area. If introducing new stock spell in a holding paddock for at least 7 days before releasing into property.
In the containment zone	Do not cart, introduce or transport contaminated hay or silage. Ensure best practice weed hygiene measures are in place to reduce risk of spread to new locations. Maintain weed free areas. Identify high value assets and protect them from impacts where possible.

For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

Grader grass (*Themeda quadrivalvis*)

Management objectives and actions



Control

Spread

Prevention	Eradication	Containment	Asset protection

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flowering												
Seeding												
Spray												
Slash												
Graze												

Key

- Peak
- First/last flush
- Occasional
- Optimal
- Good
- Marginal

Hygrophila (*Hygrophila costata*)

Details

Biosecurity obligations and legal requirements

Description: An erect, emergent aquatic herb up to 1m tall. Generally growing in thick mat on banks and water's edge but extending over the water. Small papery white flowers at the junction of the stem and leaf. The plant grows anchored to the bottom or the banks of waterways from where it can form blankets of weed growing our over water.

Distribution: Restricted to an isolated outbreak in a drainage line to the north of the Seymour River. The origin of the introduction is unknown

Impacts: Hygrophila forms dense mats which smothers riparian vegetation and blocks waterways and drainage infrastructure. It has been demonstrated to provide habitat for pest fish species like Tilapia.

Key projects: The target of eradication from Seymour River district. The removal of Hygrophila from the lower Herbert is a local and regional priority.

Biosecurity obligations and legal requirements

Obligations relating to restricted matter

Under the Act water Hygrophila must not be given away, sold, or released into the environment. Penalties apply.

Under the Regulation Hygrophila may be disposed of by:

- Deep burial,
- Transporting to a waste facility securely (contact HSC 07 4776 4740),
- Sealing the matter in plastic and leaving the matter in the sun until any vegetative material being disposed has decomposed.

General Biosecurity Obligation

The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with Act Hygrophila under their control.

In the prevention zone	Contact HSC to report any suspect plants on 07 4776 4740. You are responsible to know what you are buying online or at local markets to ensure you don't unintentionally introduce Hygrophila from a contaminated source. Be responsible and do not dump garden pond or fish tank contents into waterways.
In the eradication zone	Contact HSC to report any suspect plants on 07 4776 4740 Ensure soil or vegetation from known infestations is not moved from the site unless it is disposed of in accordance with the regulation. If you have Hygrophila in your possession do not share contaminated material including aquatic plants and do not dump garden pond or fish tank contents into waterways. Landowner's or occupiers can assist HSC by maintaining easy access to infestations and by assisting with control activities.

For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

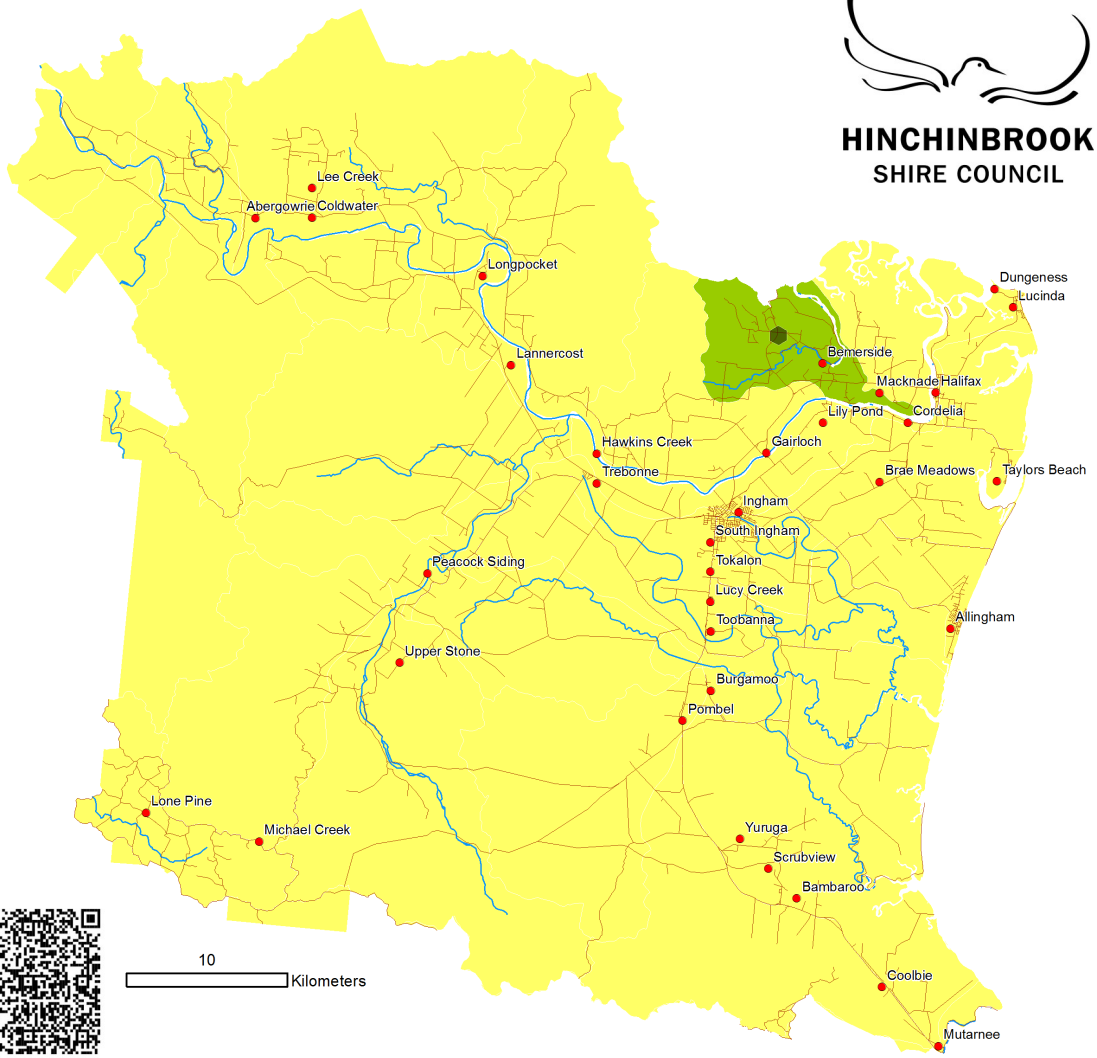
Hygrophila (*Hygrophila costata*)

Management objectives and actions

Biosecurity Act Restricted matter category

3
Do not distribute

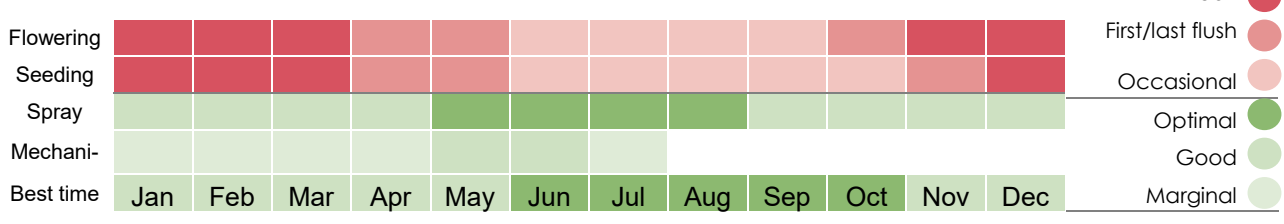
HINCHINBROOK SHIRE COUNCIL



Control

Spread

Prevention	Eradication	Containment	Asset protection



Lantana (*Lantana camara*)

Details

Biosecurity obligations and legal requirements

Description: Lantana is a heavily branched shrub that can grow in compact clumps, dense thickets or as a climbing vine. The stems of lantana are square with small, re-curved prickles. The small leaves (6cm) are covered in fine hairs, bright green above, paler underneath and have round-toothed edges

Distribution: Lantana is common and widespread within the Hinchinbrook shire.

Impacts: a significant weed of natural systems and rangeland grazing area. Lantana displaces understorey species and alters fire regimes. Lantana causes poisoning in stock.

Key projects: Lantana is one a suite of widespread weeds managed in key area environmental areas and mahogany glider habitat. It is also a serious weed of management for graziers

Biosecurity obligations and legal requirements

Obligations relating to restricted matter

Under the Act lantana must not be given away, sold, or released into the environment. Penalties apply.
Under the Regulation parthenium weed may be disposed of by:

- Deep burial,
- Transporting to a waste facility securely (contact HSC 07 4776 4740),
- Sealing the matter in plastic and leaving the matter in the sun until any vegetative material being disposed has decomposed.

General Biosecurity Obligation

The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with Act lantana under their control.

In the asset protection zone	Identify and protect key assets such as pastures, crops and sensitive environmental areas. Undertake best practice control of infestations to protect high value areas. Ensure machinery are free from seeds and plant material prior to beginning works or moving to new locations. Boundaries, access tracks and roads should be treated annually to prevent spread to adjoining areas. Manage risk of spread from your property and protect priority assets using best practice methods to control infestations where practical to do so. You are responsible to ensure materials or products leaving your property are free from lantana seed or plant material.

For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

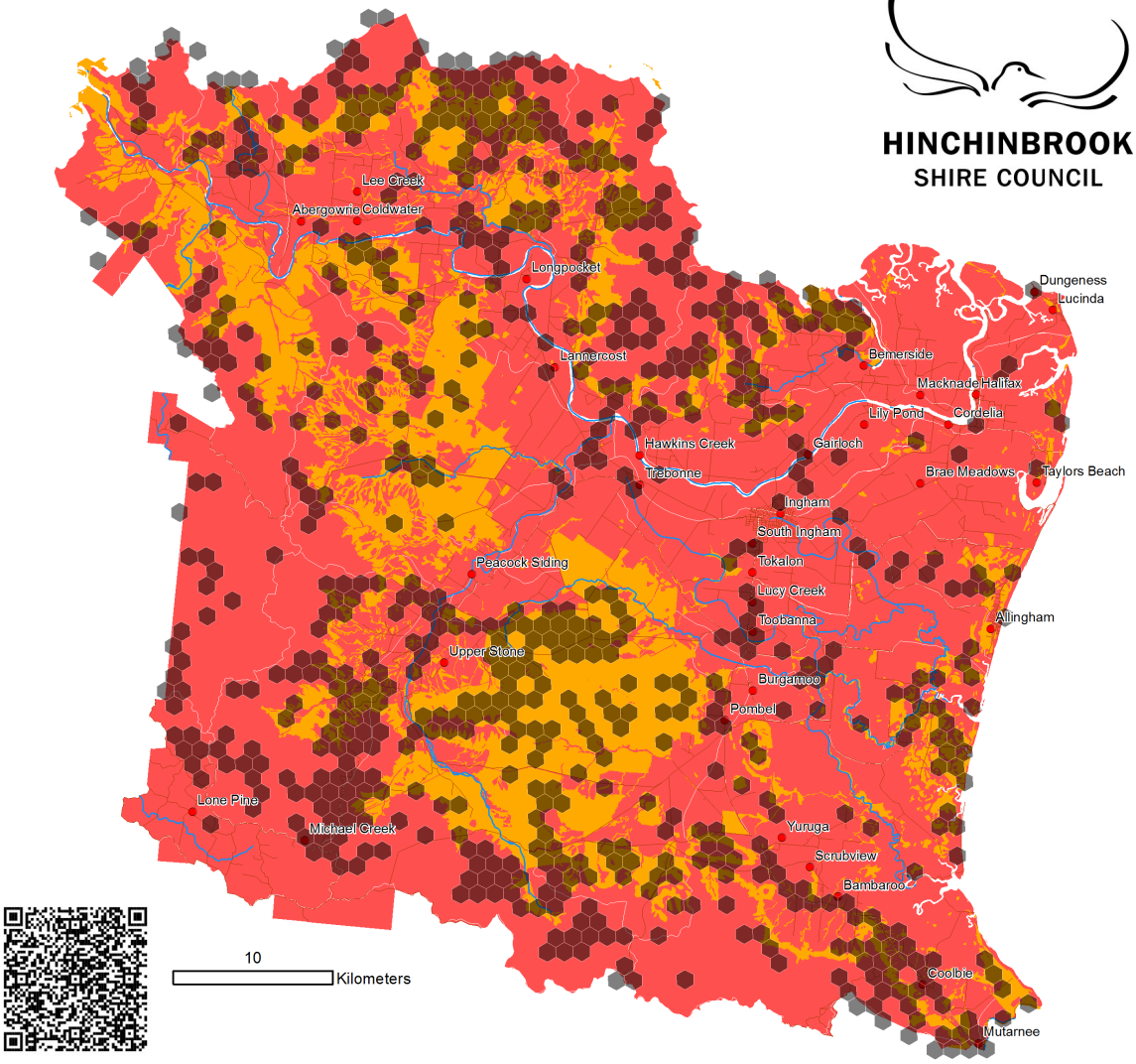
Lantana (*Lantana camara*)

Management objectives and actions

Biosecurity Act Restricted matter category

3
Do not distribute

HINCHINBROOK SHIRE COUNCIL



Control

Spread

Prevention	Eradication	Containment	Asset protection

Best time	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flower	■	■	■	■	■	■	■	■	■	■	■	■
Seed	■	■	■	■	■	■	■	■	■	■	■	■
Spray	■	■	■	■	■	■	■	■	■	■	■	■
Mechanical	■	■	■	■	■	■	■	■	■	■	■	■
Manual	■	■	■	■	■	■	■	■	■	■	■	■
Burn							■	■	■	■	■	

Key
- Peak
- First/last flush
- Occasional
- Optimal
- Good
- Marginal

Mikania vine (*Mikania micrantha*)

Details

Description: A scrambling and twining herbaceous climber. Known as 'mile-a-minute' because of its rapid growth rate. Distinctive opposite leaves in pairs. White masses of flowers.

Distribution: Isolated infestations occur along the Palm Creek system with historical infestations under monitoring at the Ingham Airport, Ingham Township and Forrest Beach.

Impacts: Mikania vine is a rapid-growing vine which is a major environmental weed and a pest in plantation crops in tropical areas around the Asia-Pacific. It poses a significant threat to banana and sugar plantations.

Key projects: All known infestations are currently under an eradication program within the Hinchinbrook shire and part of the National cost-shared Four Tropical Weeds Eradication Program. The *Biosecurity Act 2014* requires that any detection of this plant must be reported immediately, call Hinchinbrook Shire Council on 07 4776 4607.

Biosecurity obligations and legal requirements

Biosecurity obligations and legal requirements

Obligations relating to restricted matter

Under the Act Mikania vine must not be kept, moved, given away, sold, or released into the environment. All sightings of Mikania vine must be reported.

General Biosecurity Obligation

The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with Mikania vine under their control.

In the prevention zone	All persons are required to report plants they think may be Mikania vine within 24 hours to Biosecurity Queensland on 13 25 23 or Hinchinbrook Shire Council on 07 4776 4600.
In the eradication zone	All persons are required to report plants they think may be Mikania vine within 24 hours to Biosecurity Queensland on 13 25 23 or Hinchinbrook Shire Council on 07 4776 4600. If you have a known infestation on your property, you can assist the survey and control team by maintaining property access points and tracks. Do not disturb or remove soil and plant material from a known infestation location, even if no plants are visible, until consulting Biosecurity Queensland on 13 25 23 or Hinchinbrook Shire Council on 07 4776 4600. You are responsible to ensure materials or products leaving your property are free from Mikania vine seed or plant material if your property has a known infestation location.

