

5.3. BIOSECURITY MANAGEMENT PLAN AND SURVEILLANCE PROGRAM

REPORT AUTHOR	Peter Logan, Coordinator Public Spaces
MANAGER	Michael Kriedemann, Executive Manager Infrastructure
DEPARTMENT	Infrastructure

RECOMMENDATION

That Council resolves to:

- 1. Adopt the updated Douglas Shire Biosecurity Management Plan; and**
- 2. Adopt the Douglas Shire Council Invasive Plants and Animals Surveillance Program.**

EXECUTIVE SUMMARY

The purpose of the Douglas Shire Biosecurity Management Plan is to bring together all sectors of the local community to manage invasive plants and animals. It does this by outlining the key responsibilities, roles and desired outcomes required under the *Biosecurity Act 2014* for the whole of the Douglas Shire area. It aims to benefit the community through preventing or reducing the impacts of pests and weeds on the economy, environment and people of the area through:

- Addressing the obligations under the *Biosecurity Act 2014*;
- Prioritisation of invasive pests and prevent the introduction and spread of invasive plants and animals within Douglas Shire;
- Identifying the roles and responsibilities of all stakeholders and providing direction on managing biosecurity risks;
- Building partnerships and enable better use of resources available within the community and across all land managers; and
- Better coordination between all stakeholders, including integrated catchment management approaches, state-wide land protection strategies and management of conservation areas.

The plan identifies the goal for managing biosecurity in the Douglas Shire Council as:

“All stakeholders working together to implement ongoing, coordinated and effective biosecurity management across the Douglas Shire Council area.”

Under the *Biosecurity Act 2014*, Council must adopt an annual surveillance program. There have been no changes to the Management Plan and Council's strategies remain unchanged.

BACKGROUND

The Douglas Shire Biosecurity Management Plan 2017-2021 was formally adopted at the Ordinary Council Meeting of 31 October 2017. This management plan informs the management of all invasive biosecurity matter and locally declared pests in the Douglas Shire Council area. The Biosecurity Management Plan and Surveillance Program are reviewed annually by the Biosecurity Working Group. Recently minor amendments have been made to the documents to reflect the current biosecurity status in Douglas, thus requiring new approval by Council.

The plan provides management outcomes for specific high priority pests. These management outcomes are outlined in the pest specific strategies and have been developed by the Biosecurity Working Group based on priority, knowledge of distribution, feasibility, achievability and the existing and potential impacts on the biosecurity considerations (human health, social amenity, the economy or the environment) in the local area.

The management outcomes guide or set the standard for the actions and measures considered reasonable and practical by the Douglas Shire Community that will help in addressing the biosecurity risk posed by these pests and achieve the desired local management objectives.

COMMENT

The general biosecurity obligation (GBO) is one of the core principles of the Biosecurity Act and represents a major shift in thinking – from prescriptive to outcome-based management. The GBO is an overarching principle that requires all persons who deal with biosecurity matter to take all reasonable and practical measures to prevent or minimise the risk. A range of legislative instruments have been built into the Biosecurity Act to ensure there is capacity to respond appropriately to different levels of biosecurity risk and different stages of incursion.

Biosecurity programs for surveillance or prevention and control are generally for use in non-emergency situations where there is or is likely to be biosecurity matter that poses a significant biosecurity risk in the area to which the program applies. Biosecurity programs may also be used to prevent the entry or establishment of biosecurity matter in a particular area.

The programs enable local governments to be proactive in identifying and responding to a pest, disease or other biosecurity matter that poses a significant biosecurity risk. Once a program is established, authorised officers have additional powers of entry and control that are not available under normal circumstances. The program must be authorised by the Chief Executive Officer of the Local Government. A copy of the program must be published on Council's website.

PROPOSAL

That Council resolves to:

1. Adopt the updated Douglas Shire Biosecurity Management Plan; and
2. Adopt the Douglas Shire Council Invasive Plants and Animals Surveillance Program.

FINANCIAL/RESOURCE IMPLICATIONS

Council employs six full-time Officers to conduct on ground works on invasive biosecurity matter. This consists of a Team Leader Biosecurity, team of four to focus on invasive pest plants (weeds) and one staff targeting pest animals. Douglas Shire Council works closely with all stakeholders on several joint agency programs implementing a “*nil tenure*” approach to ensure successful outcomes for the shire. The works are funded as core business with funds allocated each year in the operational budget.

RISK MANAGEMENT IMPLICATIONS

Under section 48(1) of the *Biosecurity Act* the main function of local government is to ensure both prohibited and restricted invasive biosecurity matter are managed within the local government area.

The Douglas Shire Council covers an area from Degarra in the north, west to the Mt Windsor Tableland and south to Ellis Beach. The area is fringed by Wet Tropics Areas to the west and the Great Barrier Reef Marine Park to the east. These iconic natural resources combined with a strong agricultural sector make the entire region important both nationally and globally.

Given that biosecurity risks directly threaten biodiversity, agriculture and social amenity on a very large scale, there is a great responsibility to understand and mitigate the impacts of weeds and pest animals in a context that encompasses a wide range of land uses and expectations.

Implementation of the Douglas Shire Biosecurity Management Plan and the Douglas Shire Council Invasive Plants and Animals Surveillance Program will provide a timely and effective response to protect our economy, environment and community.

SUSTAINABILITY IMPLICATIONS

Economic:

Weeds cost Queensland an estimated \$600 million every year. The negative economic impacts of weeds include:

- competition with pastures leading to reduced stocking capacity and erosion;
- toxicity to stock;
- competition with crops for water and nutrients;
- increased stock mustering costs;
- loss of ecotourism values;
- impacts (of aquatic weeds) on water quality and irrigation; and
- management costs arising from the use of physical, mechanical and chemical control methods.

For example, one weed species - *Miconia* (*Miconia calvescens*, *M. nervosa* m. *racemosa*) - costs Australia more than \$3.1 million each year in control programs. Whyanbeel Valley has the largest infestation of *Miconia* in Australia. Evidence of the economic and environmental impacts of this weed in other countries supports the need to maintain eradication as the main objective of the program.

Environmental: Weeds can degrade natural vegetation and impact on biodiversity. Mexican Bean Tree (*Cecropia pachystachya*, *C. palmata* and *C peltata*) known to occur in Whyanbeel, has the potential to invade and dominate moist forest ecosystems in north Queensland, possibly causing serious and irreversible damage to the World Heritage Area. Gamba grass (*Andropogon gayanus*) recently discovered at Finlayvale, is a useful cattle feed in parts of far north Queensland, but also has significant negative impacts, including replacing native plants, increasing fire risk and ecosystem modification.

Social: Social impacts include effects on human health, recreation, safety and aesthetics. Siam weed has a significant impact on human health in heavily infested Wet Tropics areas of Queensland. People can suffer serious allergic reactions, such as dermatitis and rhinitis or asthma, on contact with the plant or its pollen. Many aquatic weeds, such as salvinia (*Salvinia molesta*), cause safety hazards. Small children have drowned when they assumed the floating carpet of salvinia was solid ground. Aquatic weeds also interfere with recreational activities (such as swimming and fishing) and reduce the aesthetic value of lakes and streams. Additionally, weed control is an essential component of road and railway corridor maintenance, especially with regards to safety considerations.

CORPORATE/OPERATIONAL PLAN, POLICY REFERENCE

This report has been prepared in accordance with the following:

Corporate Plan 2019-2024 Initiatives:

Theme 3 - Leading Environmental Stewardship

Our visitors and residents deeply value the unparalleled environment in which we live. We recognise our responsibility in protecting and preserving our natural world for generations to come. We understand the strong link between the environment and the economy: they are interdependent. Douglas Shire will be at the forefront of environmental protection by developing strategies, setting policies, and working with all stakeholders to become the envy of and to inspire locations across Australia and the World.

Goal 1 - We will protect our sensitive environment and plan for the impact of climate change.

Goal 4 - We will partner with the community to educate and monitor.

COUNCIL'S ROLE

Council can play a number of different roles in certain circumstances and it is important to be clear about which role is appropriate for a specific purpose or circumstance. The implementation of actions will be a collective effort and Council's involvement will vary from information only through to full responsibility for delivery.

The following areas outline where Council has a clear responsibility to act:

Regulator Council has a number of statutory obligations detailed in numerous regulations and legislative Acts. Council also makes local laws to ensure that the Shire is well governed. In fulfilling its role as regulator, Council will utilise an outcomes based approach that balances the needs of the community with social and natural justice.

CONSULTATION

Internal: In preparing these documents, consultation was undertaken with Council Officers from the Biosecurity Team.

External: The Biosecurity Working group (BWG) was formed to ensure the Douglas Shire Biosecurity Management Plan is developed by and for the entire community. The BWG considered all pests in relation to the range of land management priorities in the Douglas Shire Council area. To avoid conflict when setting priorities, the (BWG) has adopted a prioritisation framework that takes into account knowledge of the pest's ecology, invasion potential, control methods available and other factors, while keeping in mind the need for long-term sustainability of the range of land uses in the Douglas Shire Council.

The BWG consists of representatives from the following groups:

- Douglas Shire Council;
- Far North Queensland Region of Council's;
- Department of Agriculture and Fisheries;
- Queensland Parks and Wildlife Service;
- Jabalbina Aboriginal Corporation;
- Mossman Canegrowers;
- AgForce Daintree; and
- Mossman Botanical Gardens.

COMMUNITY ENGAGEMENT

The Biosecurity Management Plan and Surveillance Program is available for viewing on council's website.

ATTACHMENTS

1. Biosecurity Management Plan 2019 FINAL REVISION [5.3.1 - 67 pages]
2. DSC Surveillance Program 2019 FINAL REVISION [5.3.2 - 12 pages]

DOUGLAS SHIRE BIOSECURITY PLAN

All stakeholders working together to implement ongoing, coordinated and effective biosecurity management across the Douglas Shire area

2017-2021

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Executive Summary

The purpose of the Douglas Shire Biosecurity Plan (BP) is to bring together all sectors of the local community together to manage invasive plants and animal. It does this by outlining the key responsibilities, roles and desired outcomes required under the Biosecurity Act 2014 for the whole of the Douglas Shire area. In doing so, it aims to benefit the community through preventing or reducing the impacts of pests and weeds on the economy, environment and people of the area through:

- Addressing the obligations under the Biosecurity Act 2014 for all stakeholders.
- Prioritisation invasive pests and prevent the introduction and spread of invasive plants and animals within Douglas Shire based on best practice.
- Identifying the roles and responsibilities of all stakeholders involved and providing direction on managing biosecurity risks
- Building partnerships and enable better use of resources available within the community and across all land managers
- Better coordination between all stakeholders, including integrated catchment management approaches, statewide land protection strategies and management of conservation areas.

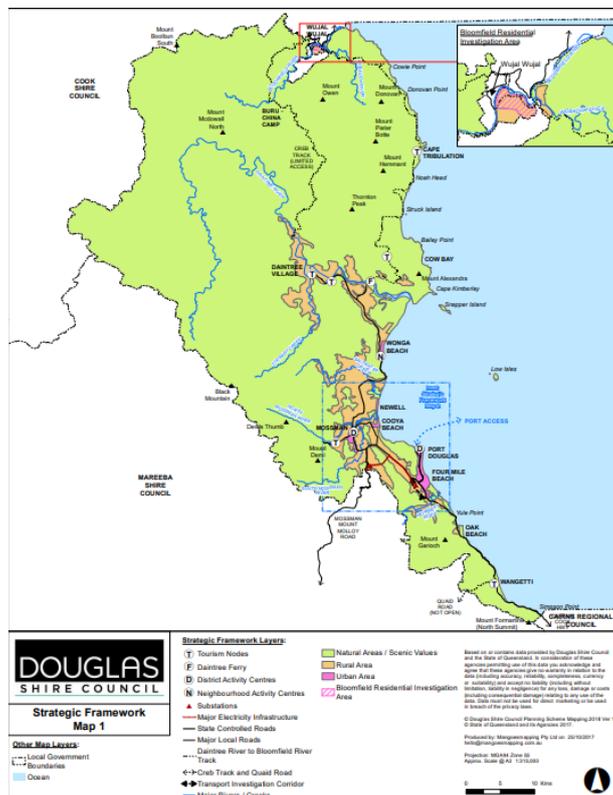
The plan identifies the goal for managing biosecurity in the Douglas Shire Council as:

“All stakeholders working together to implement ongoing, coordinated and effective biosecurity management across the Douglas Shire Council area.”



Introduction

The Douglas Shire Council covers the area from Degarra in the north, west to the Mt Windsor Tableland and south to Ellis Beach. The area is fringed by Wet Tropics Area to the west and the Great Barrier Reef Marine Park to the East. These iconic resources combined with a strong agricultural sector make the entire region important both nationally and globally.



Given that biosecurity risks directly threaten biodiversity, agriculture and social amenity on a very large scale, there is a great responsibility to understand and mitigate the impacts of weeds and pest animals in a context that encompasses a wide range of land uses and expectations.

Protecting values and managing risks

A risk-based approach to biosecurity requires us to first understand the values which are important to the community. When we understand what is important, where and why, we can then identify how invasive plants and animals (biosecurity matter) may impact those values. It is likely that the things we value may be at risk from more than a single biosecurity matter and even if those risks are not equal, they may be detrimental in an accumulative way. It is also likely that a single asset may represent a range of the values outlined below. For example, a waterway on a property may be equally important for its value for conservation (as habitat); agriculture (for watering stock); water resources (for natural flows); and community (a local swimming hole) simultaneously.

The risk assessment process, which is used to identify the issues requiring a response in this plan, considers the likelihood and extent of the impact/s a biosecurity issue might present on four broad categories of values.

Conservation and biodiversity

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



Agriculture and industry

Agriculture and industry represent primary production and the economy. These may include highly modified or intensive production systems right through to the relatively natural systems utilised in the rangelands. An industry like honey production might make use of both native forests and intensive agricultural systems. Other industries might be based in urban or industrial systems.



Water resources and assets

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



Community and residential

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



With established pest species the challenge is to ensure all stakeholders are meeting their obligations. The numerous weeds, vertebrate pests and tramp ant incursions highlight the vulnerability of our region to the introduction of biosecurity matter and the strategic importance of preventing the spread of biosecurity matter across Australia.

Given the favorable conditions in the Wet Tropics Bioregion, the Douglas Shire area is faced with a diverse range of weed and pest animal issues. The favorable climate provides ideal habitat for a huge variety of noxious weeds and an ideal harborage for large populations of pest animals with its rich resources and year-round water and cover.

The Douglas Shire Council local area Biosecurity Plan 2016-2020 is written to in accordance with the provisions of the Biosecurity Act 2014. The Biosecurity Plan is subject to ongoing review every four years, with necessary updates being made on annual basis to reflect changes in resources, pest threats, legislation or policy.

The Douglas Shire Council formally adopted this Biosecurity Plan through a resolution of council.

Pest Management Planning

A program to stop land degradation by pest invasion is a major undertaking. It cannot be achieved simply by allocating finance in the annual budget. Without setting goals and defining the means of achieving them, any gains will be due to good luck rather than good management.

When clear guidelines are not communicated it is difficult to track progress toward pest management outcomes. It is also more difficult for landowners and managers to understand what is required of them to deliver their general biosecurity obligation. This Biosecurity Plan forms a policy document which in effect is a reference tool for field and administrative staff from within Douglas Shire Council, but also applies equally to all landholders and managers across the Douglas Shire area.

Land Management in Douglas

Land in the Douglas Shire Council area is primarily managed for one or more of the following range of values:

- Residential /industrial
- Tourism and recreation
- Grazing
- Cropping and horticulture
- Nature Conservation
- Cultural Heritage
- Quarries



The Biosecurity Working Group

The Douglas Shire Council Biosecurity Working Group DSCBWG was formed and open to all stakeholders to ensure Douglas Shires Biosecurity Plan is developed by and for the entire community.