For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

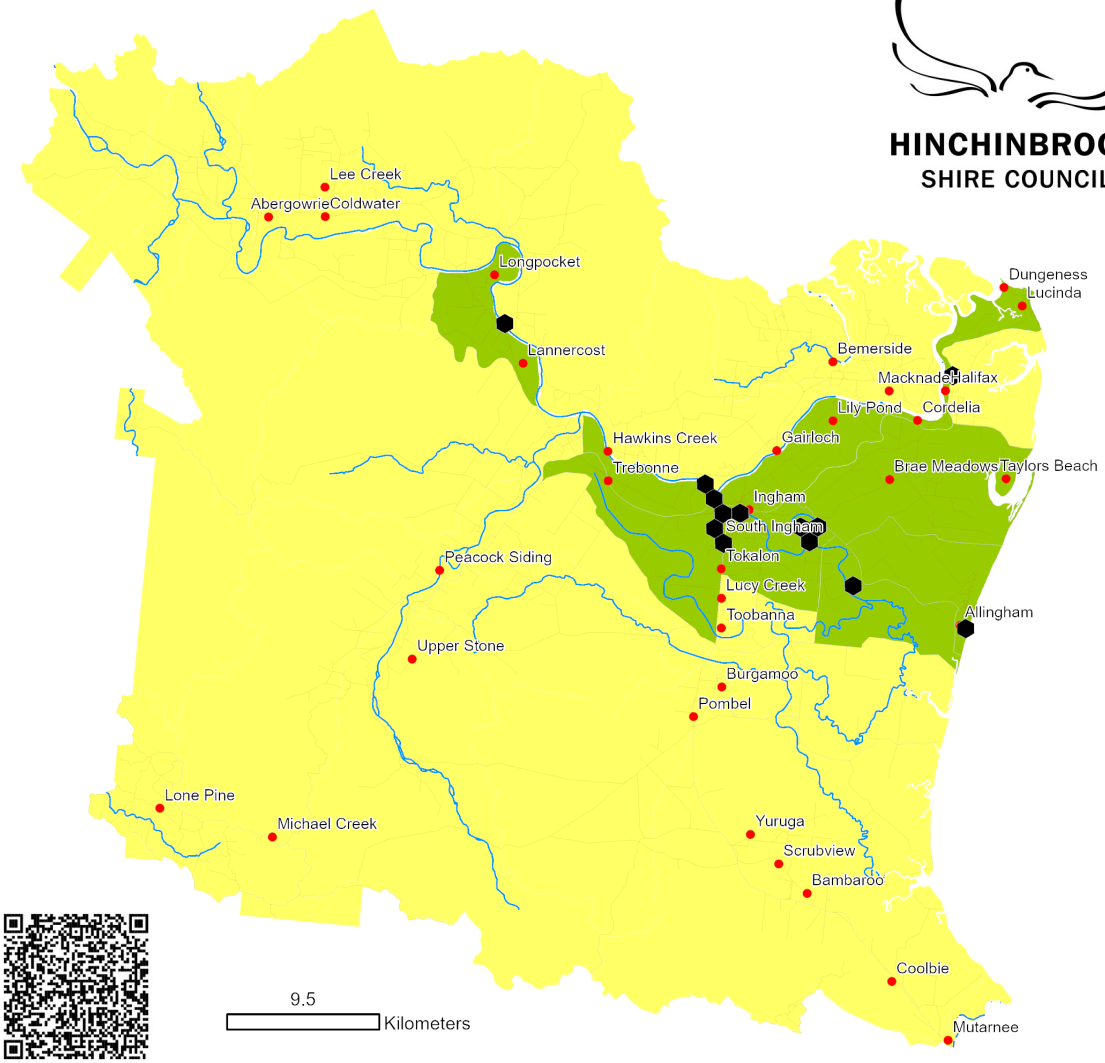
Mikania vine (*Mikania micrantha*)

Management objectives and actions

Biosecurity Act Restricted matter category

- **2** Must be reported
- **3** Do not distribute
- **4** Do not move
- **5** Do not keep

HINCHINBROOK SHIRE COUNCIL



Control

Spread

Prevention	Eradication	Containment	Asset protection

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flowering												
Seeding												
Spray												
Cut												
Hand pull												
Best time												

Key

- Peak
- First/last flush
- Occasional
- Optimal
- Good
- Marginal

Navua sedge (*Cyperus aromaticus*)

Details

Biosecurity obligations and legal requirements

Description: A robust, upright perennial sedge from 10-60 centimetres tall with a distinctive button like flower above three large and three small bracts. Leaves are long narrow and glossy green, when stressed the plant turns light yellow. Leaves have a distinctive aroma when crushed.

Distribution: Navua sedge I widespread and common across the Hinchinbrook Shire lowlands. It commonly grows in wetter areas along roadsides, within cropping areas, pastures and public spaces.

Impacts: Navua sedge outcompetes pastures and displaces native grasses and sedges. It is both difficult and expensive to control selectively and can decrease productivity significantly. Navua sedge spreads rapidly along roadsides.

Key projects: Roadsides and reserves (TYTO and the Show grounds) are managed by council to reduce spread and impacts on adjoining lands. This includes allowing landholders to apply for no slash zones on council control roads.

Bio Control: The Rust (*Puccinia kyllingae-erectae*) is now present within the Hinchinbrook Shire. This Rust can cause significant impacts on the leaves and stems of Navua sedge and seems to spread following the wet season. Landholders should consider not using herbicide control when the rust is present.

Biosecurity obligations and legal requirements

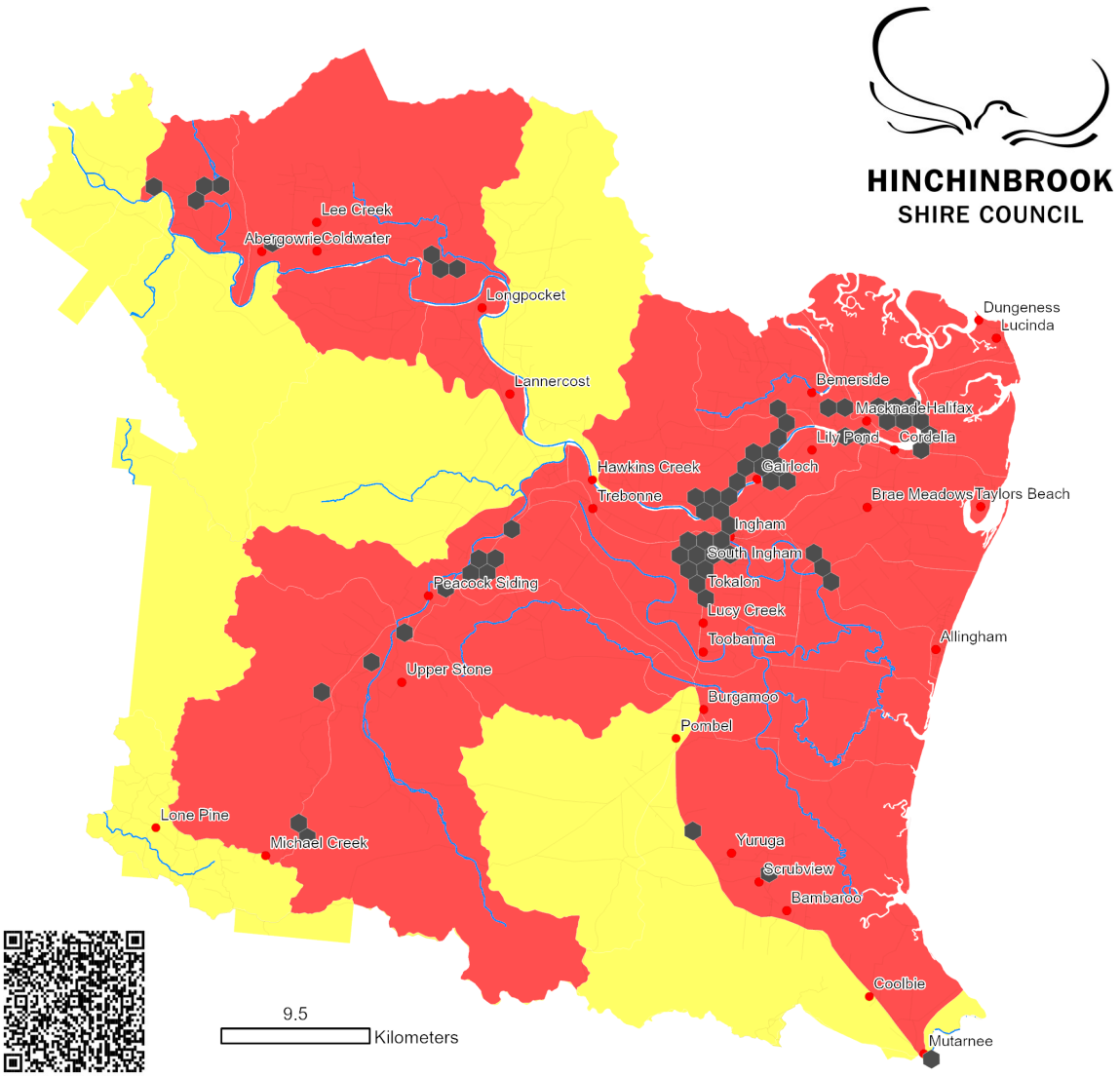
General Biosecurity Obligation
The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with Act Navua sedge under their control.

In the prevention zone	Contact HSC to report any suspect plants on 07 4776 4740. Wherever practical ensure agricultural and raw materials are sourced from a reliable supplier and are from hymenachne free area.
In the asset protection zone	Identify and protect key assets such as fish passage and breeding areas, drainage infrastructure and important wetlands. Undertake control works on known infestations with a registered herbicide as per labels instructions. Spell any stock in a holding paddock for at least 7 days before moving from known infestation areas. Ensure machinery are free from seeds and plant material when working in or near waterways and drains. Drains, wetlands and waterways should be treated annually to prevent spread to adjoining areas. Manage risk of spread from your property and protect priority assets using best practice methods to control infestations where practical to do so. You are responsible to ensure materials or products leaving your property are free from Navua sedge seed or plant material.

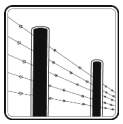
For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

Navua sedge (*Cyperus aromaticus*)

Management objectives and actions



Control



Spread

Prevention	Eradication	Containment	Asset protection

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flowering												
Seeding												
Spray												
Grazing												
Best time												

Key

- Peak
- First/last flush
- Occasional
- Optimal
- Good
- Marginal

Olive hymenachne (*Hymenachne amplexicaulis*)

Details

Biosecurity obligations and legal requirements

Description: Hymenachne is a robust, upright perennial aquatic grass to 1-2 metres tall with distinctive stem clasping leaves. It grows on wet soils and in wetlands and can raft across open water. A native species Hymenachne acutigluma also occurs in the Shire.

Distribution: A major weed of all river systems and connected wetlands in the lower Herbert. The heaviest infestations are in the Cattle, Palm and Trebonne Creek systems.

Impacts: Hymenachne blocks drainage systems in cane farms. It readily invades and outcompetes native plants in wetlands and waterways. Dense infestations can prevent fish passage and breeding opportunity for key species like Barramundi. Hymenachne can also impede boat access and potentially damage infrastructure like bridges and weirs.

Key projects: long term management projects and taking place in the Upper Cattle Creek, Palm Creek and TYTO Wetlands reserve.

Biosecurity obligations and legal requirements

Obligations relating to restricted matter

Under the Act hymenachne must not be given away, sold, or released into the environment. Penalties apply.
Under the Regulation Act hymenachne may be disposed of by:

- Deep burial,
- Transporting to a waste facility securely (contact HSC 07 4776 4740),
- Sealing the matter in plastic and leaving the matter in the sun until any vegetative material being disposed has decomposed.

General Biosecurity Obligation

The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with Act hymenachne under their control.

In the prevention zone	Contact HSC to report any suspect plants on 07 4776 4740. Wherever practical ensure agricultural and raw materials are sourced from a reliable supplier and are from hymenachne free area.
In the asset protection zone	Identify and protect key assets such as fish passage and breeding areas, drainage infrastructure and important wetlands. Undertake best practice control of infestations to protect high value areas. Spell any stock in a holding paddock for at least 7 days before moving from known infestation areas. Ensure machinery are free from seeds and plant material when working in or near waterways and drains. Drains, wetlands and waterways should be treated annually to prevent spread to adjoining areas and to manage risk of spread from your property where practical to do so. You are responsible to ensure materials or products leaving your property are free from hymenachne seed or plant material.

For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

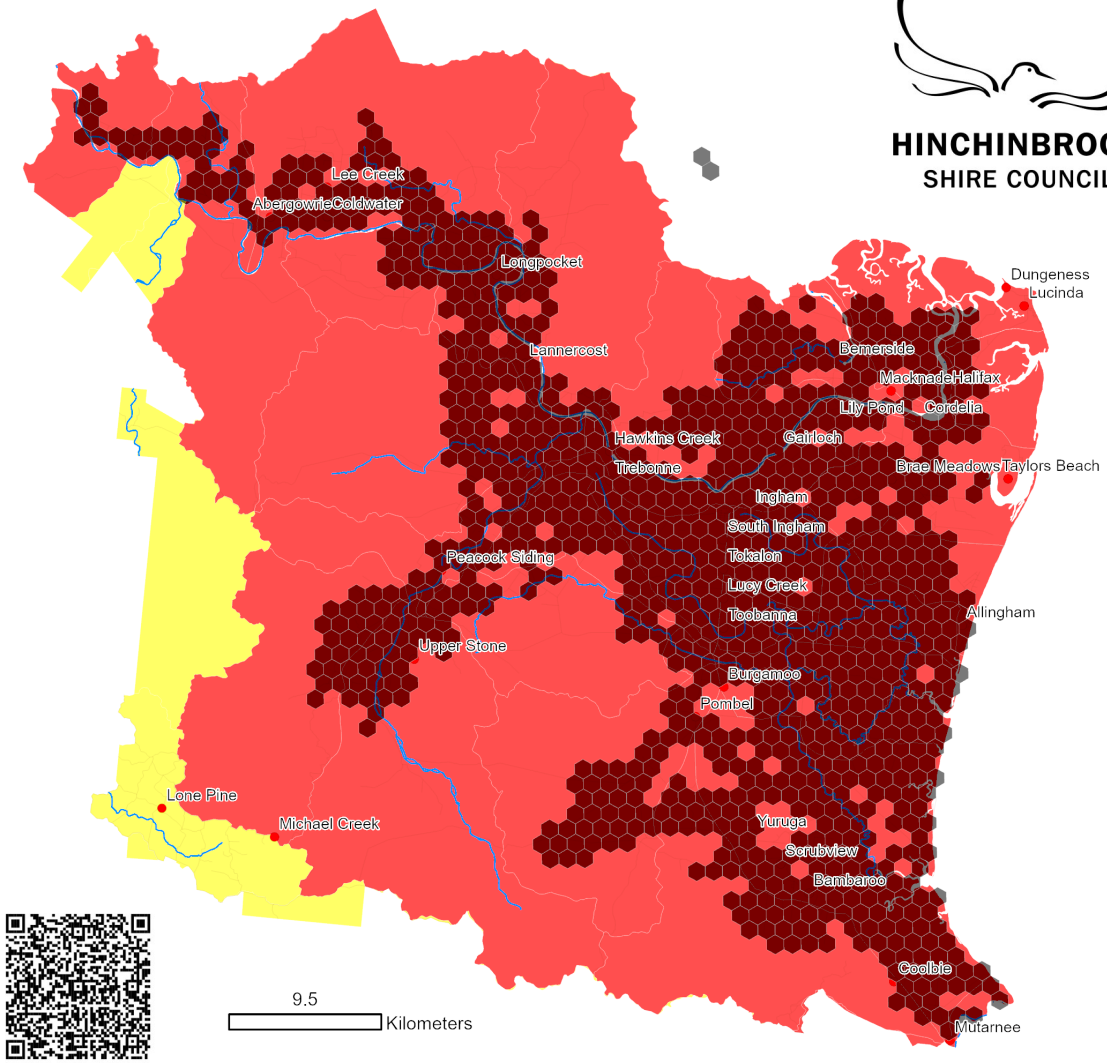
Olive hymenachne (*Hymenachne amplexicaulis*)

Management objectives and actions

Biosecurity Act Restricted matter category

3
Do not distribute

HINCHINBROOK SHIRE COUNCIL



Control

Spread

Prevention	Eradication	Containment	Asset protection

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flowering	First/last flush	First/last flush	Occasional	Occasional	First/last flush	Peak	First/last flush	Occasional	Occasional	First/last flush	Peak	Peak
Seeding	Peak	Peak	Occasional	Occasional	Occasional	Occasional	Peak	First/last flush	Occasional	Occasional	First/last flush	Peak
Spray	Marginal	Marginal	Marginal	Marginal	Good	Marginal	Marginal	Marginal	Marginal	Good	Good	Good
Burn							Marginal	Marginal	Good	Good	Optimal	Optimal
Graze	Good	Good	Good	Good	Good	Good	Marginal	Marginal	Marginal	Marginal	Marginal	Marginal
Best time				Apr	May					Oct	Nov	Dec

Key

- Peak
- First/last flush
- Occasional
- Optimal
- Good
- Marginal

Parthenium weed (*Parthenium hysterophorus*)

Details

Description: Parthenium weed is an annual herb with a deep tap root and an erect stem that becomes woody with age. As it matures, the plant develops many branches in its top half and may eventually reach a height of two metres.

Distribution: A localised infestation in the Mt Fox area is the only recorded occurrence in the Hinchinbrook Shire

Impacts: Parthenium is a weed of crops and grasslands causing loss of crop and pasture production. Parthenium weed also causes severe allergic reactions including hay fever and dermatitis in susceptible people. Parthenium is often spread as a contaminant in poultry and stock feed.

Key projects: The only known site in Hinchinbrook Shire in the Mount Fox area is under an ongoing monitoring program and progressing to eradication.

Biosecurity obligations and legal requirements

Biosecurity obligations and legal requirements

Obligations relating to restricted matter

Under the Act parthenium weed must not be given away, sold, or released into the environment. Penalties apply.

Under the Regulation parthenium weed may be disposed of by:

- Deep burial,
- Transporting to a waste facility securely (contact HSC 07 4776 4740),
- Sealing the matter in plastic and leaving the matter in the sun until any vegetative material being disposed has decomposed.

General Biosecurity Obligation

The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with Act parthenium weed under their control.

In the prevention zone	Contact HSC to report any suspect plants on 07 4776 4740. Wherever practical ensure agricultural and raw materials are sourced from a reliable supplier and are from sicklepod free area.
In the eradication zone	Any detections of this plant should be reported to Hinchinbrook Shire Council on 07 4776 4740. You are responsible to ensure materials or products leaving your property are free from parthenium seed or plant material.D o not disturb or remove soil and plant material from a known infestation location, even if no plants are visible. Landholders can assist the program by maintaining easy access to treatment areas or by assisting council staff during control and survey activities. You are responsible for ensuring machinery and vehicles avoid known infestation areas or undertake appropriate wash down procedures prior to leaving site. Wherever practical ensure agricultural and raw materials are sourced from a reliable supplier and are from a weed free area. Spell any stock in a holding paddock for at least 7 days before moving from known infestation areas.