The DSCBWG considered all pests in relation to the range of land management priorities in the Douglas Shire Council area. The challenge in the development of the DSBP is to balance the needs of rural land uses with those expectations from other residents and the growing concern for natural resources within the community

The role of the Biosecurity Working Group is:

- To acknowledge the roles and responsibilities of all stakeholders.
- To provide advice to the Douglas Shire Council, Regional and State agencies and organisations on the biosecurity management priorities and requirements of land managers and owners of the Douglas Shire area.
- Identify research priorities and operational needs of the DSLGA and ensure the DSBWG is represented at the NAMAC who Regional Pest Management Sub-committees for the purpose of the co-investment model.
- Develop and review a Biosecurity Plan for invasive biosecurity matter for all land tenure in the DSLGA.
- Prioritise invasive biosecurity matter and local priority pest species and develop locally specific obligations to ensure pests are being managed and to a standard that is accepted by the community.
- Ensure all stakeholders formally know, accept and acknowledge their roles and responsibilities in relation to the DSBP.
- Ensure key stakeholders are involved in monitoring, reviewing, and coordinating the implementation of the DSBP.

Legal Requirements Regarding Pests

Invasive biosecurity Matter and Locally Declared Pests

Under section 48(1) of the Biosecurity Act the main function of local government is to ensure both prohibited and restricted invasive biosecurity matter are managed within the local government area. According to section 48(3) of the Act, local government's local laws (Queensland Local Government Act 1993) may provide for the management of invasive plants and animals whether they are prohibited or restricted matter.

48 Main function of local government

- (1) The main function under this Act of each local government is to ensure that the following biosecurity matter (***invasive biosecurity matter*** for the local government's area) are managed within the local government's area in compliance with this Act-
 - (a) prohibited matter mentioned in schedule 1, parts 3 and 4;
 - (b) prohibited matter taken to be included in schedule 1, parts 3 and 4 under a prohibited matter regulation or emergency prohibited matter declaration;
 - (c) restricted matter mentioned in schedule 2, part 2;
 - (d) restricted matter taken to be included in schedule 2, part 2 under a restricted matter regulation.

The Biosecurity Act 2014 lists schedules for prohibited and restricted matter that can be viewed at:

<https://www.legislation.qld.gov.au/view/html/inforce/current/act-2014-007>

Biosecurity Plans

The *Douglas Shire Biosecurity Plan 2017-2021* will guide the management of all invasive biosecurity matter and locally declared pests in the Douglas Shire Council area as per section 53 of the Act.

To fulfill these responsibilities, Council is expected to:

- Control invasive biosecurity matter on land under its control.
- Inspect private property to determine the presence of invasive biosecurity matter.
- Provide advice to landholders on appropriate pest control options.
- Carry out procedures to ensure control of invasive biosecurity matter on private property.

The State government is responsible for:

- Providing technical and management information and staff training to Council personnel.
- Ensuring that invasive biosecurity matter controlled on land under the control of other Government Departments.

The Biosecurity Act provides Authorised Officers with powers and tools needed to ensure the level of response is appropriate to the level of biosecurity risk.

The Biosecurity Plan defines what community expects of individuals to discharge their **general biosecurity obligation (GBO)** regarding the priority invasive pests at specific locations.

The General Biosecurity Obligation

The general biosecurity obligation (GBO) is one of the core principles of the Biosecurity Act and represents a major shift in thinking – from prescriptive to outcome-based management.

What is a general biosecurity obligation and who does it apply to?

The general biosecurity obligation (GBO) is an overarching obligation that requires all persons who deal with biosecurity matter or a carrier to take all reasonable and practical measures to prevent or minimise the risk. However, the obligation only arises when the person *knows or ought reasonably to know* that the biosecurity matter, carrier or activity pose or is likely to pose a biosecurity risk.

How the GBO is used to achieve local pest management outcomes?

The GBO imposes an obligation on all relevant persons – individuals, industry and government – to take an active role in preventing, managing and addressing biosecurity risks that relate to their activities. It provides a capacity for flexibility and ensures that the focus is on the management of biosecurity risk rather than following a prescribed process.

The Douglas Shire Council Biosecurity Plan provides management outcomes for specific high priority pests. These the management outcomes are outlined in the pest specific strategies and have been developed by the PWG based on priority, knowledge of distribution, feasibility, achievability and the

existing and potential impacts on the biosecurity considerations (human health, social amenity, the economy or the environment) in the local area.

The management outcomes guide or set the standard for the actions and measures thought to be reasonable and practical by the Douglas Shire Community that will help in addressing the biosecurity risk posed by these pests and achieve the desired local management objectives.

There may be circumstances when a person fails to take actions to discharge their GBO to manage a biosecurity risk.

An authorised officer determines, through risk-based decision-making, if the person has failed to take appropriate actions consistent with the management outcomes stated in the Douglas Shire Council Biosecurity Plan to address that biosecurity risk.

The officer must be certain that the person responsible for the biosecurity matter understands the risk/s that must be mitigated. There may be a need for the officer to provide some education to the person. Following this, if the individual does not take steps to mitigate the risk, the officer would be in a position to consider issuing a biosecurity order.

The person then must take the actions stated in the Biosecurity Order to address the risk.

Biosecurity Orders

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

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

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

A biosecurity order **must** be directed at ensuring the recipient discharges their GBO at the place; and **may** relate to a specific biosecurity matter. In addition, the biosecurity order may propose stated times or intervals for re-entry to the place, a vehicle or another place, to check compliance with the order; or state how the recipient may show that the stated action has been taken.

A template for the Douglas Shire Council Biosecurity order and information notice can be found in Appendix 2.

Biosecurity Programs

Biosecurity programs (surveillance or prevention and control programs) have been implemented by the Department of Agriculture and Fisheries <https://www.daf.qld.gov.au/business-priorities/biosecurity> and Douglas Shire Council <https://douglas.qld.gov.au/environment-water-and-waste/natural-resource-management/pest-management/> to enable proactive management of a weeds and pest animals.

The Douglas Shire Council surveillance program is an instrument to provide authorised officers additional powers of entry for the purpose of undertaking proactive surveillance to determine the presence or absence of stated invasive biosecurity matter, monitoring compliance with the Act or the effect of measures taken in response to a biosecurity risk, or levels of biosecurity matter in a carrier – within Douglas Shire Council local government area. A copy of the surveillance program can be obtained at <https://douglas.qld.gov.au/environment-water-and-waste/natural-resource-management/pest-management/> or purchased through council for the price of printing.

The Douglas Shire Council prevention and control program/s are aimed at managing or reducing or eradicating a limited number of high priority pests that currently pose a significant risk to the biosecurity considerations of the Douglas Shire region. A copy of the prevention and control programs can be obtained <https://douglas.qld.gov.au/environment-water-and-waste/natural-resource-management/pest-management/> or purchased through council for the price of printing.

Invasive Biosecurity 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. <https://www.daf.qld.gov.au/business-priorities/biosecurity/policy-legislation-regulation/biosecurity-act-2014/biosecurity-matter-report/prohibited-matter>

Identifying prohibited matter

It is the responsibility of all Queenslanders, as well as visitors from interstate and overseas, to be aware and take steps to prevent prohibited matter from entering our state. You will be expected to know about the prohibited matter that you may come across as part of your environment, business or hobby.

Reporting prohibited matter

It is an offence to deal with prohibited matter and fail to report its presence. If you become aware of prohibited matter or you believe, or ought to reasonably believe, that something is prohibited matter you need to report it immediately to Biosecurity Queensland. You must also take all reasonable steps to minimise the risks of the prohibited matter and not make the situation worse. If you are unsure if it is prohibited matter, contact Biosecurity Queensland for more information on 13 25 23

Restricted Matter

Restricted matter is listed in the Act and includes a range of invasive plants and animals that are present in Queensland. These invasive plants and animals are having significant adverse impacts in Queensland and it is desirable to manage them and prevent their spread, thereby protecting uninfested parts of the State. <https://www.daf.qld.gov.au/business-priorities/biosecurity/policy-legislation-regulation/biosecurity-act-2014/biosecurity-matter-report/restricted-matter>

Categories of restricted matter

There are seven categories for restricted matter, five of which are relevant to this plan each category places restrictions on the dealings with the biosecurity matter or requires actions to be taken to minimise the spread and adverse impact of the biosecurity 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 DSC Biosecurity Plan 2017–2021 refer to seven restricted matter categories.