For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

Parthenium weed (*Parthenium hysterophorus*)

Management objectives and actions

Biosecurity Act Restricted matter category

3
Do not distribute

HINCHINBROOK SHIRE COUNCIL

Control

Spread

	Prevention	Eradication	Containment	Asset protection

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flowering												
Seeding												
Spray												
Biocontrol												
Grazing												
Fencing												
Best time												

Key

- Peak
- First/last flush
- Occasional
- Optimal
- Good
- Marginal

Siam weed (*Chromolaena odorata)*

Details

Description: A scrambling woody shrub to 3 metres (sometimes higher as a scrambling climber) with distinctive forked leaf venation and purple flush on new leaves. Siam produces clusters of mauve-white flowers in May-June and October.

Distribution: Siam weed is localised and common along the Herbert River from Abergowrie to Trebonne. Isolated infestations may occur on other catchments and locations.

Impacts: Siam weed can form dense thickets and outcompete native species and pasture in both disturbed and undisturbed sites.

Key projects: Siam weed outside of the Hebert River is a priority for management. The primary management objective is to prevent it establishing in other locations and catchments within the Hinchinbrook Shire.

Biosecurity obligations and legal requirements

Biosecurity obligations and legal requirements

Obligations relating to restricted matter

- Under the Act Siam weed must not be given away, sold, or released into the environment. Penalties apply.

Under the Regulation Siam weed may be disposed of by:

- Deep burial,
- Transporting to a waste facility securely (contact HSC on 07 4776 4740),
- Sealing the matter in plastic and leaving the matter in the sun until any vegetative material being disposed has decomposed.

General Biosecurity Obligation

The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with Act Slamweed under their control.

In the prevention zone	Contact HSC to report any suspect plants on 07 4776 4740. Wherever practical ensure agricultural and raw materials are sourced from a reliable supplier and are from Siam weed free area. .
In the asset protection zone	Undertake control works on known infestations in April prior to peak flowering period in May-June. Follow up control works during May-June to ensure any missed plants are controlled before they can produce seed. Do not disturb or remove soil and plant material from a known infestation location, even if no plants are visible. You are responsible for ensuring machinery and vehicles avoid known infestation areas or are appropriately washed down prior to leaving your property.

For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

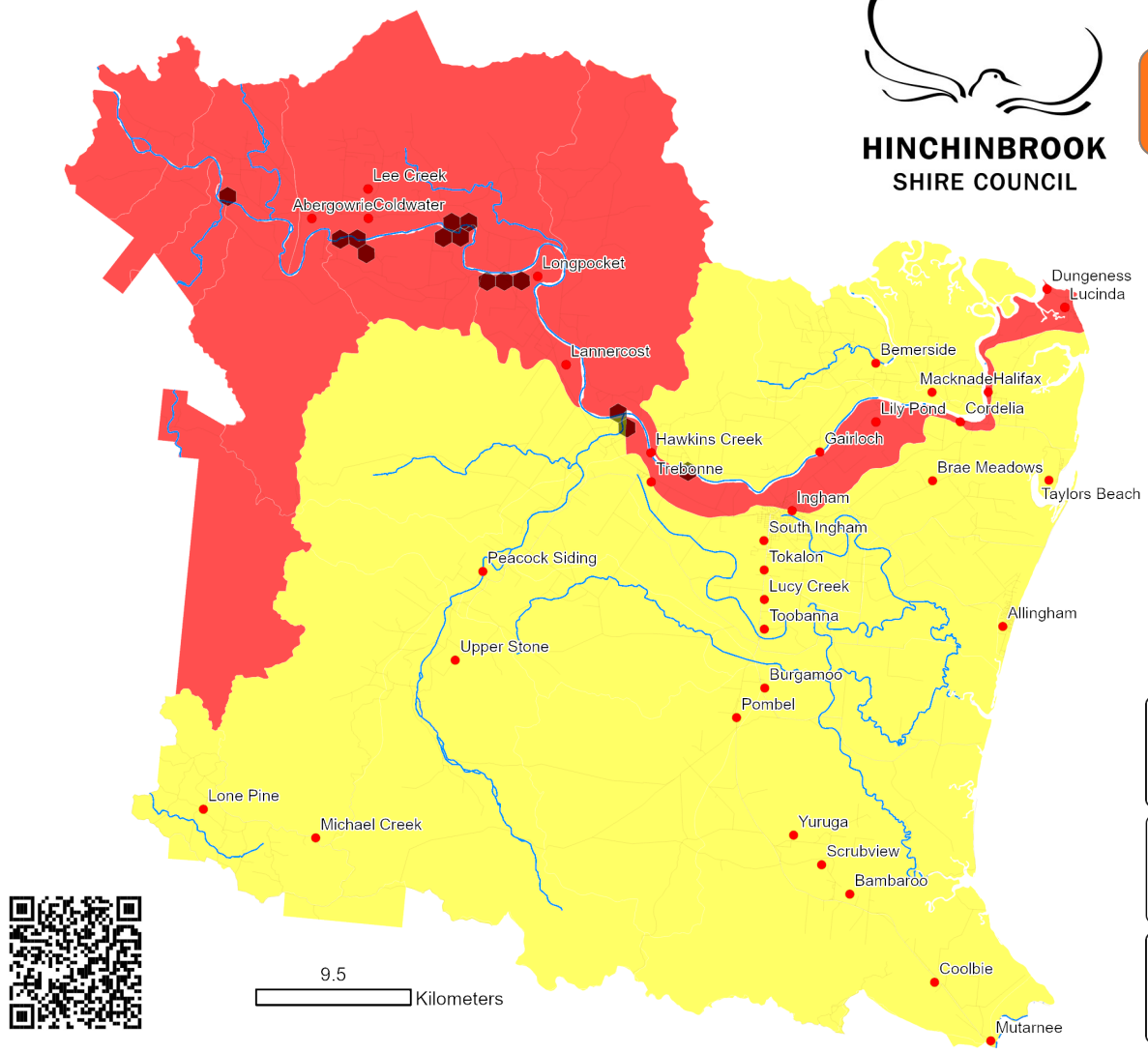
Siam weed (*Chromolaena odorata*)

Management objectives and actions

Biosecurity Act Restricted matter category

3
Do not distribute

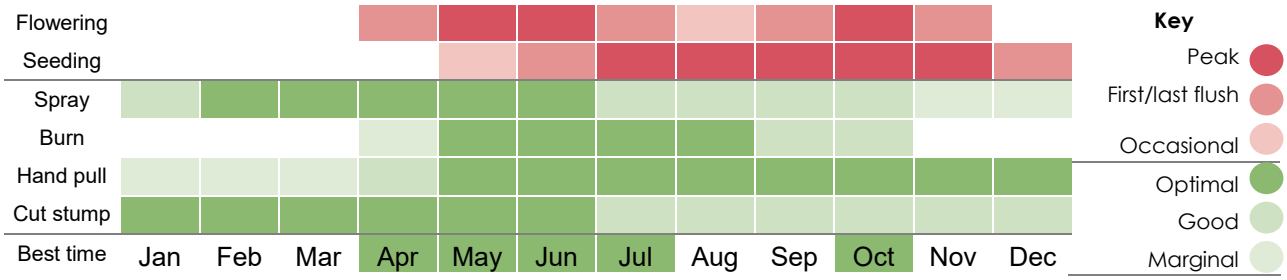
HINCHINBROOK SHIRE COUNCIL



Control

Spread

Prevention	Eradication	Containment	Asset protection



Pond Apple (*Annona glabra)*

Details

Biosecurity obligations and legal requirements

Description: Pond apple is a tall semi-deciduous shrub or tree reaching around 15m but usually 3-6 m. Pond apple is most likely to occur in wetlands and along waterways, but it may occur along beaches as well. Leaves are lighter below than above and have a green apple scent when crushed. The Large fruit is similar to a custard apple and are filled with floating seeds similar in size and shape to a pumpkin seed.

Distribution: A number of isolated infestations occur along the Palm Creek and Lower Herbert River systems. Seeds may be present on debris line of coastal beaches. Seeds can float on river and ocean currents.

Impacts: Pond apple is a highly invasive tree/shrub that can colonise and take over a wide range of wetland habitats. It forms dense thickets that exclude most native ground and shrub layer plants and prevents regeneration of trees.

Key projects: All known infestations are currently under an eradication program. Pond apple can be confused with several mangrove species so contact the council team on 07 4776 4740 to assist identify and plan your management response.

Biosecurity obligations and legal requirements

Obligations relating to restricted matter

Under the Act pond apple must not be given away, sold, or released into the environment. Penalties apply.
Under the Regulation Act pond apple may be disposed of by:

- Deep burial,
- Transporting to a waste facility securely (contact HSC 07 4776 4740),
- Sealing the matter in plastic and leaving the matter in the sun until any vegetative material being disposed has decomposed.

General Biosecurity Obligation

The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with Act pond apple under their control.

In the prevention zone	Contact HSC to report any suspect plants on 07 4776 4740.
In the eradication zone	Contact HSC to report any suspect plants on 07 4776 4740. Landowner's or occupiers can assist HSC by maintaining easy access to infestations and by assisting with control activities. You are required to control all identified pond apple plants on your property where practical to do so. You are responsible to ensure materials or products leaving your property are free from pond apple seed or plant material.

For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

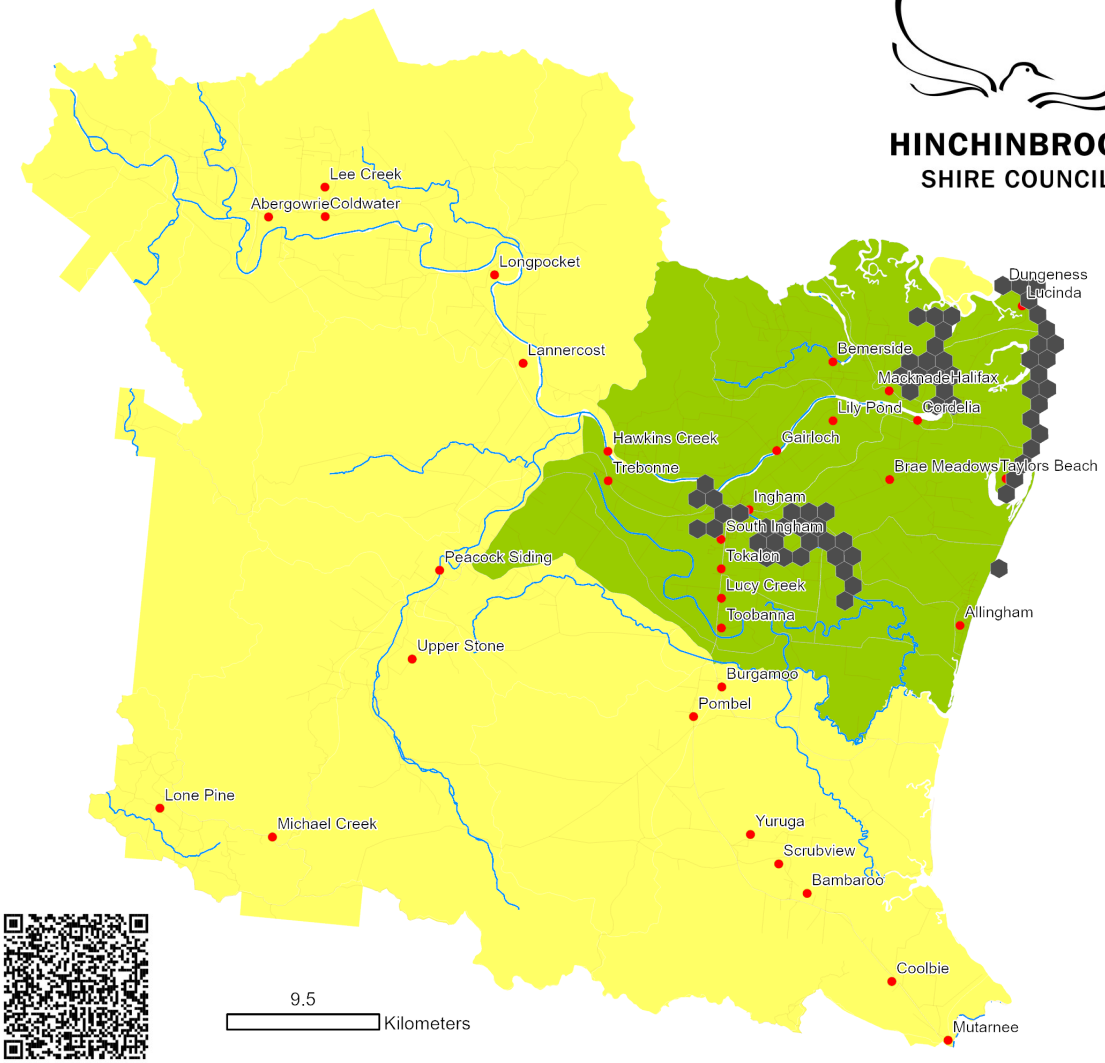
Pond Apple (*Annona glabra*)

Management objectives and actions

Biosecurity Act Restricted matter category

3
Do not distribute

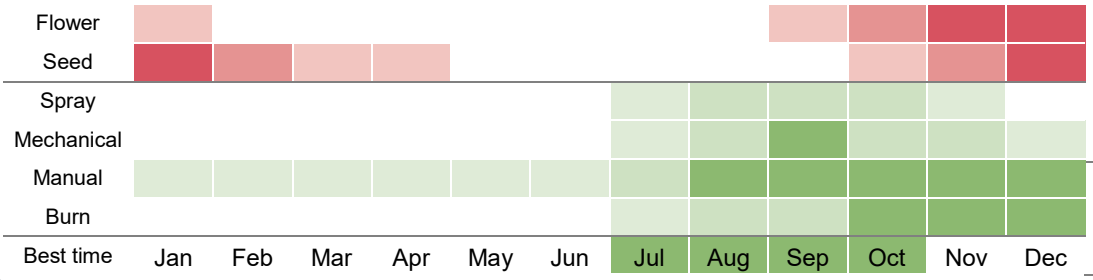
HINCHINBROOK SHIRE COUNCIL



Control

Spread

Prevention	Eradication	Containment	Asset protection



Redwood (*Acacia glauca*)

Details

Biosecurity obligations and legal requirements

Description: Is a small shrub or tree growing from 1.5 - 6m tall with reddish stems that producing clusters of white flowers and in turn a legume seed pod 4-8cm long. Can be confused with Leucaena or other acacia species. All non-native acacia species not currently present in Queensland are prohibited.

Distribution: Redwood occurs at a single location south of the Helens Hill truck stop area within the main road reserve.

Impacts: Like most introduced acacia species redwood can form dense thickets and outcompete native species and pastures. The seed is long lived.

Key projects: The single known infestation in the Helens Hill area is currently under an eradication program within the Hinchinbrook shire. The Biosecurity Act 2014 requires that any detection of this plant must be reported immediately, call Hinchinbrook Shire Council on 07 4776 4740.

Biosecurity obligations and legal requirements

Obligations relating to restricted matter

Under the Act redwood must not be kept, moved, given away, sold, or released into the environment. All sightings of Mikania vine must be reported.

General Biosecurity Obligation

The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with redwood under their control.

In the prevention zone	All persons are required to report plants they think may be Redwood within 24 hours to Hinchinbrook Shire Council on 07 4776 4740.
In the eradication zone	All persons are required to report plants they think may be Mikania vine within 24 hours to Hinchinbrook Shire Council on 07 4776 4740. Landowner's or occupiers can assist HSC by maintaining easy access to infestations and by assisting with control activities. Do not disturb or remove soil and plant material from a known infestation location, even if no plants are visible, until Hinchinbrook Shire Council on 07 4776 4740 You are responsible to ensure materials or products leaving your property are free from Redwood seed or plant material if your property has a known infestation location. You are responsible for ensuring machinery and vehicles avoid known infestation areas or undertake appropriate wash down procedures prior to leaving site.

For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

Redwood (*Acacia glauca*)

Management objectives and actions

Biosecurity Act Restricted matter category

- **2** Must be reported
- **3** Do not distribute
- **4** Do not move
- **5** Do not keep

Control

Spread

Prevention | **Eradication** | **Containment** | **Asset protection**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flowering												
Seeding												
Spray												
Cut stump												
Burn												
Best time												

Key

- Peak
- First/last flush
- Occasional
- Optimal
- Good
- Marginal

Salvinia (*Salvinia molesta*)

Details

Biosecurity obligations and legal requirements

Description: A floating fern with small, coarsely hairy oval leaves which repel water. As the plant matures it turns from bright green to brown and bunches up into tight rafts. Salvinia reproduces by rapidly dividing into smaller plants.

Distribution: A major weed of all river systems and connected wetlands in the lower Herbert. The heaviest infestations are in the Cattle, Palm and Trebonne Creek systems. It is commonly detected in water features, garden ponds, and aquariums.

Impacts: Salvinia floats on still or slow-moving water and can grow rapidly to cover the entire water surface with a thick mat of vegetation. The thick mat of vegetation shades out any submerged plant life and limits oxygen exchange, making the water unsuitable for fish and other animals.

Key projects: Long-term management projects and taking place in the Upper Cattle Creek, Palm Creek and TYTO Wetlands reserve. These and other locations are also controlled by strategic releases of the salvinia weevil which is an effective biological control agent.

Biosecurity obligations and legal requirements

Obligations relating to restricted matter

Under the Act salvinia must not be given away, sold, or released into the environment. Penalties apply.
Under the Regulation Act salvinia may be disposed of by:

- Deep burial,
- Transporting to a waste facility securely (contact HSC 07 4776 4740),
- Sealing the matter in plastic and leaving the matter in the sun until any vegetative material being disposed has decomposed.

General Biosecurity Obligation

The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with Act salvinia under their control.

In the prevention zone	Contact HSC to report any suspect plants on 07 4776 4740. You are responsible to know what you are buying online or at local markets to ensure you don't unintentionally introduce salvinia from a contaminated source. Remove and bag specimens from water features and contact HSC to arrange disposal on 07 4776 4740.
In the containment zone	Ensure soil or vegetation from known infestations is not moved from the site unless it is disposed of in accordance with the regulation. If you have salvinia in your possession do not share contaminated material including aquatic plants and do not dump garden pond or fish tank contents into waterways. You are responsible to know what you are selling online or at local markets to ensure you don't unintentionally spread salvinia.
In the asset protection zone	Ensure best practice weed hygiene and control measures are in place to reduce risk of spread to new locations. Maintain salvinia free areas. Identify high value assets and protect them from impacts where possible. If you have salvinia in your possession do not share contaminated material including aquatic plants and do not dump garden pond or fish tank contents into waterways. You are responsible to know what you are selling online or at local markets to ensure you don't unintentionally spread salvinia.

For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

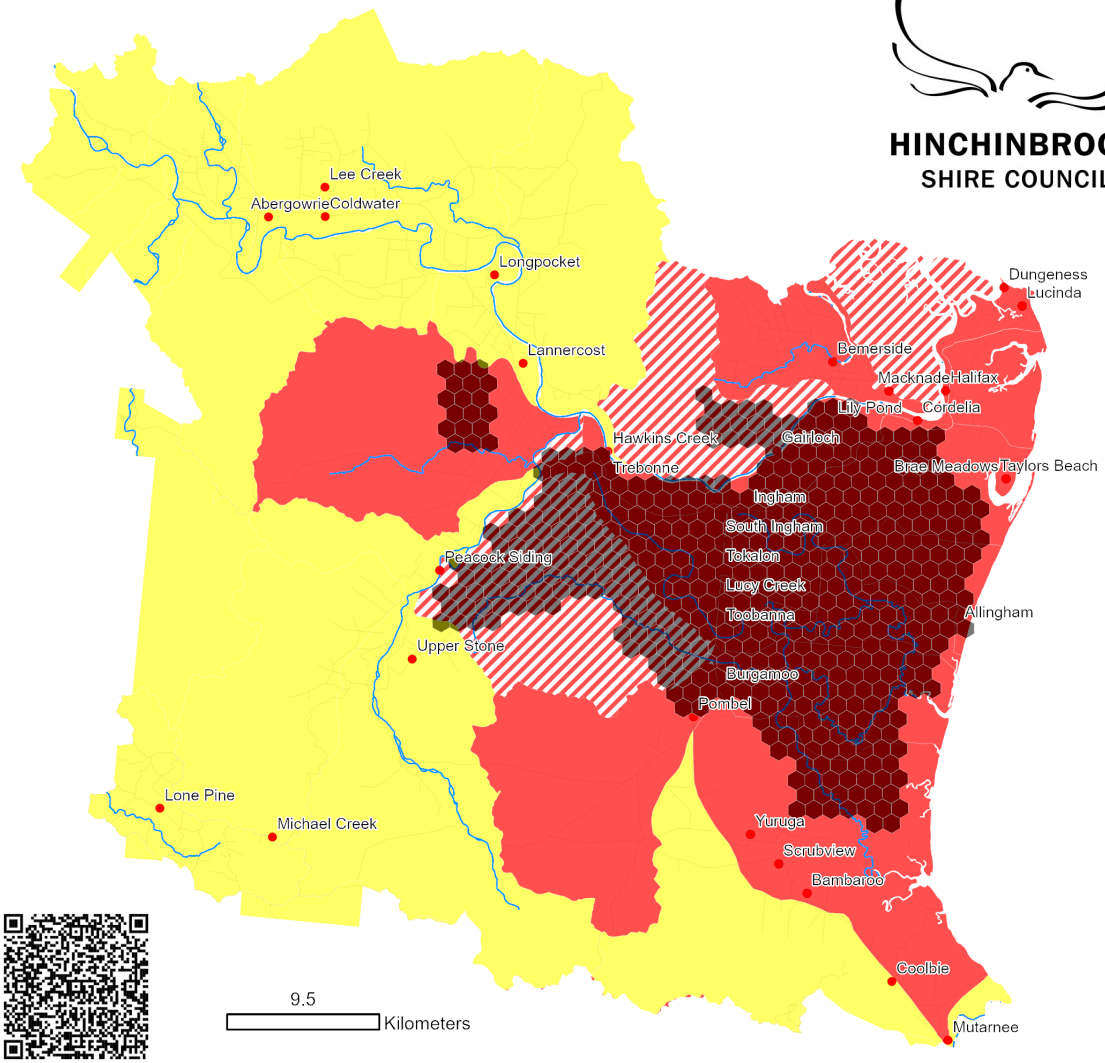
Salvinia (*Salvinia molesta*)

Management objectives and actions

Biosecurity Act Restricted matter category

3
Do not distribute

HINCHINBROOK SHIRE COUNCIL



Control

Spread

Prevention	Eradication	Containment	Asset protection

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Vegetative												
Spray												
Biocontrol												
Manual												
Best time												

Key

- Peak
- First/last flush
- Occasional
- Optimal
- Good
- Marginal

Sicklepod (*Senna obtusifolia)*

Details

Biosecurity obligations and legal requirements

Description: A vigorously growing, very competitive woody shrub to 1.5-2m tall and 1m wide. Normally an annual though plants that have been slashed or survive chemical application often re-shoot and survive another year. See can be viable for up to 10 years. Sicklepod generally grows as an annual. It forms dense stands in areas where seed was deposited in previous years.

Distribution: Common and widespread within the Hinchinbrook shire.

Impacts: Sicklepod can invade and completely dominate pastures. It becomes a major of crops within 2 or 3 seasons. Sicklepod will invade natural areas especially following disturbance. Areas subject to broad scale disturbance from event s like floods and fire can result in dense stands of sicklepod establishing.

Key projects: The ongoing control on council and main road reserves will continue as resources allows.

Biosecurity obligations and legal requirements

Obligations relating to restricted matter

Under the Act sicklepod must not be given away, sold, or released into the environment. Penalties apply.
Under the Regulation Act sicklepod may be disposed of by:

- Deep burial,
- Transporting to a waste facility securely (contact HSC 07 4776 4740),
- Sealing the matter in plastic and leaving the matter in the sun until any vegetative material being disposed has decomposed.

General Biosecurity Obligation

The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with Act sicklepod under their control.

In the prevention zone	Contact HSC to report any suspect plants on 07 4776 4740. Wherever practical ensure agricultural and raw materials are sourced from a reliable supplier and are from sicklepod free area. Identify and protect key assets such as pastures, crops and sensitive environmental areas.
In the asset protection zone	Undertake best practice control of infestations to protect high value areas Spell any stock in a holding paddock for at least 7 days before moving from known infestation areas. Ensure machinery are free from seeds and plant material prior to beginning works or moving to new locations. Boundaries, access tracks and roads should be treated annually to prevent spread to adjoining areas or neighbouring properties. Manage risk of spread from your property and protect priority assets using best practice methods to control infestations where practical to do so. You are responsible to ensure materials or products leaving your property are free from sicklepod seed or plant material.

For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

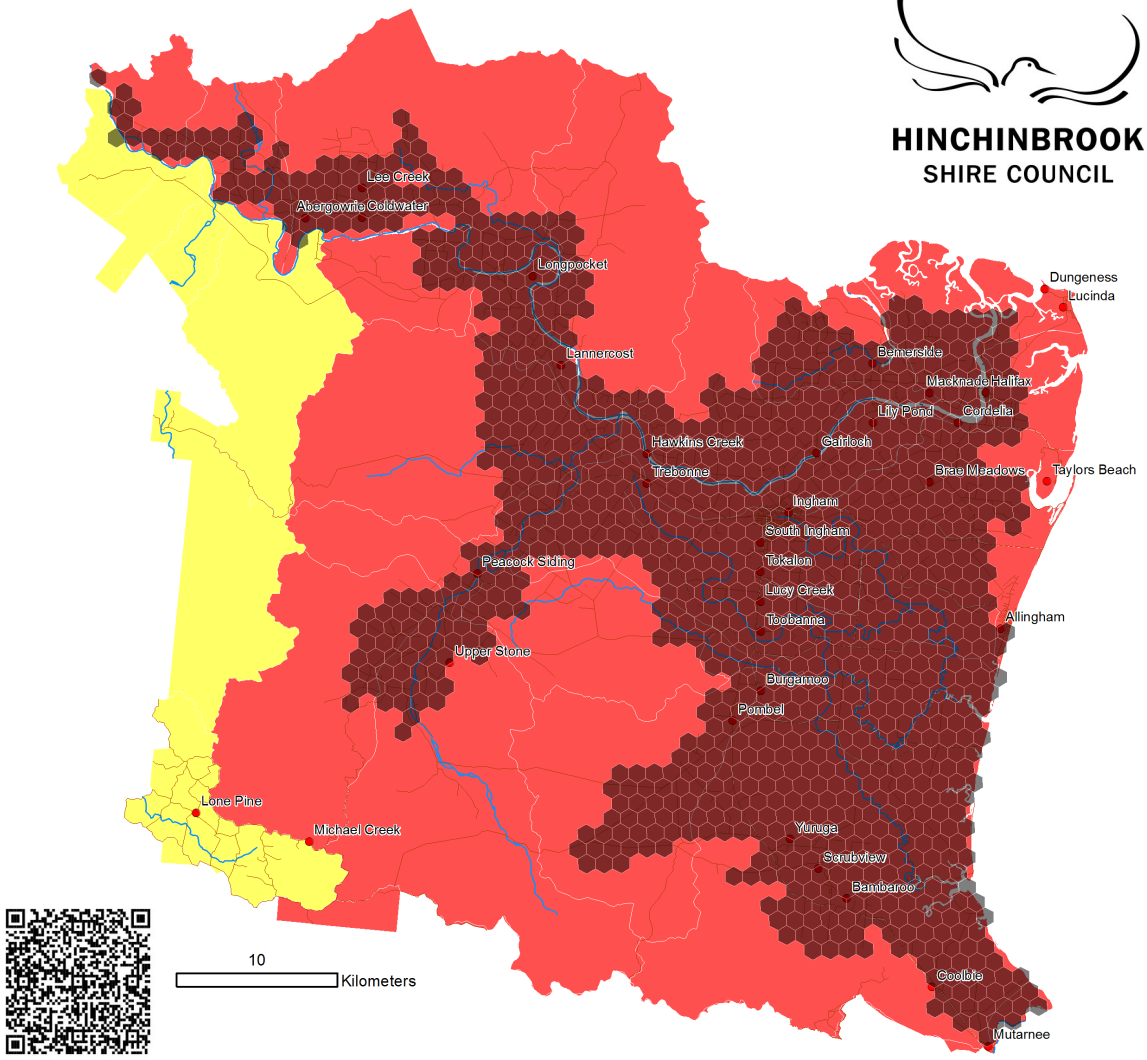
Sicklepod (*Senna obtusifolia*)

Management objectives and actions

Biosecurity Act Restricted matter category

3 Do not distribute

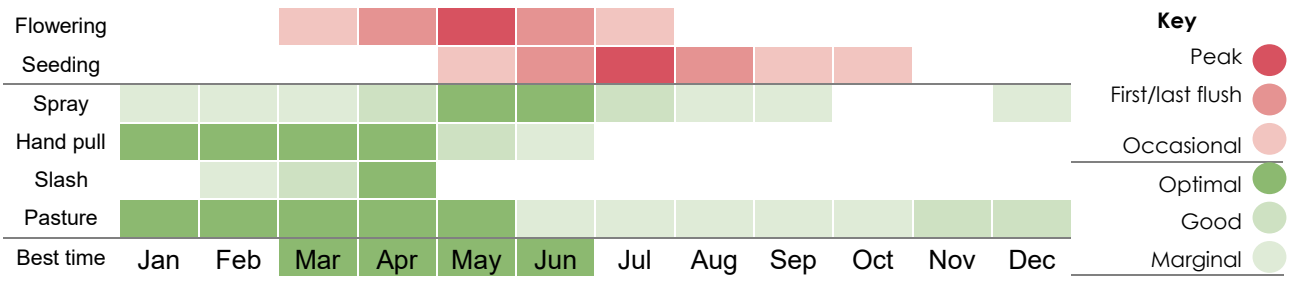
HINCHINBROOK SHIRE COUNCIL



Control

Spread

Prevention | **Eradication** | **Containment** | **Asset protection**



Rat's tail grasses (*Sporobolus* species)

Details

Biosecurity obligations and legal requirements

Description: A group of robust, upright perennial grasses 0.6 –1.7 metres tall. Flower spikes are about 40 cm long and transform from a distinctive dark 'rats tail' shape when young to an open pyramid when mature. Leaves are narrow and tough and can be rasp like to touch. Identification of weedy sporobolus grasses can be difficult. Outside of areas of know distribution a herbarium specimen should be collected to aid identification.

Distribution: An established weed across the drier regions of the tropics, rat's tail grasses are increasing in distribution into areas of the wet tropics, particularly along roadsides and in rangelands.

Impacts: A large stature species which can drastically outcompete desirable pastures. Unpalatable to stock causing selective over-grazing of native grasses. Is a major problem in over-stocked or disturbed systems. Invades creek lines and woodlands in drier savannah environments. Rat's tail grasses are well adapted to fire

Key projects: The protection of important environmental and agricultural assets is a high priority. Roadside management of this species is undertaken annual to prevent spread.

Biosecurity obligations and legal requirements

Obligations relating to restricted matter

Under the Act weedy Sporobolus must not be given away, sold, or released into the environment. Penalties apply.

Under the Regulation weedy Sporobolus may be disposed of by:

- Deep burial,
- Transporting to a waste facility securely (contact HSC 07 4776 4740),
- Sealing the matter in plastic and leaving the matter in the sun until any vegetative material being disposed has decomposed.

General Biosecurity Obligation

The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with Act weedy Sporobolus under their control.

In the prevention zone	Contact Hinchinbrook Shire Council to report any suspect plants on 07 4776 4740. Wherever practical ensure agricultural and raw materials are sourced from a reliable supplier and are from a grader grass free area. If introducing new stock spell in a holding paddock for at least 7 days before releasing into property.
In the asset protection zone	Do not cart, introduce or transport contaminated hay or silage. Undertake best practice control of infestations to protect high value areas. Ensure best practice weed hygiene measures are in place to reduce risk of spread to new locations. Maintain weed free areas. Control isolated plants before they seed. Regularly check for recruitment along tracks, fence lines and in areas adjacent to known infestations. Spell any stock in a holding paddock for at least 7 days before moving from areas that are either known to be, or may be, infested with the rat's tail grass.

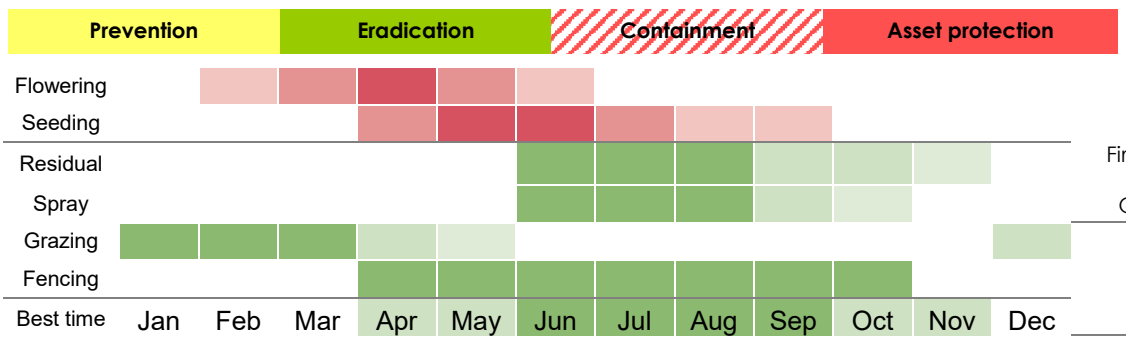
For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

Rat's tail grasses (*Sporobolus* species)

Management objectives and actions

Control

Spread



Singapore daisy (*Sphagneticola trilobata*)

Details

Biosecurity obligations and legal requirements

Description: A dense, low ground cover with lobed, glossy leaves and brown/maroon runners rooting wherever they contact the soil. Distinctive yellow daisy flowers are formed year-round. The plant spreads mainly from stem from fragments and runners.

Distribution: Singapore daisy has a limited distribution across the Hinchinbrook Shire.

Impacts: Singapore daisy forms dense mats smothering out native vegetation and pasture. The plant is allelopathic, releasing a toxin which inhibits the growth and germination of other plants.