There may be several restriction categories that apply to particular biosecurity matter.

Category 1	must be reported to a Queensland Government inspector within 24 hours.
Category 2	must be reported to a Queensland Government inspector or a local Government authorised officer.
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.
Category 4	must not be moved.
Category 5	must not be possessed or kept unless it is under a permit issued in accordance with the Act or another act.
Category 6	must not be fed except for the purpose of preparing for or undertaking a control program.
Category 7	must be destroyed and disposed of as soon as practicable in accordance with Queensland Government requirements.

See <https://www.daf.qld.gov.au/business-priorities/biosecurity/invasive-plants-animals/fact-sheets> for a detailed list of restricted invasive plants in Queensland.

Key Projects and Programs

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

Siam Weed Eradication Program



Goal: Locate all infestations within the Shire and control, with the aim to eradicate from the Douglas Shire Council Area.

Performance Indicator: Surveys of the entire Shire completed with all Siam Weed located mapped and controlled.

Strategic Action:

- To conduct annual surveys to locate and map Siam Weed within the Douglas Shire;
- To ensure that all infestations located are controlled;
- Promote individual landholders and other departments to control Siam Weed on their lands;
- Douglas Shire Council to facilitate public awareness programs with landholders in high risk areas
- To issue biosecurity orders to non-compliant landholders as required;
- Identify funding opportunities to assist in all of the above programs.

Project partners: Douglas Shire Council, Queensland Parks and Wildlife Service, landowners

Hiptage Eradication Program



Goal: In partnership with Queensland Parks and Wildlife Service locate all infestations within the Shire and control, with the aim to eradicate from the Douglas Shire Council Area.

Performance Indicator: Surveys completed within management areas, all Hiptage, mapped and treated with no reproductive events.

Strategic Action:

- To conduct annual surveys to locate and map Hiptage within the Douglas Shire;
- To ensure that all infestations located are controlled prior to seeding;
- Promote individual landholders and other departments to control Hiptage on their lands;
- Douglas Shire Council to facilitate public awareness programs with landholders in high risk areas
- Identify funding opportunities to assist in all the above programs.

Project partners: Douglas Shire Council, Queensland Parks and Wildlife Service, landowners

Miconia Species (Four Tropical Weeds Eradication Program)



Goal: In partnership with the Four Tropical Weeds team locate and control all Miconia infestations within the Shire with the aim to eradicate.

Performance Indicator: Surveys completed within management areas, all Miconia species located, mapped and treated with no reproductive events.

Strategic Action:

- Participate in survey and control program
- To ensure that all infestations located are controlled prior to seeding;
- Assist or facilitate public awareness programs such as displays at local field days /talks with landholders in high risk areas;

Project partners: Four Tropical Weeds Eradication Program, Douglas Shire Council, Queensland Parks and Wildlife Service, Whyanbeel Community Group.

Feral Pig Management Program



Goal: To implement a Shire-wide feral pig management program that minimises the environmental, social and economic impacts of feral pigs.

Performance Indicator: A reduction in complaints received regarding feral pig damage occurring within the Shire.

Strategic Action:

- To coordinate an effective feral pig trapping program within Douglas Shire
- Promote individual landholders and other departments on their lands and monitor populations and impacts of feral pigs
- To provide a 1080 baiting service where appropriate;
- To provide advice on best management practice to the community;

Project partners: Douglas Shire Council, Queensland Parks and Wildlife Service, landowners

Desired Outcomes

The desired outcomes proposed for this plan are consistent with those of the state weeds and pest animal strategies (developed in accordance with the requirements of the Biosecurity Act 2014 and are central to the success off biosecurity management activities.

Desired Outcome 1	Stakeholders are informed, knowledgeable and are committed to pest weed and animal management.
Desired Outcome 2	To ensure all stakeholders are strongly committed to implementing effective biosecurity management.
Desired Outcome 3	Strategic directions are established, maintained and owned by all stakeholders.
Desired Outcome 4	To prevent the introduction and establishment of new weeds and pest animals.
Desired Outcome 5	Integrated systems for managing the impacts of established weeds and pest animals are developed.

Desired Outcome 1

“Stakeholders are informed, knowledgeable and have ownership of weed and pest animal management”

Objective - *To increase community, industry, agribusiness and government awareness of pests and their impacts*

Principle	Strategic Action	By Whom	Timeframe	Success Indicator	
Awareness 	Provide draft BMP for PWG and public consultation/submissions.	DSC	2017	Draft posted on DSC web site. Submissions received.	Completed (Revised 2019)
	Review BMP and Programs annually		2021	Review completed and amendments made	2019
	Submit BMP for adoption by Council.	DSC	2017	Adopted BMP and action plans published on DSC Web site. with linkages to FNQROC web site and DAF fact sheets.	Completed in 2017 (Revised 2019)
	PMAC works together to promote weed and pest animal awareness across sectors and interest groups	All Stakeholders	Ongoing	Extension material available. Information circulated through existing networks	
	Biosecurity displays are presented at the Field Days & other opportunities (i.e. Reef guardian Program, Canegrowers, Catchment Group meetings)	DSC, DAFF	Ongoing	Number of presentations made	

Desired Outcome 2

“To ensure all stakeholders are strongly committed to implementing effective biosecurity management”.

Objective- Establish long term commitment to pest weed and animal management and ensure compliance with the Act in pest weeds and pest animals management

Principle	Strategic Action	By Whom	Timeframe	Success Indicator
Commitment, Consultation and partnership 	Maintain a working group of key stakeholders to develop and review plans and actions	Stakeholders	Annually	Meetings held and updates provided. Continued working partnerships
	Participate in delivery and hosting of taskforce operations under the regional taskforce MOU	DSC & FNQROC	As required	Number of taskforces attended or hosted
	Participate in regional advisory and governance of Biosecurity (NAMAC)	DSC, DAF & FNQROC	Quarterly	Attend and contribute to quarterly NAMAC meetings
	Maintain and promote a Surveillance, Prevention and Control Programs for key projects and priorities	DSC	Annually	Pest Survey Program maintained and implemented
	Support State and Commonwealth pest management projects.	DSC, DAF & DES	On going	State/Commonwealth projects supported.
	Support other *stakeholder projects where they align with the BMP.	DSC, Landcare & Terrain	On going	Stakeholders, community groups supported.
	Utilise compliance where necessary in line with principals in the Strategic Action Plans.	DSC	As required	Compliance exercised when necessary to achieve actions within the BMP.

Desired Outcome 3

“Strategic directions are established, maintained and owned by all stakeholders”

Objective- To create a coordinated and integrated planning framework for weed and pest animal management

Principle	Strategic Action	By Whom	Timeframe	Success Indicator
<p>Planning, Integration</p> 	Ensure that the Biosecurity Management Plan is consistent with related strategies and plans	DSC, DAF, FNQROC	Annually	No inconsistencies between plans. 3) The level of attendance and participation of State Agency representation in planning meetings
	Participate and contribute to regional planning and advisory groups and forums (i.e. NAMAC)	DSC, DAF, FNQROC	As required	Number of meetings and events hosted or attended
	Annual review of action plan and management objectives by PMAC	Stakeholders	Annually	Timely review of action plans
	Support DSC Development Assessments. Promote pest issues and undesirable species to planning staff	DSC	On going	Informed staff review vegetation plans. Undesirable species are not used. Developments meet legislative requirements concerning pests.

Desired Outcome 4

“Introduction spread and establishment of weeds and pest animals is prevented.”

Objective- To prevent the introduction and establishment of new weeds and pest animals

Principle	Strategic Action	By Whom	Timeframe	Success Indicator
Prevention 	Adopt weed prevention protocols.	Stakeholders	Ongoing	Occurrence of new weeds species
	Promote weed hygiene declarations for movement of harvesting and construction plant, and fodder.	Stakeholders	Ongoing	Use of weed prevention declaration
	Promote early reporting of pest problems and respond to landowners complaints promptly.	DSC & DAF	Ongoing	% of recurrence of target weeds
	Promote and participate in Rapid Response protocol.	DSC & DAF	As required	

Desired Outcome 5

“Integrated systems for managing the impacts of established weeds and pest animals are developed.”