Key projects: A targeted program using selective herbicides is underway to treat all known infestation within Hinchinbrook Shire area.

Biosecurity obligations and legal requirements

Obligations relating to restricted matter

Under the Act Singapore daisy must not be given away, sold, or released into the environment. Penalties apply.

Under the Regulation Singapore daisy may be disposed of by:

- Deep burial,
- Transporting to a waste facility securely (contact HSC 07 4776 4740),
- Sealing the matter in plastic and leaving the matter in the sun until any vegetative material being disposed has decomposed.

General Biosecurity Obligation

The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with Act Singapore daisy under their control.

In the prevention zone	Contact HSC to report any suspect plants on 07 4776 4740.
In the containment zone	Contact HSC to report any suspect plants on 07 4776 4740 Landowner's or occupiers can assist HSC by maintaining easy access to infestations and by assisting with control activities. Manage risk of spread from your property and protect priority assets using best practice methods to control infestations where practical to do so. If your property has an active infestation, make sure your green waste does not contain Singapore daisy and is disposed of in accordance with the regulation.

For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

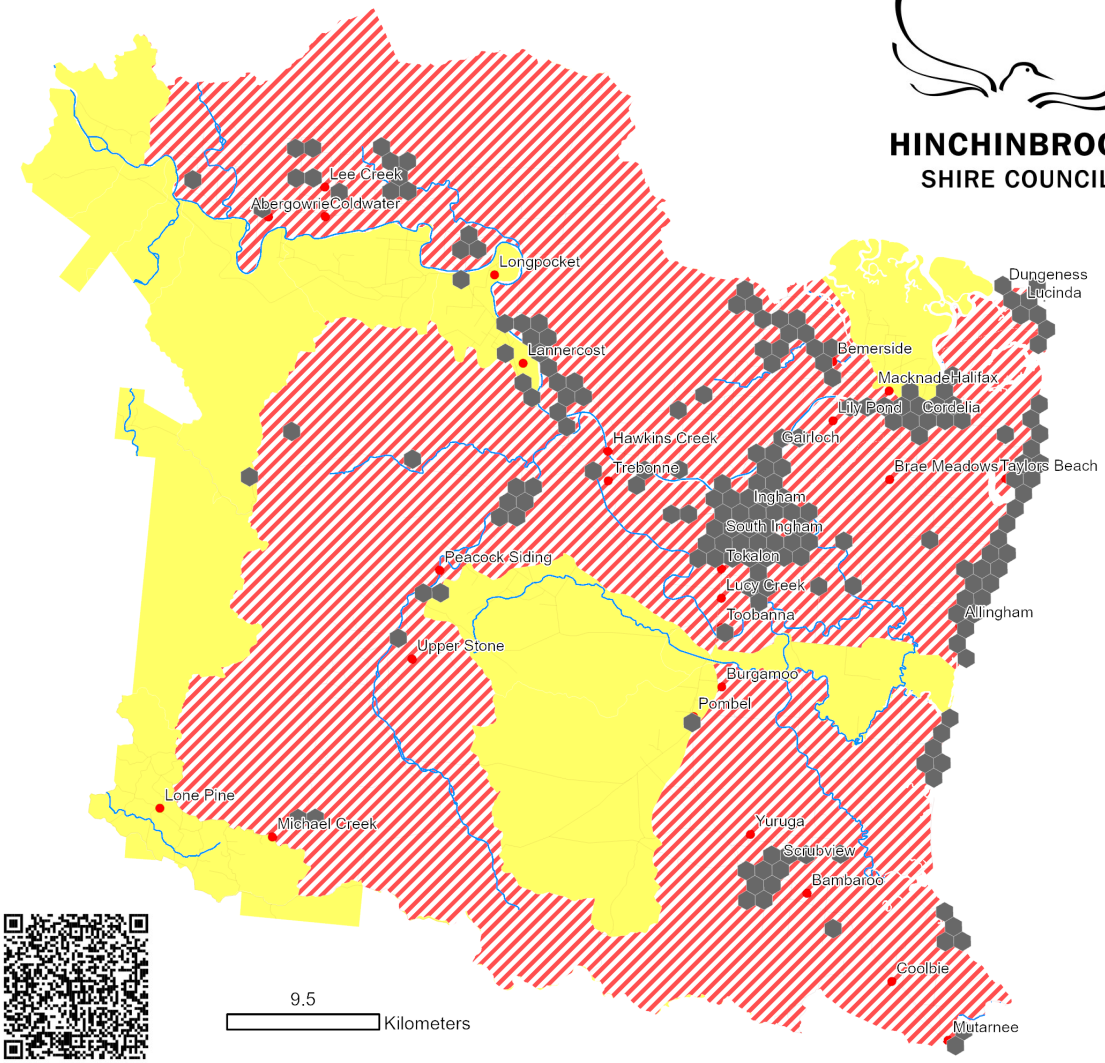
Singapore daisy (*Sphagneticola trilobata*)

Management objectives and actions

Biosecurity Act Restricted matter category

3
Do not distribute

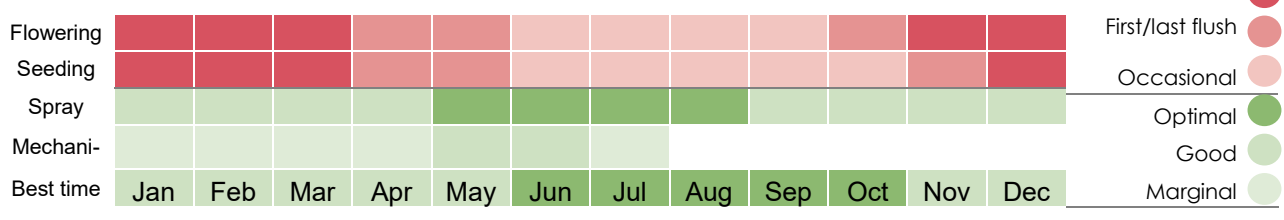
HINCHINBROOK SHIRE COUNCIL



Control

Spread

Prevention	Eradication	Containment	Asset protection



Thunbergia vine (*Thunbergia grandiflora)*

Details

Biosecurity obligations and legal requirements

Description: A rapidly growing vine which forms large underground tubers. Thunbergia climbs and smothers native vegetation. Thunbergia has lavender-blue trumpet shaped flowers. The leaves may vary from a choko-like shape to an oval with a narrow-pointed tip.

Distribution: There are a number of isolated infestations within the Hinchinbrook Shire . Many sites are in monitoring towards eradication. The main method of spread for Thunbergia vine has been through the sharing plants between gardeners so most infestations are associated with house gardens.

Impacts: This plant species climbs and smothers native vegetation, killing and often pulling down mature trees with the weight of the vine. It can have major impacts on waterways by destroying riparian vegetation.

Key projects: All known infestations are currently under an eradication program within the Hinchinbrook Shire. Landholders should report any instances of this vine when detected.

Biosecurity obligations and legal requirements

Obligations relating to restricted matter

Under the Act Thunbergia vine must not be given away, sold, or released into the environment. Penalties apply.
Under the Regulation Act Thunbergia vine may be disposed of by:

- Deep burial,
- Transporting to a waste facility securely (contact HSC 07 4776 4740),
- Sealing the matter in plastic and leaving the matter in the sun until any vegetative material being disposed has decomposed.

General Biosecurity Obligation

The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with Act Thunbergia vine under their control.

In the prevention zone	Contact HSC to report any suspect plants on 07 4776 4740.
In the eradication zone	Contact HSC to report any suspect plants on 07 4776 4740. Landowner's or occupiers can assist HSC by maintaining easy access to infestations and by assisting with control activities. If your property has an active infestation, make sure your green waste does not contain thunbergia and is disposed of in accordance with the regulation. You are required to control all identified Thunbergia vine plants on your property where practical to do so. You are responsible to ensure materials or products leaving your property are free from Thunbergia vine apple seed or plant material.

For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

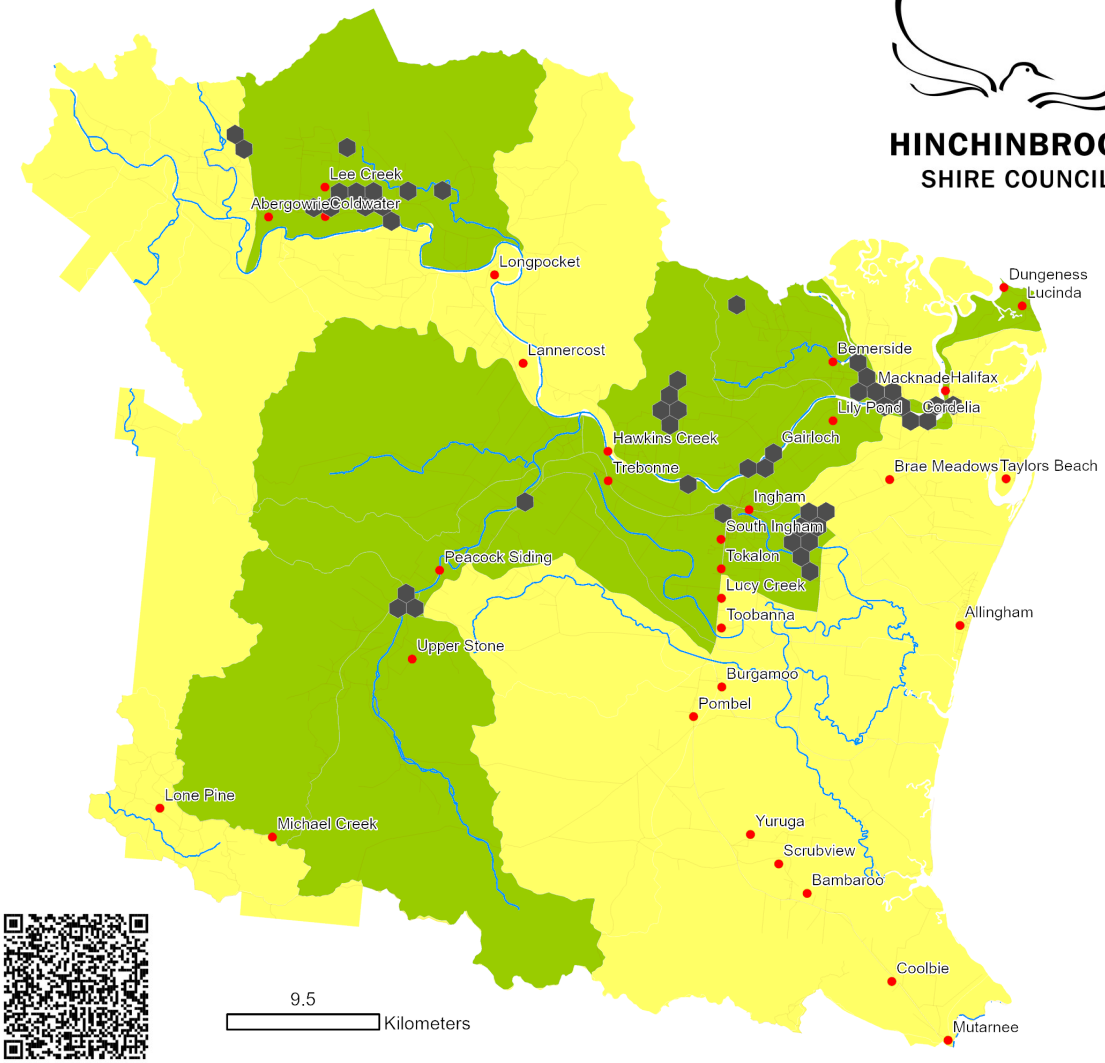
Thunbergia vine (*Thunbergia grandiflora*)

Management objectives and actions

Biosecurity Act Restricted matter category

3
Do not distribute

HINCHINBROOK SHIRE COUNCIL



Control

Spread

	Prevention	Eradication	Containment	Asset protection

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flowering	Peak	Peak	Peak	First/last flush					First/last flush	Peak	Peak	Peak
Seeding	First/last flush	First/last flush	First/last flush	First/last flush							First/last flush	First/last flush
Spray				Marginal	Good	Optimal	Optimal	Good	Marginal			
Chop	Optimal	Optimal	Occasional	Occasional	Occasional	Occasional	Occasional	Occasional	Occasional	Optimal	Optimal	Optimal
Hand pull	Optimal	Optimal	Optimal	Marginal	Occasional						Marginal	Marginal
Cut stump	Marginal	Marginal	Marginal	Marginal	Good	Good	Good	Good	Good	Marginal	Marginal	Marginal
Best time												

Key
- Peak
- First/last flush
- Occasional
- Optimal
- Good
- Marginal

Water hyacinth (*Eichhorinia crassipes*)

Details

Biosecurity obligations and legal requirements

Description: A free floating aquatic herb with glossy, spoon shaped leaves and distinctive purple/lilac flowers. Water hyacinth forms dense blankets over waterways and wetlands. A similar native species occurs but can be distinguished by its yellow flowers and spear-shaped leaves.

Distribution: A major weed of all river systems and connected wetlands in the lower Herbert. The heaviest infestations are in the Cattle, Palm and Trebonne Creek systems.

Impacts: It floats on still or slow-moving water and can grow rapidly to cover the entire water surface with a thick mat of vegetation. Water hyacinth shades out any submerged plant life and limits oxygen exchange, making the water unsuitable for fish and other animals.

Key projects: long term management projects are taking place in the Upper Cattle Creek, Palm Creek and TYTO Wetlands reserve.

Biosecurity obligations and legal requirements

Obligations relating to restricted matter

Under the Act water hyacinth must not be given away, sold, or released into the environment. Penalties apply. Under the Regulation water hyacinth may be disposed of by:

- Deep burial,
- Transporting to a waste facility securely (contact HSC 07 4776 4740),
- Sealing the matter in plastic and leaving the matter in the sun until any vegetative material being disposed has decomposed.

General Biosecurity Obligation

The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with Act water hyacinth under their control.

In the prevention zone	Contact HSC to report any suspect plants on 07 4776 4740. You are responsible to know what you are buying online or at local markets to ensure you don't unintentionally introduce water hyacinth from a contaminated source. Be responsible and do not dump garden pond or fish tank contents into waterways.
In the containment zone	Remove and bag specimens from water features and contact HSC to arrange disposal on 07 4776 4740. Ensure soil or vegetation from known infestations is not moved from the site unless it is disposed of in accordance with the regulation. If you have water hyacinth in your possession do not share contaminated material including aquatic plants and do not dump garden pond or fish tank contents into waterways. You are responsible to know what you are selling online or at local markets to ensure you don't unintentionally spread water hyacinth .
In the asset protection zone	Undertake best practice control of infestations to protect high value areas. Ensure soil or vegetation from known infestations is not moved from the site unless it is disposed of in accordance with the regulation. If you have water hyacinth in your possession do not share contaminated material including aquatic plants and do not dump garden pond or fish tank contents into waterways. You are responsible to know what you are selling online or at local markets to ensure you don't unintentionally spread water hyacinth.

For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

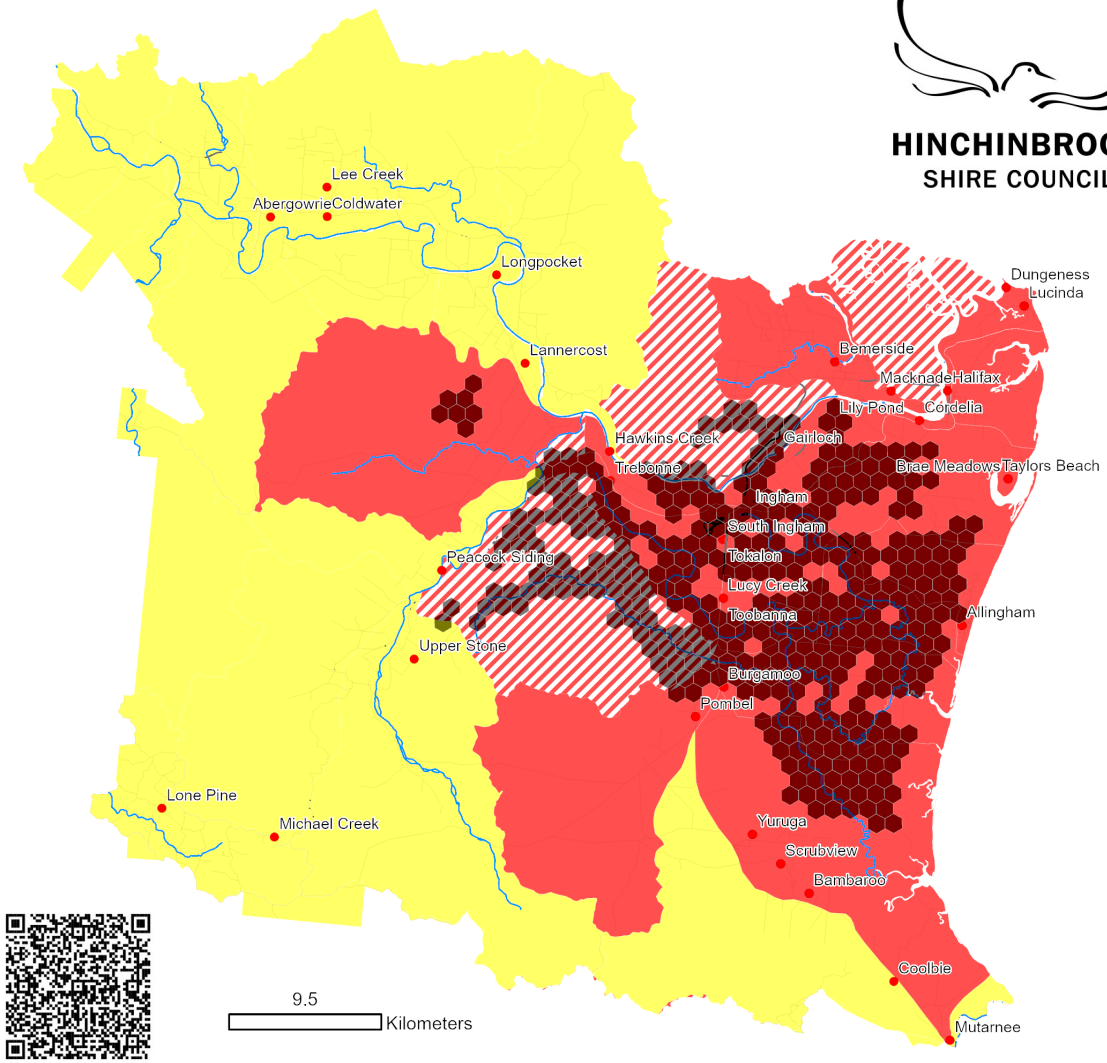
Water hyacinth (*Eichhorinia crassipes*)

Management objectives and actions

Biosecurity Act Restricted matter category

3
Do not distribute

HINCHINBROOK SHIRE COUNCIL



Control

Spread

Prevention	Eradication	Containment	Asset protection

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flowering												
Vegetative												
Seeding												
Spray												
Manual												
Biocontrol												
Best time												

Key

- Peak
- First/last flush
- Occasional
- Optimal
- Good
- Marginal

Chital deer (*Axis axis*)

Details

Biosecurity obligations and legal requirements

Description: A short stature deer with distinctive white spots (or broken lines) with large tail and prominent white throat. Stags stand to 90cm at the shoulder with a three tined antler.