Objective - Adoption of best practice management techniques by stakeholder/land managers

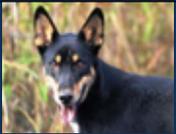
Principle	Strategic Action	By Whom	Timeframe	Success Indicator
Best Practice Management 	Consider: timing, integrated, techniques, non-target damage, cost prevention, animal welfare, workplace health and safety, monitoring, research, operational procedures and chemical registration requirements in planning	Stakeholders	Ongoing	Feedback on the Pest Management Plan's comprehensive coverage of issues.
	Promote the use, awareness and availability of best practice information.	DSC, DAF & FNQROC	As required	Best Practice Manuals distributed
	Maintain and update pest management distribution and objectives. Contribute to Annual Pest Distribution Survey	DSC & DAF	Annually	Distribution and management objective mapping for priority pests and weeds remains current. GIS data shared freely between all stakeholders

Prioritisation of Biosecurity Matter in the Douglas Shire Area

The framework utilised by the working group in assessing and assigning the priorities of Biosecurity matter within this plan was developed within local government and adopted regionally by the FNQROC. The process of determining priorities was conducted by members of the Biosecurity working group prior to going to wider consultation. For more details on the framework refer to the Local Government Pest Assessment, Prioritisation and Planning Framework at <http://www.fnqroc.qld.gov.au/files/media/original/003/d7a/a59/809/Framework.pdf>.

Douglas Shire Council weed prioritisation		Existing plans and priorities			Impacts and threats				Capacity to manage		
		NATIONAL	STATE	LOCAL	Conservation/ Biodiversity	Riparian/ Aquatic	Agricultural/ Production	Residential/ Urban	Achievability	Current Extent	Total Score
	Miconia species	5	2.5	5	5	4	1	5	2	5	34.5
	Water Hyacinth	2.5	1.5	4	4	5	1	4	4	5	31
	Siam Weed	0	1.5	5	4	4	4	3	4	5	30.5
	Limnocharis	3	1.5	5	3	5	2	2	4	5	30.5
	Gamba grass	2.5	1.5	5	4	3	3	2	4	5	30

	Mexican bean tree	0	2.5	5	4	4	1	3	5	5	29.5
	Hiptage	0	1	4	5	5	2	5	4	3	29
	Pond Apple	2.5	1.5	5	4	5	3	1	3	3	28
	Water lettuce	0	1.5	4	4	5	1	4	3	5	27.5
	Parthenium	2.5	1.5	5	3	2	3	1	4	5	27
	Salvinia	2.5	1.5	4	4	5	1	4	3	2	27
	Kudzu vine	0	1.5	3	4	4	2	3	3	5	25.5
	Venezuelan Pokeweed	0	1	4	4	4	1	3	3	5	25
	Thunbergia Species	0	1.5	4	4	4	1	4	4	2	24.5
	Ivy Gourd	0	1	3	3	3	1	2	4	5	22
	Tobacco Weed	0	1.5	4	3	2	4	2	3	2	21.5

Douglas Shire Council pest animal prioritisation– Feb 2016		Existing plans and priorities			Impacts and threats				Capacity to manage		
		NATIONAL	STATE	LOCAL	Conservation/ Biodiversity	Riparian/ Aquatic	Agricultural/ Production	Residential/ Urban	Achievability	Current Extent	Total Score
	Feral pigs	0	1.5	5	4	4	4	2	2	1	23.5
	Wild dogs	0	1.5	3	3	2	4	3	2	1	19.5
	Electric Ants	5	2.5	5	5	3	4	5	5	5	40.5

The following weeds are presumed eradicated from the area and are currently under monitoring to ensure they do not reoccur. Any suspected sightings of these weeds should be reported to DSC on 40999444.

MONITORING	Weed	Location	Where to watch out for it
	Alligator Weed	Port Douglas	Aquariums, waterways, gardens
	<i>Limnocharis flava</i>	Port Douglas, Wonga and Cape Trbulation	Water features, gardens, nurseries,

Pest and weed alerts

If you suspect you have seen any of these pests and weeds in the Douglas Shire Area, please report to the DSC on 40999444. For further information go to www.daff.qld.gov.au

ALERTS	Weed	Vicinity (State or Local Government Area)	Likely source and mode of spread
	Fireweed	Tablelands	Machinery, stockfeed, wind, roadside maintenance
	Kosters Curse	Mareeba, Cassowary Coast	Birds, water, machinery
	<i>Cabomba caroliniana</i>	Cairns, Cassowary Coast	Aquariums, Boats, fishing gear, water
	<i>Stevia ovata</i>	Tablelands	Machinery, wind, water
	<i>Hygrophila costata</i>	Cairns, Cassowary Coast, Hinchinbrook	Aquariums, water
	Neptunia – Water mimosa	Cairns	Food gardens, water
	Madras thorn	Cairns	Ornamental gardens
	Aleman grass	Cassowary Coast, Hinchinbrook	Grazing, stolons (cuttings)

	Yellow Crazy Ants	Cairns, Mareeba	Building / garden materials, machinery
	<i>Senegalia insuavis</i> , species	Cairns, Cassowary Coast, Mareeba, Cook	Edible gardens
	<i>Opuntia</i> cacti	Cairns, Cassowary Coast, Mareeba	Ornamental gardens
	<i>Limnobiun lavaetatum</i>	Cairns, Tablelands, Mareeba	Aquariums, water

Action Plans for Control of Priority Plant Pest and Animal Species

Action plans have been developed for priority pest plant and animals which occur in the Douglas Shire Council 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.

There are numerous methods to control pests and ways by which each pest species can be spread. These are summarised in icons on each action plan and are detailed below.

Priority scores: The results of the prioritisation process from the pest management work.

Distribution and zoning map: designated management zones and 1km resolution distribution map.

Weed type: identifies the type of weed across three categories
Form: woody/grass/vine/herb
Lifecycle: perennial/annual
Habitat: Terrestrial/aquatic

Details: a brief description of the pest, its distribution, impacts and key projects underway.

Background: an outline of weed or pest to provide advice on the best way to approach management.

Legislated requirements under the Biosecurity Act or Local laws.

Control methods: identifies the recommended methods of control. See management principles for icon descriptions.

Methods of spread: identifies the primary methods of spread. See management principles for icon descriptions.

Management calendar: peak flowering and fruiting times and when types of control activities are recommended. The green bar indicates when management activities should take place.

Identification images : the key features of the pest to help with identification.

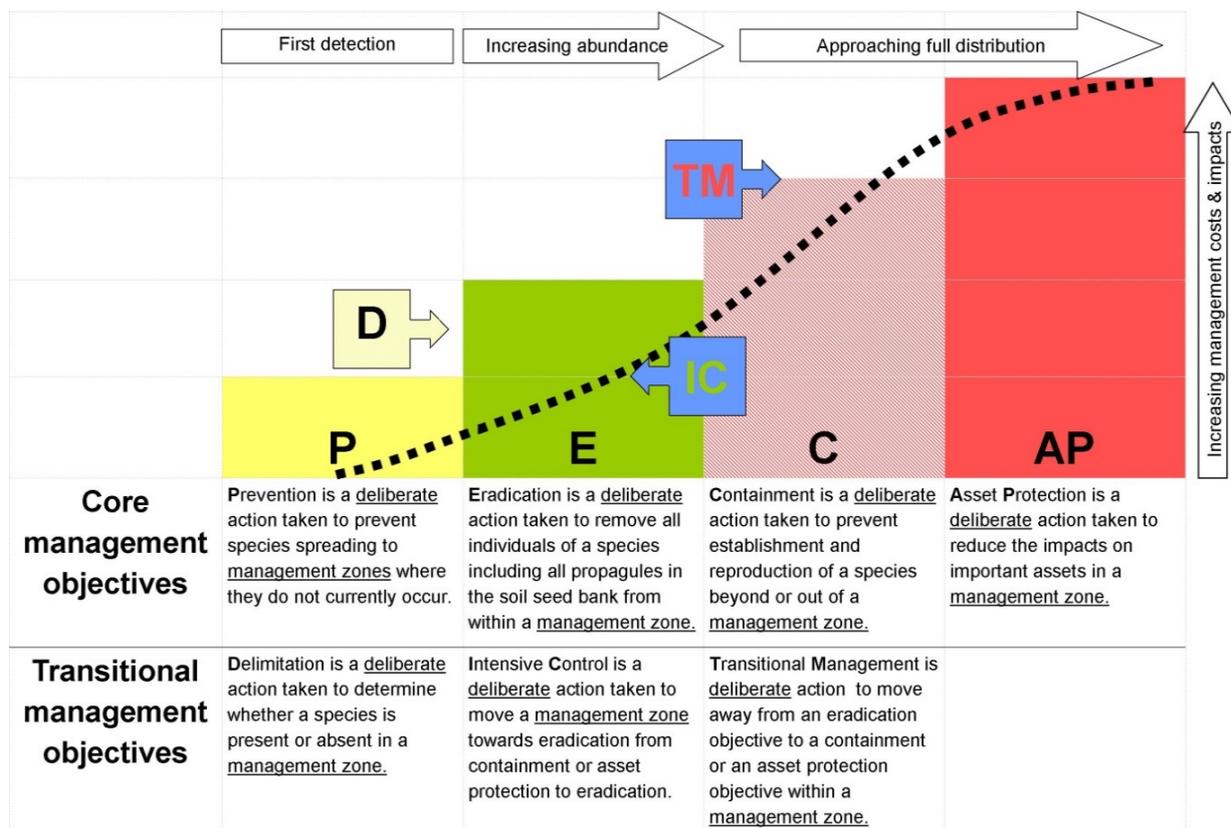
Biosecurity obligations: what do you need to do to meet your obligations within each zone.

Outline of the material contained within biosecurity action plans for priority species

Management zones

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 is reduced.



The invasion curve concept describes the management objectives in each of the management zones in the biosecurity action plan.

Key Methods of Controlling Biosecurity Matter

There are numerous methods to control pests and ways by which each pest species can be spread.

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.
	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 areas.
	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.

Modes of Spread for Biosecurity Matter

Key to modes spread



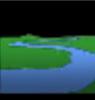
Droppings

Many plants have evolved to use animals to spread seeds by producing a 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.

Biosecurity Action Plans

Canis lupis familiaris (Wild dog)

	National priority	State priority	Previous local	Conservation	Water resources	Agriculture and industry	Community and residential	Feasibility of control	Current extent																																																																																											
Priority																																																																																																				
	0.0/5	1.5/5	5.0/5	2.0/5	1.0/5	4.0/5	3.0/5	3.0/5	2.0/5																																																																																											
Details	<p>Description: Wild dogs include dingoes, wild domestic dogs and hybrids.</p> <p>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.</p> <p>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.</p> <p>Key projects: In the Douglas Shire wild dogs are managed in response to need on a case by case basis. A coordinated approach to wild dog control is essential to prevent animals from areas with no control actions underway re-colonising controlled areas.</p>																																																																																																			
Background	<p>Wild dogs do not have defined home territories but are able to cover large distances when moving to new areas either through competition for resources or by being pushed out of areas by more dominant animals.</p> <p>In urban and settled areas Douglas Shire Council will respond to individual issues as they arise on a case by case basis. Whilst wild dogs are generally not aggressive to people they may display threatening behaviour in urban areas such as attacking domestic dogs, scavenging or stalking. 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.</p> <p>The biosecurity program does not include management of straying or problematic domestic dogs (including hunting dogs). These animals are domestic animals and are managed in accordance with Douglas Shire Councils Local Laws. For domestic dog queries contact Council on 07 4099 9444.</p> <p>1080 Policy guideline update</p>																																																																																																			
Control calendar	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th></th> <th>Jan</th><th>Feb</th><th>Mar</th><th>Apr</th><th>May</th><th>Jun</th><th>Jul</th><th>Aug</th><th>Sep</th><th>Oct</th><th>Nov</th><th>Dec</th> </tr> </thead> <tbody> <tr> <td>Breeding</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Pups</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Trap</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Shoot</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Bait</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Fence</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </tbody> </table> <div style="margin-top: 10px;"> <p>Key</p> <ul style="list-style-type: none"> Peak First/last flush Occasional Optimal Good Marginal </div>										Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Breeding													Pups													Trap													Shoot													Bait													Fence												
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For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Douglas Shire Biosecurity Management Plan available at douglas.qld.gov.au and customer service centres.



DOUGLAS
SHIRE COUNCIL

Canis lupis familiaris (Wild dog)

Douglas Shire Biosecurity Management Plan 2017-21

Grazing assets and urban areas

Vertebrate

Carnivore

Biosecurity Act Restricted matter category

2
Must be reported

3
Do not distribute

4
Do not move

5
Do not keep

6
Do not feed

Control

What is my biosecurity obligation?

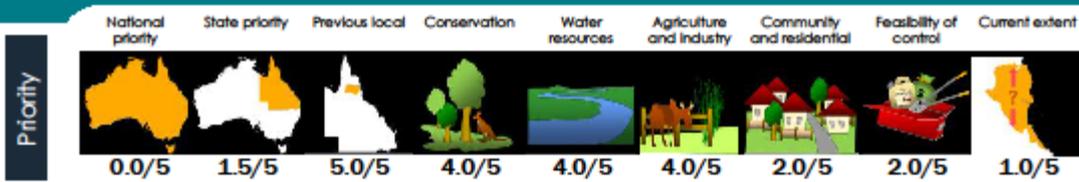
In the asset protection zone

Dog proof fencing is by far the most effective method of reducing the impacts of wild dogs on domestic stock and pets.

A range of control options from shooting, to trapping and baiting are used to control wild dogs when required. Targeting control activities to deliver protection prior to calving in stock is the best way to reduce impacts.

For domestic dog queries contact Council on 07 4099 9444.

Sus scrofa (Feral Pig)



Description: Feral pigs include all pigs ranging from typical black wild pigs to buff or spotted black or white which may resemble a typical farmed pig. By definition a feral pig is any pig which is not domesticated and is 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. Feral pigs breed throughout the year often producing two weaned litters per year.

Distribution: Common and widespread within the Douglas Shire, particularly in the lowlands.

Impacts: Feral pigs damage crops, stock, property and the natural environment. They transmit disease and could spread exotic diseases such as foot and mouth if this was introduced to the country.

Key projects: A long-term shire wide program has been set up to assist the community to minimise the environmental, social and economic impacts of feral pigs.

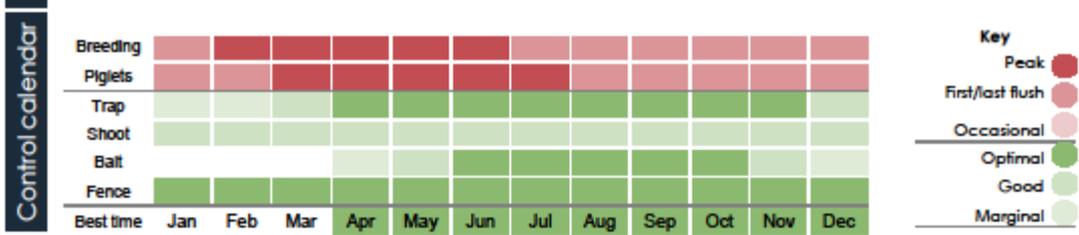
Background

Feral pigs are considered to number around 24 million in Queensland and are one the most widespread and destructive invasive animals in the State.

The Douglas Shire Feral Pig Management Program is an ongoing trapping and baiting project across the lowlands of the Douglas Shire Council Area. The program targets the protection of environmental, and agricultural assets. Landholders wishing to participate in the program should contact Douglas Shire Council on 07 4099 9444.

The program also assists to reduce the impacts of feral pigs on the natural environment by targeting trapping programs.