Distribution: Any population of Chital deer not contained within a deer proof enclosure are considered feral animals under legislation. Chital are on the move northwards up the western side of the great divide. Isolated populations and sightings are recorded from the Mt Fox region. They prefer dry monsoon habitats which in Australia includes the tropical savannah.

Impacts: Feral deer are heavy browsers and grazers and can cause significant local impacts. They compete with stock and wildlife for food and water resources . They can compete with domestic stock for pasture, damage fences, and reduce the profitability of pastoral and agricultural industries.

Key projects: There are currently no targeted programs underway.

Biosecurity obligations and legal requirements

Obligations relating to restricted matter

Under the Act you must not move, feed, keep, give away, sell or release rabbits into the environment. Penalties may apply.

General Biosecurity Obligation
The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with dealing with rabbits under their control.

In delimitation zone	Report any sightings or detections of rabbits to Hinchinbrook Shire on 07 4776 4607 Where possible take a photograph to aid identification
In prevention zone	Report any sightings or detections of rabbits to Hinchinbrook Shire on 07 4776 4607 Report any suspected outbreaks or detections to Hinchinbrook Shire on 07 4776 4607. Where possible take a photograph to confirm identification. Maintain fencing and enclosures.

For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

Chital deer (*Axis axis*)

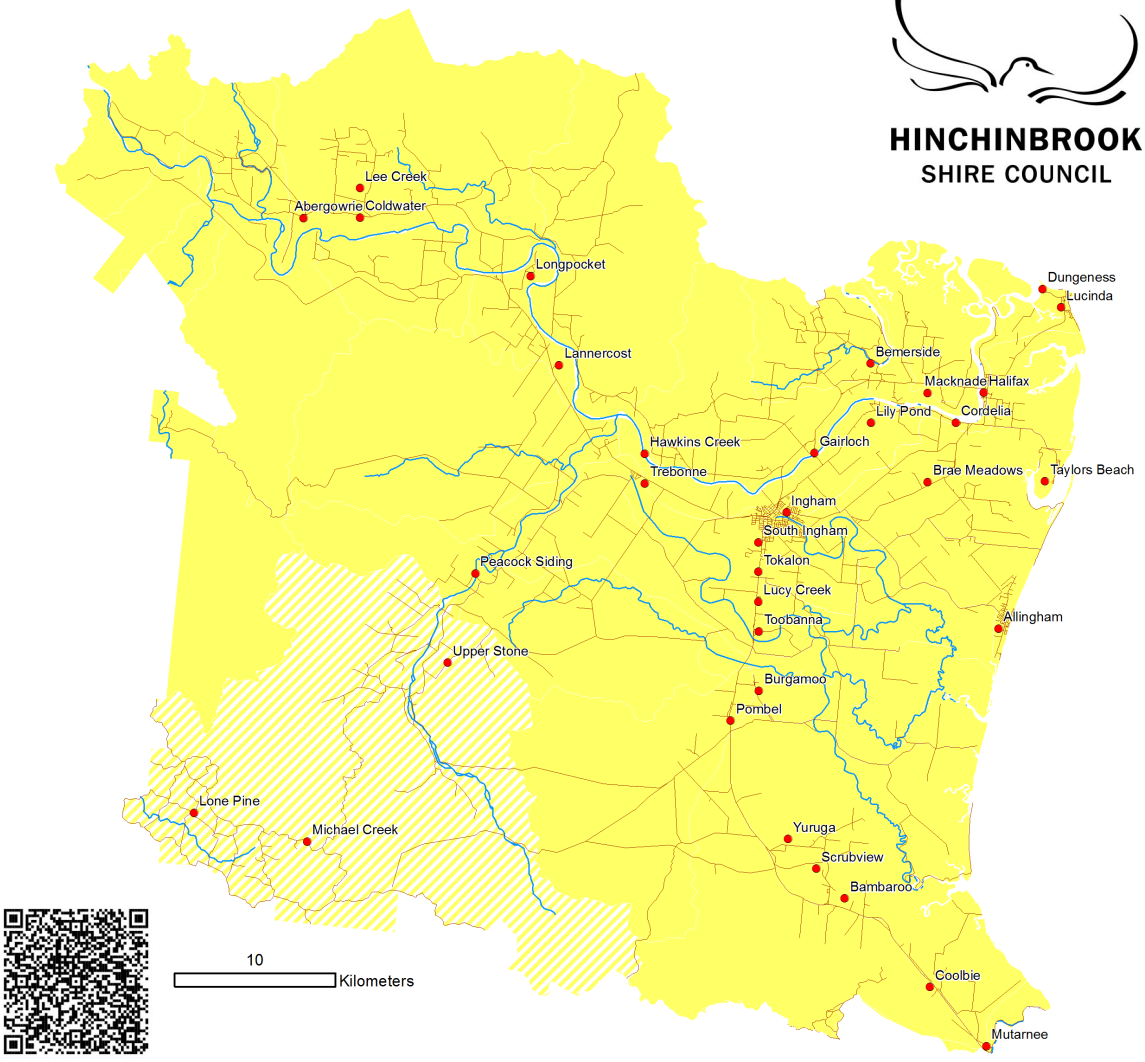
Management objectives and actions

Biosecurity Act Restricted matter category

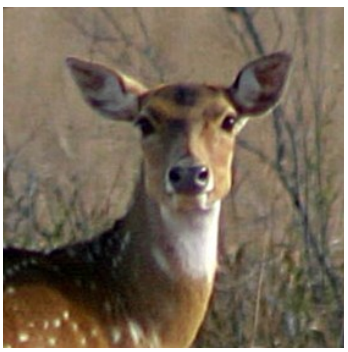
3 Do not distribute

4 Do not move

6 Do not feed



Control



Prevention	Eradication	Containment	Asset protection

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Breed												
Fawns												
Trap												
Shoot												
Fence												
Best time												

Key

- Peak
- First/last flush
- Occasional
- Optimal
- Good
- Marginal

Feral Goat *(Capra hircus)*

Details

Description: Feral goats are typically descended from angora and cashmere breeds which were introduced as livestock or as a wild food source. Coloration varies from white to brown to black.

Distribution: Isolated populations have occurred in the past on Pelorus and Orpheus Islands but these populations are now in monitoring towards eradication. Feral goats may also occur in the Herbert Gorge and Mt Fox region

Impacts: Feral goats can cause major agricultural and environmental damage through browsing, grazing and subsequent erosion. They compete with domestic stock for pasture, damage fences, and reduce the profitability of pastoral and agricultural industries.

Key projects: A targeted eradication program led Hinchinbrook Shire Council is underway on Pelorus Island. A long established population of feral goats on the island has led to soil erosion and vegetation loss. The goats are likely to have been introduced in the 1800's as a source of meat and milk by sailors.

Biosecurity obligations and legal requirements

Biosecurity obligations and legal requirements

Obligations relating to restricted matter

Under the Act you must not move, feed, give away, sell or release feral goats into the environment. Penalties may apply.

General Biosecurity Obligation

The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with dealing with feral goats under their control.

In the prevention zone	Report any suspected sightings of feral goats to Hinchinbrook Shire on 07 4776 4607. Do not release unwanted stock into the wild. Follow instructions and management signage if visiting offshore islands.

For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

Feral Goat *(Capra hircus)*

Management objectives and actions

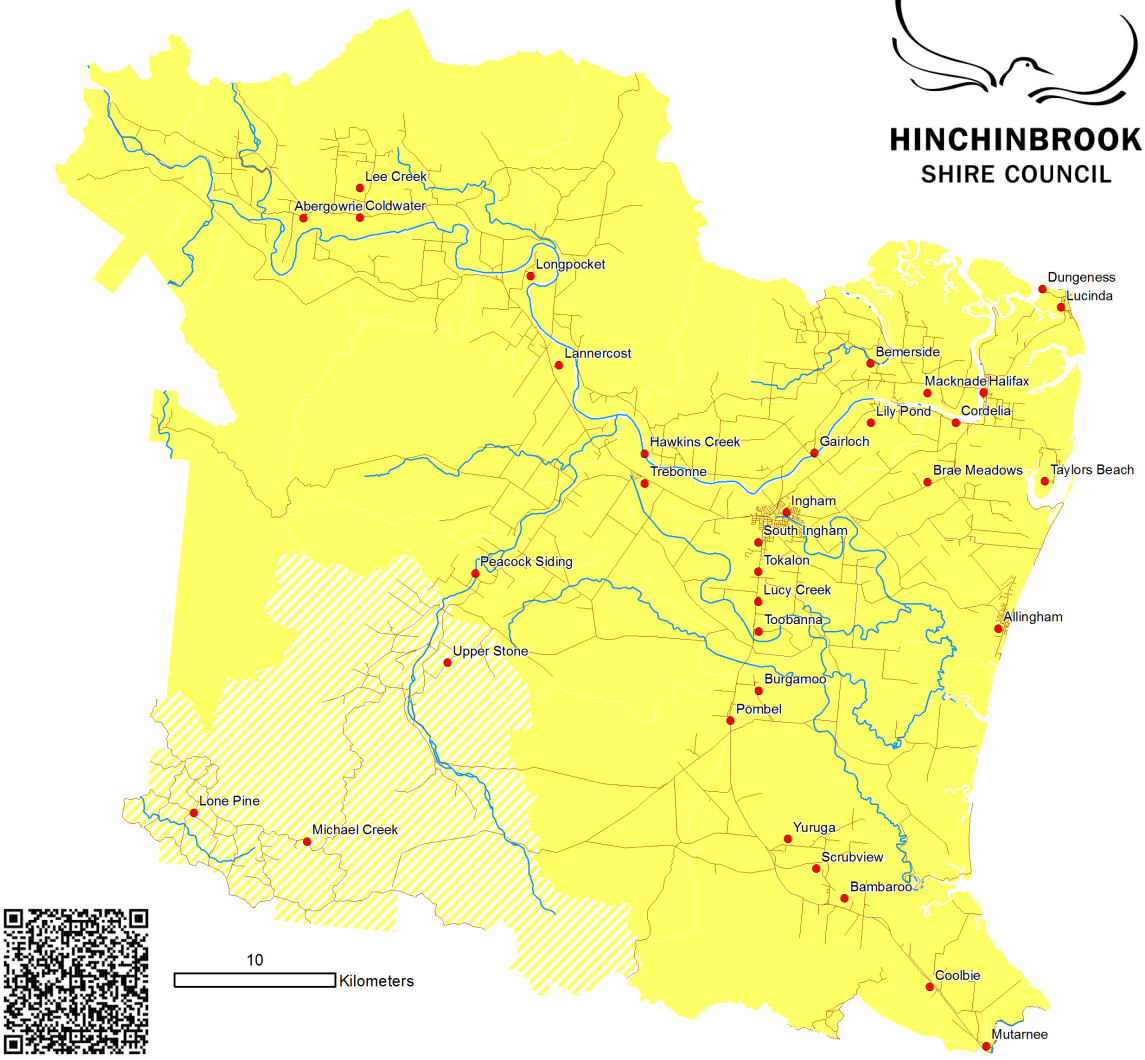
Biosecurity Act Restricted matter category

3 Do not distribute

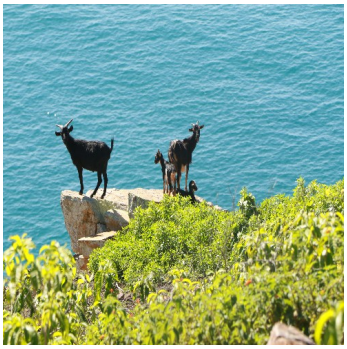
4 Do not move

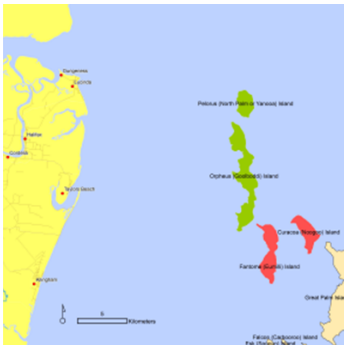
6 Do not feed

HINCHINBROOK SHIRE COUNCIL



Control





Prevention | **Eradication** | **Containment** | **Asset protection**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Breeding												
Kids												
Trap												
Shoot												
Fence												
Best time												

Key

- Peak
- First/last flush
- Occasional
- Optimal
- Good
- Marginal

Feral Pig (*Sus scrofa*)

Details

Biosecurity obligations and legal requirements

Description: Feral pigs include all pigs that are not domesticated and living in a wild state. They are generally nocturnal, and camp in thick cover during the day. Feral pigs are omnivorous and can range from 5 to 50 square kilometres. They breed throughout the year often producing two weaned litters annually.

Distribution: Except for some of the Shires' GBR islands, feral pigs are found across the entire Hinchinbrook local government area.

Impacts: Feral pigs damage crops, stock, property and the natural environment. They transmit disease and could spread exotic diseases, such as African swine fever, if introduced to the country.

Key projects: The Hinchinbrook Community Feral Pig Management Program is an ongoing trapping, baiting and shooting operation across the Hinchinbrook Shire Council Area. The program targets the protection of agricultural and urban assets (marked orange).

Biosecurity obligations and legal requirements

Obligations relating to restricted matter

Under the Act you must not move, feed, give away, sell or release feral pigs into the environment. Penalties may apply.

General Biosecurity Obligation

The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with dealing with feral pigs under their control.

In the asset protection zone

Landholders wishing to participate in the Hinchinbrook Community Feral Pig Management Program should contact Hinchinbrook Shire Council on 07 4776 4600.

The is an ongoing trapping, baiting and shooting operation across the Hinchinbrook Shire Council Area. The program targets the protection of agricultural and urban assets (marked orange).

The program also assists to reduce the impacts of feral pigs on the natural environment by targeting trapping programs and aerial shooting in the wetland systems on the coastal margin (marked green). These programs have the added benefit of protecting marine turtle nesting sites on the beaches.

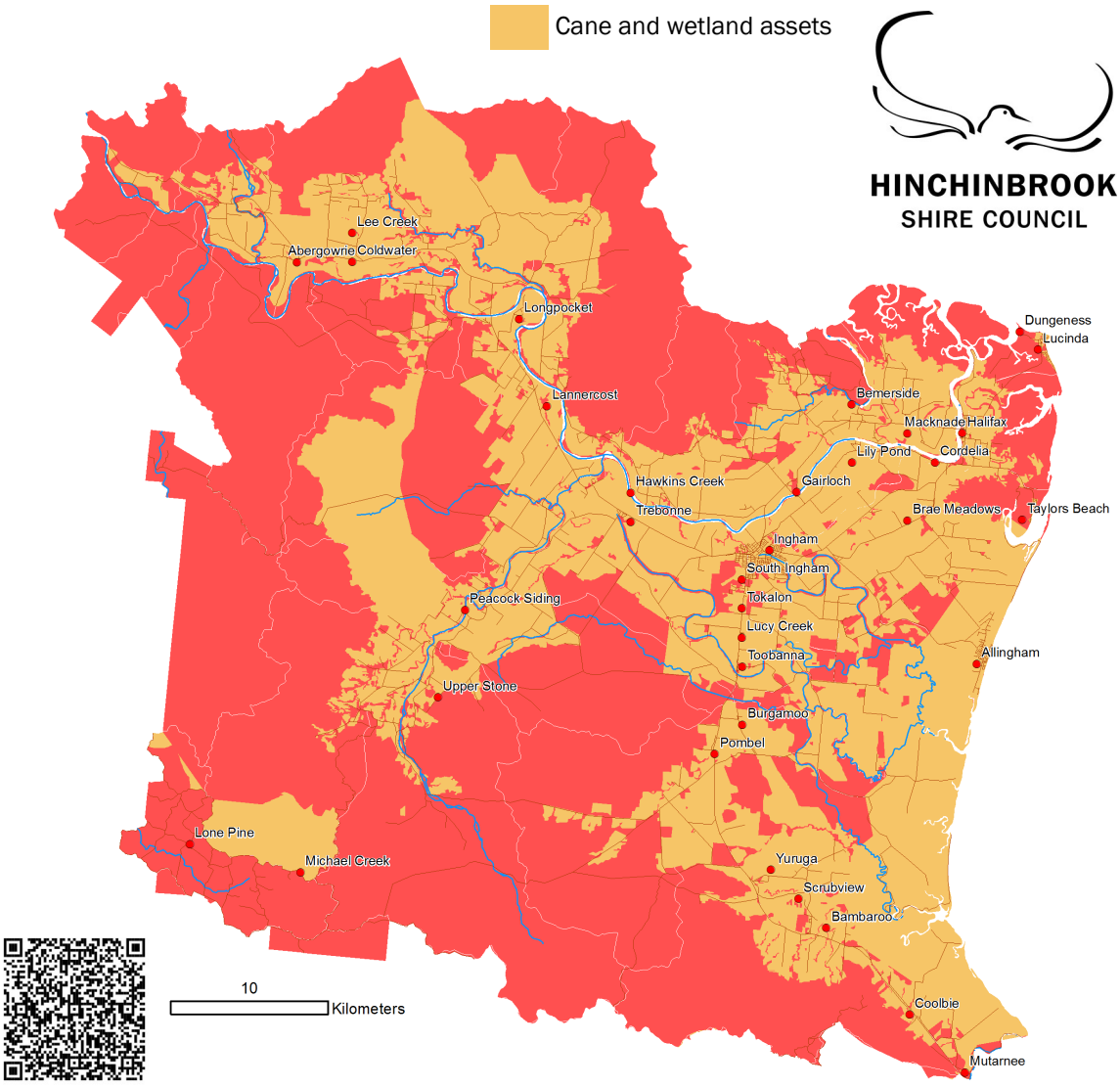
For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

Feral Pig (*Sus scrofa*)

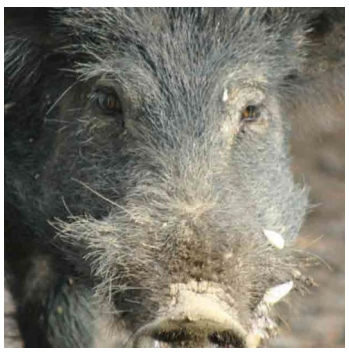
Management objectives and actions

Biosecurity Act Restricted matter category

- **3** Do not distribute
- **4** Do not move
- **6** Do not feed



Control



Prevention	Eradication	Containment	Asset protection

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Breeding												
Piglets												
Trap												
Shoot												
Bait												
Fence												
Best time												

Key

- Peak
- First/last flush
- Occasional
- Optimal
- Good
- Marginal

Rabbit (*Orictolagus cuniculus*)

Details

Description: Grey brown with a pale belly. Long hind legs and short front legs with large ears and dark eyes. Can also be black, white or ginger. Rabbits in be derived from wild or domestic stock.

Distribution: Isolated populations occur in the Mount Fox area and are possibly expanding their range. Distribution elsewhere in the region is uncertain but needs to be established in order to guide the next steps for management.

Impacts: Rabbits cause destruction of native vegetation with subsequent erosion of these areas. They also provide competition for food and shelter with native animals.

Key projects: An ongoing control and monitoring project of a small population in the Mount Fox area is continuing , distribution through the remainder of the shire is uncertain. Rabbits cannot be kept as pets or raised for meat in the state of Queensland.

Biosecurity obligations and legal requirements

Biosecurity obligations and legal requirements

Obligations relating to restricted matter

Under the Act you must not move, feed, keep, give away, sell or release rabbits into the environment. Penalties may apply.

General Biosecurity Obligation

The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with dealing with rabbits under their control.

In prevention zone	Report any sightings or detections of rabbits to Hinchinbrook Shire on 07 4776 4607
In eradication zone	Report any sightings or detections of rabbits to Hinchinbrook Shire on 07 4776 4607 Ensure best practice control measures are in place to reduce risk of spread to new locations. Maintain rabbit free areas. Identify high value assets and protect them from impacts where possible. Remove rabbit harbour by cleaning up rubbish and debris in impacted areas.

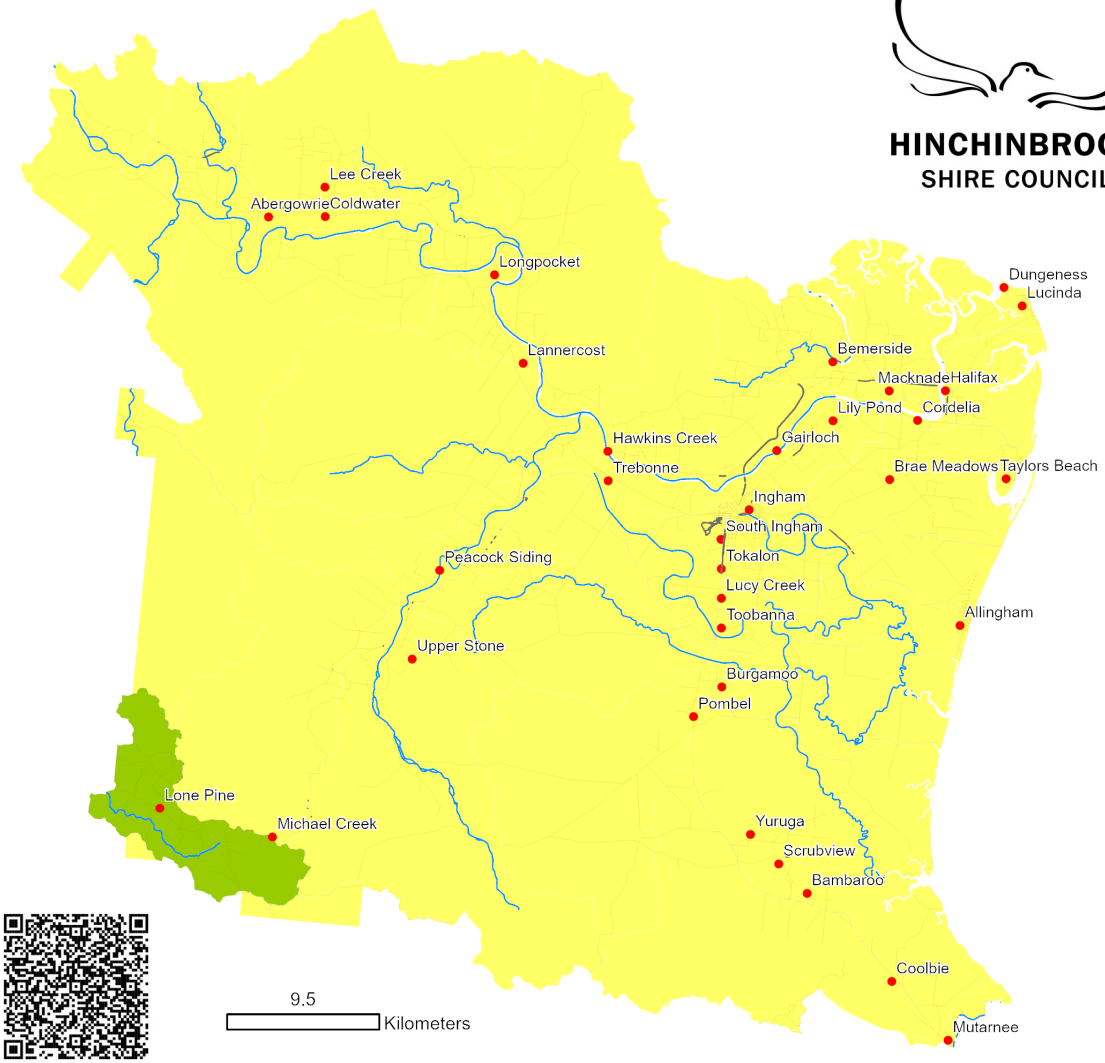
For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

Management objectives and actions

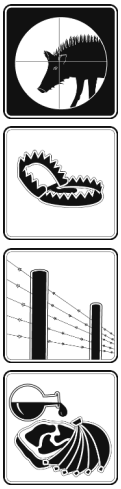
Biosecurity Act Restricted matter category

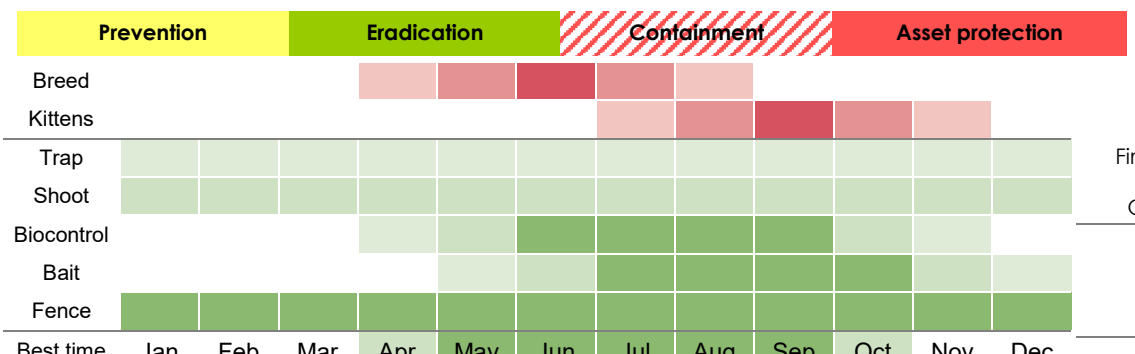
- **3** Do not distribute
- **4** Do not move
- **5** Do not keep
- **6** Do not feed

HINCHINBROOK SHIRE COUNCIL



Control





Tilapia (*Oreochromis mossambicus*)

Details

Biosecurity obligations and legal requirements

Description: Two species of Tilapia are established in Queensland the Mozambique tilapia (*Oreochromis* mossambicus) and the spotted tilapia *(Pelmatolapia mariae).* Mozambique tilapia Grows to more than 36cm and lives up to 13 years. Usually dark grey or almost black but can be silver with 2–5 dark blotches/ spots on the side. Breeding males can have red tips on their fins. Deep-bodied with a thin profile and long pointed fins. Mozambique tilapia are mouth brooders – females protect eggs and larvae from predators by holding them in their mouths. Males build large circular breeding nests in soft silt or muddy substrate. Spotted tilapia lay their eggs on hard substrate

Distribution: The Mozambique tilapia has established in the Upper Herbert River and subsequently spread downstream to the lower catchment.

Impacts: Tilapia can survive environments where native fish find coping difficult and can rapidly outnumber native fish and dominate aquatic communities. They can tolerate saline water allowing them to retreat to lower stream reaches during dry seasons.

Key projects: Awareness and education is essential to prevent spread to new catchments within the Hinchinbrook Shire area.

Biosecurity obligations and legal requirements

Obligations relating to restricted matter

Tilapia is a restricted noxious fish under the *Biosecurity Act 2014*.
Under the Act you must not move, keep, feed, give away, sell or release Tilapia into the environment. Penalties may apply. If you catch these species, you must immediately humanely kill and dispose of them by burying them above the high-water mark or disposing of them in a nearby bin.

General Biosecurity Obligation

The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with dealing with rabbits under their control.

In delimitation zone	Report any sightings or detections of Tilapia to Hinchinbrook Shire on 07 4776 4607. Where possible take a photograph to aid identification
In prevention zone	Most new infestations are caused by human-assisted translocation (movement of live fish). This includes private dam stocking and moving tilapia between catchments to use as bait. Obtain a permit to stock fish. Buy fingerlings from a registered hatchery to minimise the chance of contamination with undesirable species. Know how to identify tilapia and report any suspected sightings to Council on 07 4776 4607.
In the asset protection zone	You cannot use tilapia or any other invasive fish as bait. These fish must not be returned to the water dead or alive. If you catch Tilapia , you must immediately humanely kill and dispose of them by burying them above the high-water mark or disposing of them in a nearby bin. Don't transfer invasive fish between waterways. Prevent unwanted hitchhikers—check, clean and dry your boats and gear between waterways to prevent spread of weed with tilapia eggs or juveniles attached.

For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

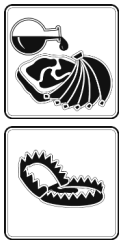
Tilapia (*Oreochromis mossambicus*)

Management objectives and actions

Biosecurity Act Restricted matter category

- **3** Do not distribute
- **5** Do not keep
- **6** Do not feed
- **7** Kill and dispose

Control



Spread

Prevention | **Eradication** | **Containment** | **Asset protection**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Breeding	Peak	Peak	Peak	Peak	Peak	First/last flush	First/last flush	First/last flush	First/last flush	Peak	Peak	Peak
Larvae	Peak	Peak	Peak	Peak	Peak	First/last flush	First/last flush	First/last flush	First/last flush	Peak	Peak	Peak
Trap	Occasional	Occasional	Occasional	Occasional	Occasional	Optimal	Optimal	Optimal	Optimal	Occasional	Occasional	Occasional
Poison				Optimal	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal	Optimal	
Best time												

Key

- Peak
- First/last flush
- Occasional
- Optimal
- Good
- Marginal

Wild dog (*Canis lupis familiaris*)

Details

Description: Wild dogs include dingoes, wild domestic dogs and hybrids

Distribution: Wild dogs are widespread in both the agricultural and natural landscape. They also frequently exist on the outskirts of towns and even within urban areas.

Impacts: Wild dogs can cause stock losses in calving season. They also often carry parasites and pathogens. Near towns they can cause nuisance and impact on domestic animals.

Key projects: In urban and settled areas Hinchinbrook Shire Council will respond to individual issues as they arise on a case-by-case basis. Wild dogs are generally not aggressive to people however they may display threatening behaviour in urban areas such as attacking domestic dogs, scavenging, or stalking. HSC undertakes a bi-annual 1080 baiting program.

Biosecurity obligations and legal requirements

Biosecurity obligations and legal requirements

Obligations relating to restricted matter

Under the Act you must not move, keep, feed, give away, sell or release wild dogs into the environment. Penalties may apply.

- The biosecurity plan does not include management of straying or problematic domestic dogs (including hunting dogs). These animals are domestic animals and are managed in accordance with Hinchinbrook Shire Councils Local Laws.
- For domestic dog queries contact Council on 07 4776 4740

General Biosecurity Obligation

The Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with dealing with wild dogs under their control.

In the asset protection zone	Domestic pets and poultry are best protected by dog mesh fencing. Fencing also restrains your domestic animals and may assist in preventing other animals such as wallabies or pigs entering your property. If you have grazing animals, then targeting control activities to reduce wild dog numbers prior to calving is the best way to reduce impacts. Property managers should coordinate control activities with neighbours.

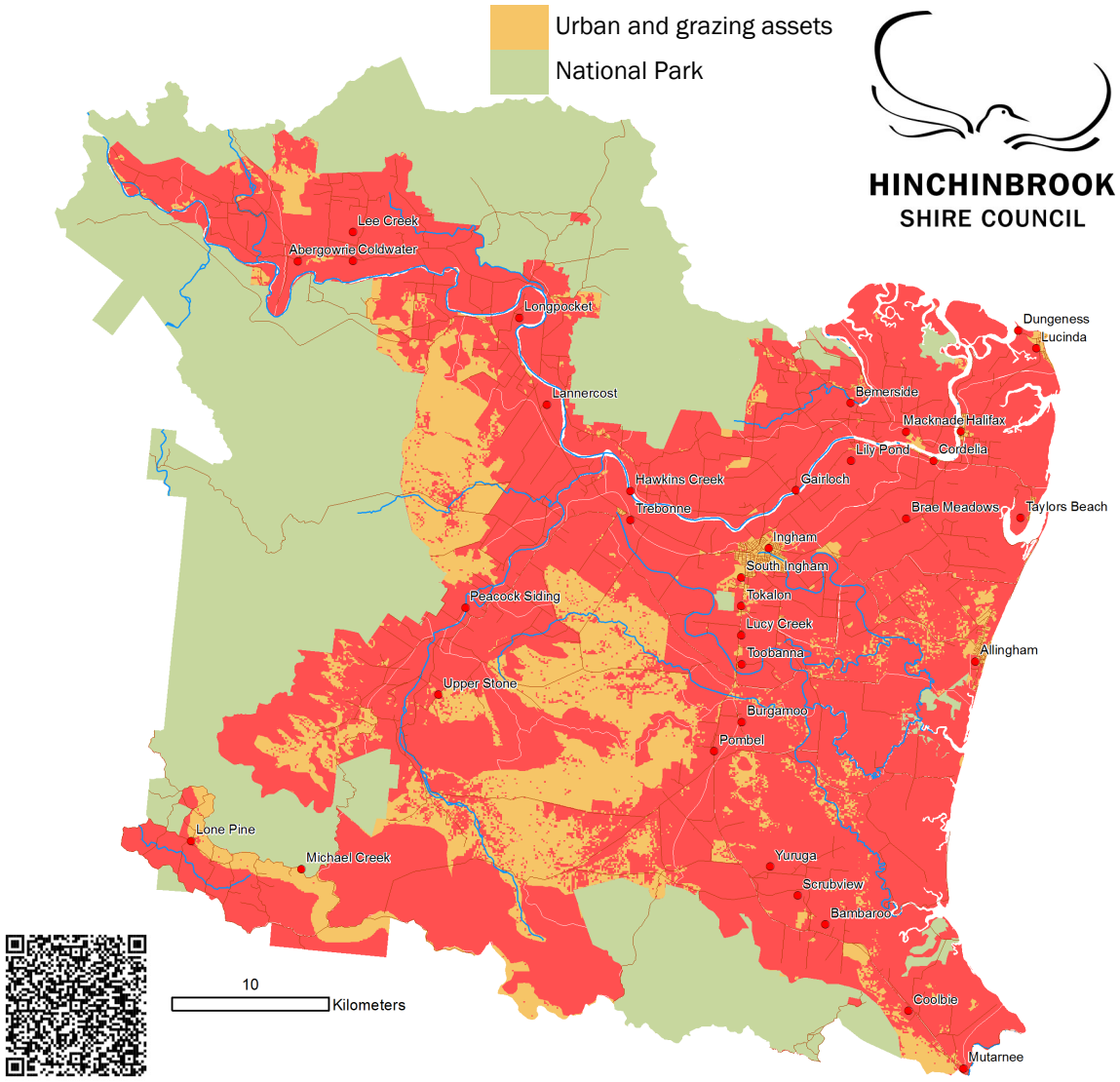
For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Hinchinbrook Shire Biosecurity Management Plan available at hinchinbrook.qld.gov.au and customer service centres.