1080 Policy guideline update and trapping guideline/protocol



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

douglas.qld.gov.au
enquiries@douglas.qld.gov.au

64-66 Front Street,
Mossman, QLD, 4873

1800 026 318

@douglasshirecouncil

DOUGLAS
SHIRE COUNCIL

Sus scrofa (Feral Pig)

Douglas Shire Biosecurity Management Plan 2017-21

Natural assets and urban areas

Vertebrate

Carnivore

Biosecurity Act Restricted matter category

2
Must be reported

3
Do not distribute

4
Do not move

5
Do not keep

6
Do not feed

Control

[Icon: Pig]

[Icon: Pig]

[Icon: Pig]

[Icon: Pig]

What is my biosecurity obligation?

In the asset protection zone

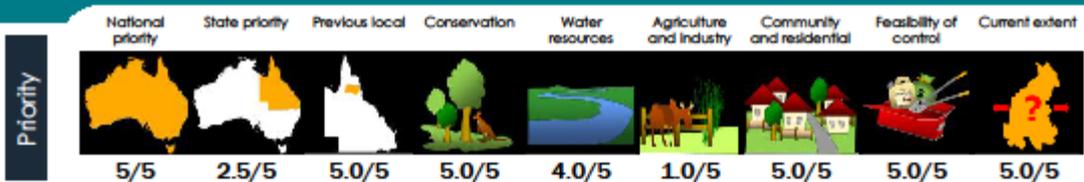
Pig proof fencing is by far the most effective measure of reducing the impacts of feral pigs on domestic gardens and small crops.

A range of control options from shooting, to trapping and baiting are used to control feral pigs when required. Douglas Shire Council operates a series of traps along the coastal lowlands and in the Daintree to reduce the number of feral pigs.

Landholders wishing to participate in the program should contact Douglas Shire Council on 07 4099 9444.

Ordinary Council Meeting Page 3112 November 2019

Miconia species (Miconia)



Description: Small tree (up to 15 m) with large leaves up to 70 cm long. The underside of the leaves is a distinct, deep iridescent purple. Produces clusters of small white flowers followed by red/purple berries. *M. nervosa* has distinctive pointed leaves with prominent veins with a red/maroon hue.

Distribution: Current incursions occur in Whyanbeel Valley and Mossman.

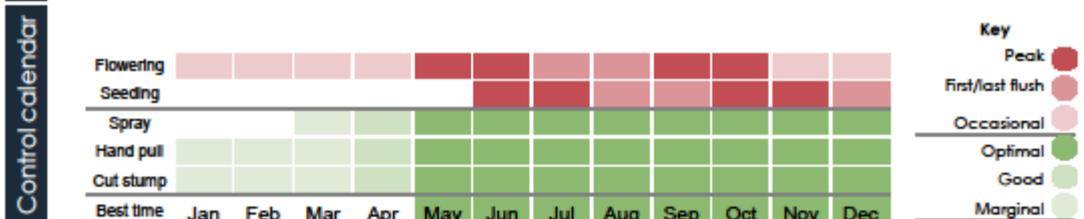
Impacts: Miconia produces hundreds of small berries every year which are attractive to birds and are spread long distances. It forms dense thickets in rainforest understoreys, potentially replacing native plants and affecting wildlife populations

Key projects: Target of the National cost-shared Four Tropical Weeds Eradication Program led by Biosecurity Queensland. All plants should be reported to Biosecurity Queensland immediately on 13 25 23

All Miconia in the Douglas Shire area have been introduced by gardeners and subsequently spread by birds. A community education and awareness program is an important part of the eradication program. Managing risk of spread to new areas through hygiene protocols for impacted nurseries and growers play an important role in prevention. Hygiene protocols are also in place for survey and control operations.

A National eradication program is underway on all known infestations. Bi-annual surveys are conducted to monitor all known infestations and to ensure no new outbreaks have gone undetected. Birds can disperse the small seeds out to many hundreds of metres .

Miconia calvescens is the most widely distributed of the two Miconia species present in the Douglas Shire which are eradication targets of the National 4 Tropical Weeds Eradication Program. Both species were introduced as garden specimens which have spread into neighbouring rainforest and agricultural landscape by birds.



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

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@douglasshirecouncil

Douglas Shire Biosecurity Management Plan 2017-21



Miconia species (Miconia)

M. nervosa







10 Kilometers

Woody

Terrestrial

Perennial

Biosecurity Act Restricted matter category

2 Must be reported

3 Do not distribute

4 Do not move

5 Do not keep

6 Do not feed

Control



Spread



M. calvescens

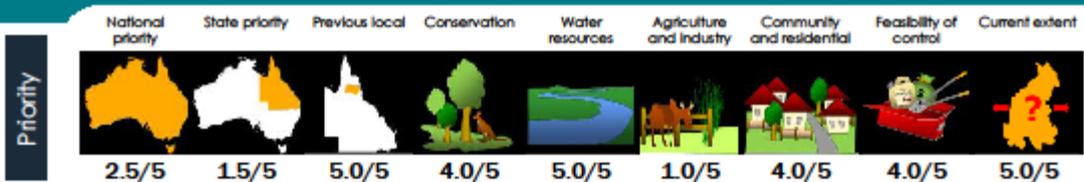




What is my biosecurity obligation?

In the prevention zone	Currently the target of the National cost-shared Four Tropical Weeds Eradication Program. Landholders are required to report suspected infestations immediately to Biosecurity Queensland on 13 25 23
In the eradication zone	If you have an active infestation on your property you can assist the survey and control team by ensuring you do not move soil or plant material from the infestation area and maintaining property access points and tracks.

Eichhornia crassipes (Water hyacinth)



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: Occurs only as isolated occurrences in drainage lines at Port Douglas and Wonga Beach

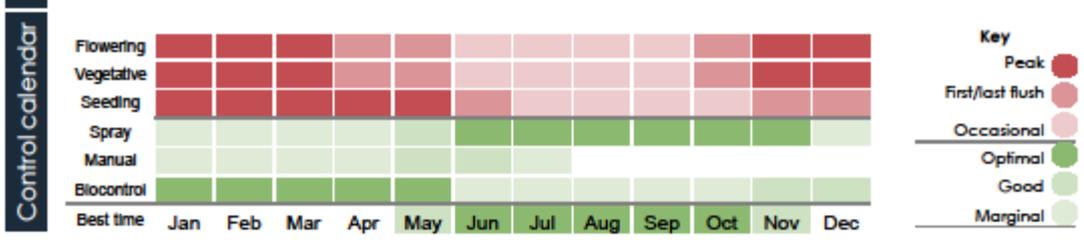
Impacts: It floats on still or slow-moving water and can grow rapidly to cover the entire water surface with a thick mat of vegetation. This shades out any submerged plant life and impedes oxygen exchange, making the water unsuitable for fish and other animals.

Key projects: Both known infestations are subject to eradication actions. Contact Douglas Shire Council to report any suspect plants on 1800 026 318

Douglas Shire is conducting a community education and awareness program to prevent water hyacinth's spread to clean catchments. Water hyacinth is most likely to be introduced in water features and ponds or as an aquarium plant. Ensure water features and ornamental gardens do not contain water hyacinth. Douglas Shire is the northern most distribution of water hyacinth in the Wet Tropics and actions here will help protect wetlands and waterways to the north. Water hyacinth grows from seed and by division of mature plants and may be spread in contaminate soil from water features containing the weed in other areas.

An eradication program is underway on the known infestations in the Port Douglas and Wonga Beach areas. Bi-annual surveys are conducted to monitor all known infestations and to ensure no new outbreaks have gone undetected.

Contact Douglas Shire Council to report any suspect plants or infestations on 1800 026 318



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

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Eichhornia crassipes (Water hyacinth)

Douglas Shire Biosecurity Management Plan 2017-21

Floating

Aquatic

Perennial

Biosecurity Act Restricted matter category

2 Must be reported

3 Do not distribute

4 Do not move

5 Do not keep

6 Do not feed

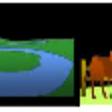
Control

Spread

What is my biosecurity obligation?

In the prevention zone	Ensure wetland and pond plants are sourced from a reliable supplier from and are from a weed free area. Contact Douglas Shire Council to report any suspect plants on 07 40999444. Do not share water plants or dump into waterways as this is the most likely means of spread.
In the eradication zone	Remove and bag potted specimens from water features and contact Douglas Shire Council to arrange disposal on 07 4099 9444. Ensure soil or vegetation from known infestations is not moved from the site or is disposed of correctly.