Wild dog (*Canis lupis familiaris*)

Management objectives and actions

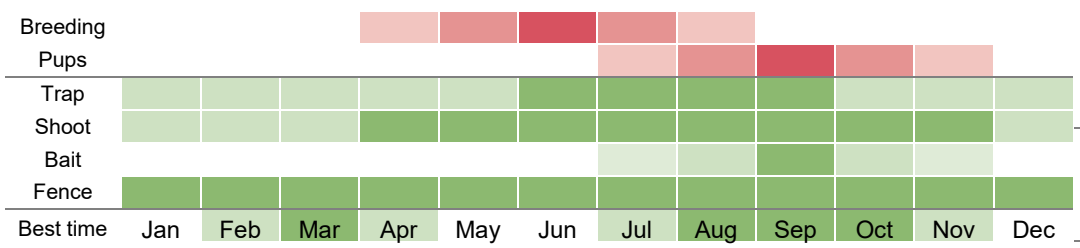
Biosecurity Act Restricted matter category

- **3** Do not distribute
- **4** Do not move
- **5** Do not keep
- **6** Do not feed



Control

Prevention	Eradication	Containment	Asset protection



Appendix A – Desired Outcomes

Vision	Reduce the impacts and prevent the introduction and spread of invasive plants and animals within the Hinchinbrook Shire Council area through cooperative partnerships from all stakeholders and the community.

Desired Outcome #1	Assumption	Actions	Indicators	Mechanism	Outcome Delivered	Date/ Reporting Period	By Whom?	Additional Comments
The Community is informed and have knowledge of their GBO and has ownership of invasive plant and animal management.	Awareness and knowledge of invasive pests and GBO is essential to increase the capacity and willingness of individuals to manage invasive plants and animals.	Promote the HLGABP.	Number of times people reference the plan or visit the HSC website.	Webpage hits; Other organisations reference the plan.	Greening Australia and Mungalla Aboriginal Corporation for Business reference to plan in Operations and Maintenance Plan for the Mungalla Blue Carbon project registration.	March 2025	Greening Australia	
					Promotion of our GBO. Maintenance of powerlines conducted by contractors sufficiently trained in managing biosecurity risks which includes an understanding of local, Regional, State and Commonwealth-listed biosecurity matters.	Continuous	Ergon Energy - Vegetation Contractors	
					HSC promotes the Biosecurity Plan and Biosecurity Obligations on the website. Biosecurity Programs (Invasive Plants and Animals and Prevention and Control Program are published on the website as well. All information is to be found in the Pest Management section.	Continuous	HSC	
		Seek opportunities to engage with community sectors	No. of community events relating to BS/ GBO's attended.	Provide details of events/ outcomes.	Biosecurity Team Leader gave a joint presentation with Harry Neubecker from DPI to the Grazing connect workshop to 40+ attendees on priority and alert weed species. This included a display of 6 live	April 2025	HSC	

Desired Outcome #1	Assumption	Actions	Indicators	Mechanism	Outcome Delivered	Date/ Reporting Period	By Whom?	Additional Comments
		(youth, clubs, stakeholders).			(GSP, Candle bush, Navua sedge, Siam weed, Redwood Acacia and Sicklepod) and 4 replica weed species (Mikania vine, Limnocharis, Miconia calvescenes and Cecropia).			
					Presentation at the AgForce roadshow on biosecurity and a farmer's obligation. Approximately 60 attended the event.	April 2025	QCAR	
		Provide information to increase knowledge and capacity of community to improve GBO or community capacity for BS.	No. of Media Releases that contain GBO or general knowledge about BS.	Record No. of Media Releases that contain GBO or general knowledge about BS.	Aerial Survey – Priority Weed Species	June 2024	HSC	
					Acaciella Glauca (Redwood)	June 2024		
					Pond Apple	July 2024		
					Cha-Om	September 2024		
					African Tulip	October 2024		
					Aerial Pig Shoot Media Release	November 2024		
					Turtle Nesting	December 2024		
					Yellow Crazy Ants	January 2025		
					Prevent Weed and Pest Spread Following Floods	March 2025		
					Acaciella Glauca (Redwood)	April 2025		
					Mikania vine	May 2025		
					Aerial Survey – Priority Weed Species	May 2025		
					Aerial Pig Shoot Media Release	June 2025		
		One on one education with landholders to build land management capability and GBO's.	No. of landholders engaged around BS matters and actions.	Record No. of property managers engaged.	Engagement with landholders through 72 customer requests related to any pest matters.	Continuous	HSC	
					No records of this, however Ergon Energy continuously works with landholders to support biosecurity management.	Continuous	All Ergon staff and contractors	

Desired Outcome #2	Assumption	Actions	Indicators	Mechanism	Outcome Delivered	Date/ Reporting Period	By Whom?	Additional Comments
All stakeholders are committed to undertake coordinated management of invasive plants and animals.	The HLGABP guides on-ground actions and enables partnerships to ensure consistency in management approaches for priority invasive species and provides a platform for compliance where necessary.	Maintain a BPWG of key stakeholders.	No. of meetings/ members attending BSWG activities.	Details of event/ outcomes.	Ongoing emails sent out quarterly to Biosecurity group for updates of outcomes delivered by stakeholders.	Quarterly	HSC	
		Partners using HLGABP to guide their priorities and OG actions for available resource.	No. of partners addressing priorities outlined within the HLGABP.	Details of OG/ strategic actions that align with the Plan.	Mungalla Station, with support from Greening Australia, is addressing the priorities in the HLGABP of Hinchinbrook Community Feral Pig Management Program and Palm Creek Projects.	2024	Mungalla Station	
					TMR contractors are made aware of HLGABP and any updates.	2024	Department of Transport and Main Roads	HLGABP provided to contractors routinely.
					The department's (DNRMMRRD) annual management plans are based and prioritised off the HLGABP.	January 2025	DNRMMRRD	
					Ergon Energy's Environmental Management Standard includes detailed information on BS Management including information on biosecurity threats (invasive plants, invasive animals, pathogens, contaminants) and management strategies that relate to our activities. BS Management requires all personnel and contractors to be sufficiently trained to understand potential biosecurity risks associated with operations and to know how to effectively implement controls	Continuous	Ergon Energy - Environment Group	

Desired Outcome #2	Assumption	Actions	Indicators	Mechanism	Outcome Delivered	Date/ Reporting Period	By Whom?	Additional Comments
					to prevent or minimise the spread of biosecurity matters. This includes but is not limited to being aware of their GBO and of any significant biosecurity matters (i.e., Biosecurity Act and local government-listed weeds and animal pests) that may be encountered and/or impacted by works. To minimise the spread of weeds, Ergon Energy and Energex staff and contractors are required to carry out clean down procedures regularly and routinely and always after being in areas of known infestations. The majority of our depots across the State have washdown facilities and wash-downs are recorded in logbooks and are made available when required (i.e., environmental auditing, landholder request).			
					QCAR Manager- Lawrence Di Bella undertook biosecurity management training in Townsville.	April 2025	QCAR	
		The Plan supports collaborative design and delivery for better OG outcomes.	No. of partnerships/ multi agency collaborative projects undertaken or invested.	Record No. of projects where partners are collaborating to improve BS outcomes.	Mungalla Wetland Restoration project and Roberts Revegetation Project.	2024	Greening Australia, Mungalla Station and HSC; Greening Australia and HSC.	
					HLGABP referenced in contracts for TMR Construction and Maintenance works.	2024/2025	Department of Transport and Main Roads	HLGABP is referenced in contracts to

Desired Outcome #2	Assumption	Actions	Indicators	Mechanism	Outcome Delivered	Date/ Reporting Period	By Whom?	Additional Comments
								ensure prioritisation of actions in accordance with plan.
					The department's (DNRMMRRD) annual management plans are based and prioritised off the HLGABP.	January 2025	DNRMMRRD	
					HSC - Pond Apple, NRM Terrain Mahogany Glider - African Tulip, Litteral Rain forests, Upper Cattle Creek and Palm Creek aquatic weed management, Singapore daisy.	Continuous	MRRD, HSC, Terrain, Wilmar, Landholders, DNRMMRRD	
					Ergon Energy participating in the HLGABP Review process	March 2025	Ergon Energy - Environmental Officer	
					The Hinchinbrook Community Feral Pig Management Program	Annually	HSC, HCPSL, DNRMMRRD, FPQ, Qld Parks, and Landholders	
		Participation in Regional Advisory/ Taskforce groups where capacity is shared and improved.	No. of Regional groups where BS issues addressed with planning or OG works.	Record No. of regionally relevant meeting/ events where partners are collaborating to improve BS outcomes.	Not in the Hinchinbrook LGA in the last 12 months but open to opportunities as required. HSC participated in the Gamba grass taskforce in Cook shire and participates in the NAMAC and NQ Dry tropics regional meetings. HSC has also worked with DAF on Mikania vine and Redwood Acacia.	1/03/2025 Quarterly	Ergon Energy - Environmental Officer, HSC/DPI	

Desired Outcome #3	Assumption	Actions	Indicators	Mechanism	Outcome Delivered	Date/ Reporting Period	By Whom?	Additional Comments
The introduction of new invasive plants and animals is prevented, and the spread of existing issues are managed effectively.	Implementation of GBO's and best practice biosecurity measures and actions will assist to prevent the spread and establishment of new (or eradicable) invasive plants and animals.	Conduct Risk Assessments on new and/or emerging threats.	No. of new threats identified.	Assess species using the invasion curve (pg. 20) and adopted risk matrix (pg. 79)	No new invasive pests / weeds identified within North Queensland as part of Ergon Energy activities in previous 12 months.	March 2025	Ergon Energy - Environmental Officer	
		Work with partners to develop a strategy to prevent or minimise the impacts of new/ emerging threats, including disaster management.	No. of partners/ landholders affected and likely impacts on the wider community.	Implement strategy and involve as many stakeholders as required to raise profile.	Pest and weed alert species identified within the biosecurity plan and stakeholders have been promoting these species within the community. Various inspections were carried out for possible new incursions as they have occurred. Examples of this have been with YCA, electric ants and other weed species such as Pond Apple.	Annually	All stakeholders	
		Maintain early detection/ surveillance programs for invasive species not already established within the shire.	No. of partners actively undertaking early detection/ surveillance for new/ emerging threats.	Record No. of surveillance actions undertaken by partners to improve BS outcomes.	Annual general inspections of unallocated State Land for biosecurity risks, fire risk and compliance.	July 2025	Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development. (DNRMMRRD)	
					Annual inspection and controls carried out for the following priority species including Mikania vine (May/Jun), Pond Apple (July), Redwood Acacia (July/Aug), Thunbergia (Oct/Jan), Hygrophila (Nov) and Singapore daisy (Sept/Oct/Nov/Dec/Jan).	Annually	HSC/DPI	

Desired Outcome #3	Assumption	Actions	Indicators	Mechanism	Outcome Delivered	Date/ Reporting Period	By Whom?	Additional Comments
					Quarterly or as required inspections of key sites have been carried out for Tramp Ants, as well as an eDna sampling of Palm creek.			
		Participation in Statewide/ Regional groups where potential threats to Hinchinbrook Shire are likely to be identified.	No. of State/ Regional BS groups where issues of new/ emerging threats are likely to be addressed.	Record No. of relevant meeting/ events where partners have identified potential threats for Hinchinbrook.	NAMAC and NQ Dry Tropics. HSC also attended the Biosecurity preparedness workshop in Cairns.	Quarterly April	HSC	

Appendix B – Risk Assessment Results

The biosecurity prioritisation framework utilised by the BPWG in assessing and assigning the priorities of biosecurity matter within this plan was developed within local government and adopted regionally by the FNQROC in May 2021.

The process of determining priorities was conducted by members of the working group prior to going to wider consultation to ensure that all stakeholders are strongly committed to implementing effective biosecurity management.

	IMPACTS AND THREATS								MANAGEMENT FEASIBILITY				MANAGEMENT OBJECTIVES
	ECONOMIC	SOCIAL AMENITY	HUMAN HEALTH	ENVIRONMENTAL	IMPACT SCORE	INVASIVENESS	POTENTIAL ISTRIBUTION	RISK SCORE	CURRENT DISTRIBUTION	COST OF CONTROL	EFFECTIVENESS OF CONTROL	FEASIBILITY SCORE	RECOMMENDED CORE OBJECTIVE
PEST PLANTS													
Mikania vine	4	3	2	4	4	3	3	36	1	2	1	2	Eradication
Hygrophila	3	3	2	4	4	3	3	36	1	2	1	2	Eradication
Pond apple	3	3	2	4	4	3	3	36	1	4	1	4	Eradication
Siam weed	4	3	2	4	4	4	4	64	2	2	3	12	Containment
Thunbergia grandiflora	3	2	2	4	4	2	3	24	1	2	2	4	Eradication
Acacia glauca	2	2	2	3	3	3	3	27	1	2	1	2	Eradication
Water lettuce	2	3	3	4	4	3	3	36	1	3	1	3	Eradication
Singapore daisy	3	2	2	4	4	2	3	24	2	1	2	4	Eradication
Hymenachne	3	3	2	4	4	4	4	64	3	2	4	24	Asset protection
Giant sensitive plant	3	2	2	2	3	3	3	27	4	2	2	16	Asset protection
African tulip tree	2	2	2	4	4	4	3	48	2	4	3	24	Asset protection
Salvinia	2	2	3	4	4	3	3	36	4	3	2	24	Asset protection
Water hyacinth	2	2	3	4	4	3	3	36	4	3	2	24	Asset protection
Aleman grass	3	3	2	4	4	3	4	48	2	2	3	12	Containment
Lantana	3	3	2	4	4	3	3	36	3	3	3	27	Asset protection
Sicklepod	3	3	2	4	4	3	3	36	4	2	2	16	Asset protection
Navua sedge	4	3	2	3	4	4	3	48	3	3	3	27	Asset protection
Parthenium weed	3	3	4	2	4	3	2	24	1	2	2	4	Eradication
Prickly pear	2	2	2	3	3	2	2	12	2	2	1	4	Containment
Rats tail grass	4	2	2	3	4	4	3	48	2	4	2	16	Asset protection
Grader grass	4	2	2	3	4	3	3	36	2	2	3	12	Containment
Hamil/Guinea grass	2	4	1	4	4	4	2	32	2	4	3	24	Asset Protection

	IMPACTS AND THREATS								MANAGEMENT FEASIBILITY				MANAGEMENT OBJECTIVES
	ECONOMIC	SOCIAL AMENITY	HUMAN HEALTH	ENVIRONMENTAL	IMPACT SCORE	INVASIVENESS	POTENTIAL DISTRIBUTION	RISK SCORE	CURRENT DISTRIBUTION	COST OF CONTROL	EFFECTIVENESS OF CONTROL	FEASIBILITY SCORE	RECOMMENDED CORE OBJECTIVE
PEST ANIMALS													
Feral Pigs	4	2	3	4	**4**	3	4	**48**	4	4	2	**32**	Asset protection
Wild Dogs	2	3	3	2	**3**	3	4	**36**	4	2	2	**16**	Asset protection
Rabbits	2	2	2	3	**3**	3	2	**18**	1	2	2	**4**	Eradication
Feral cats	2	3	2	4	**4**	3	4	**48**	4	4	3	**48**	Asset protection
Feral goats	2	3	2	4	**4**	3	2	**24**	1	3	2	**6**	Eradication
Tilapia	3	4	1	4	**4**	4	4	**64**	2	4	4	**32**	Asset Protection