Chromolaena odorata (Siam weed)

	National priority	State priority	Previous local	Conservation	Water resources	Agriculture and industry	Community and residential	Feasibility of control	Current extent
Priority									
	0.0/5	1.5/5	5.0/5	4.0/5	4.0/5	4.0/5	3.0/5	5.0/5	5.0/5

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

Distribution: Localised and occasional in the Killaloe and Mossman area

Impacts: This species can form dense thickets and outcompete native species and pasture in both disturbed and undisturbed sites. Prefers richer soils in alluvial and riparian zones but will grow in rock and escarpment.

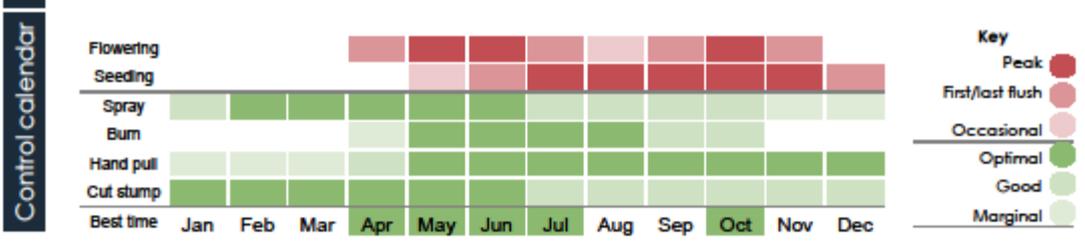
Key projects: The target of an National Eradication Program up until 2012, Siam weed is now in a transition to management. Siam weed remains a long term eradication target for the Douglas Shire area. Contact Douglas Shire Council to report any suspect plants on 07 40999444

Siam weed is likely to arrive with contaminated stock, produce, vehicles or machinery from adjoining infested areas. Ensure weed hygiene measures are in place and materials/produce are sourced from a clean site.

Siam weed has a peak flowering period in May-June with another, less vigorous flowering in October. It is most visible at these times and this feature is used to detect plants prior to seeding. Siam weed is able to be spread by wind and water as well as by machinery and an ongoing intensive control program is preparing all known infestations across the Douglas Shire area for eradication.

Siam seed is confirmed to remain viable in the soil for at least 7 years. Maintaining records of historical infestations and restricting disturbance and movement of soil is essential to prevent spread.

For larger infestations Douglas Shire Council will work with landholders to develop an on-farm biosecurity plan.



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

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Chromolaena odorata (Siam weed)

Douglas Shire Biosecurity Management Plan 2017-21

Herb

Terrestrial

Perennial

Biosecurity Act Restricted matter category

2 Must be reported

3 Do not distribute

4 Do not move

5 Do not keep

6 Do not feed

Control

Spread

In the prevention zone

In the intensive control zone

What is my biosecurity obligation?

Ensure agricultural and raw materials are sourced from a reliable supplier and are from a weed free area. Contact Douglas Shire Council to report any suspect plants on 07 4099 9444.

Do not disturb or remove soil and plant material from a known infestation location, even if no plants are visible. Undertake control works known infestations in April. Follow up control works during May-June to ensure any missed plants are controlled before the can produce seed.

Cecropia spp. (Mexican bean tree)

	National priority	State priority	Previous local	Conservation	Water resources	Agriculture and industry	Community and residential	Feasibility of control	Current extent
Priority									
	0.0/5	2.5/5	5.0/5	4.0/5	4.0/5	1.0/5	3.0/5	5.0/5	5.0/5

Description: Rapidly growing tree to 20m. Hollow stems, large deeply lobed leaves with flocked white undersides. Distinctive leaf scars on trunk. Female plant produces long finger-like spikes.

Distribution: Restricted to isolated outbreaks in the Whyanbeel Valley where it was introduced as a garden specimen

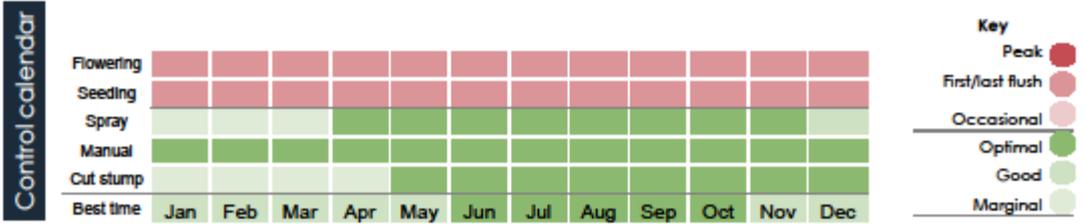
Impacts: A rapid growing rainforest pioneer which can invade and dominate rainforests and urban gardens. Cecropia is spread by birds and bats and so can be moved long distances into adjoining landscapes and forests.

Key projects: All known locations the target of a regional eradication program led by Biosecurity Queensland. All suspected sightings of this plant should be reported to Biosecurity Queensland on 13 25 23

A community education and awareness program is an important part of the eradication program. Managing risk of spread to new areas through hygiene protocols for impacted nurseries and growers play an important role in prevention. Hygiene protocols are also in place for survey and control operations.

Cecropia was most likely to be introduced as a garden specimen or experimental food plant over the past 2 decades. Keep an eye out in areas where plant collections or gardens have been or are situated as well as rainforest areas and disturbed sites across the Whyanbeel Valley.

All known locations the target of a regional eradication program led by Biosecurity Queensland. All suspected sightings of this plant must be reported to Biosecurity Queensland on 13 25 23



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

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Cecropia spp. (Mexican bean tree)

Douglas Shire Biosecurity Management Plan 2017-21

Woody

Terrestrial

Perennial

Biosecurity Act Restricted matter category

2 Must be reported

3 Do not distribute

4 Do not move

5 Do not keep

6 Do not feed

Control

Spread

What is my biosecurity obligation?

In the prevention zone	<p>All known locations are the target of a regional eradication program led by Biosecurity Queensland.</p> <p>All suspected sightings of this plant must be reported to Biosecurity Queensland on 13 25 23 within 24 hours of sighting.</p>
In the eradication zone	<p>It must not be given away, sold or released into the environment without a permit.</p> <p>You are required to control all identified Cecropia plants.</p>

Hiptage benghalensis (Hiptage)

Priority	National priority	State priority	Previous local	Conservation	Water resources	Agriculture and industry	Community and residential	Feasibility of control	Current extent
	0.0/5	0.0/5	5.0/5	5.0/5	5.0/5	2.0/5	5.0/5	4.0/5	3.0/5

Description: Perennial plant that is more shrub-like in open areas, but more vine-like in rainforest, where it can grow to more than 15m tall. Fruit is helicopter like ('samara') which has 3 papery wings 2-5cm long that float on wind and contain 1-3 seeds.

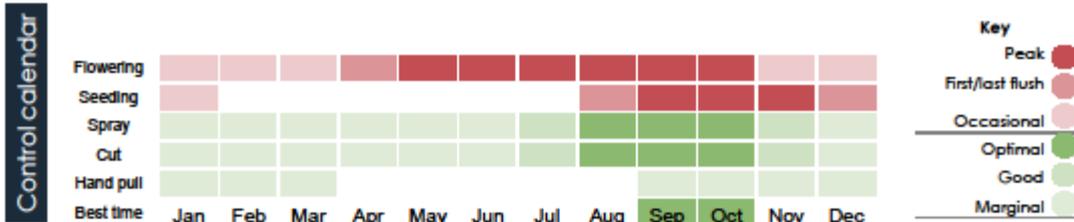
Distribution: Only known to occur in the Mossman River Catchment within Far North Queensland. Core infestations occur on Butches Hill. Outlier infestations occur in the Mossman Gorge and South Mossman River areas.

Impacts: Forms dense vine towers which smothers native vegetation along banks of creeks and rivers in coastal areas. Invades rainforests and seasonally dry, lowland closed forests. Hiptage poses a significant threat to Mossman Gorge and the Wet Tropics Works Heritage Area.

Key projects: Target of a coordinated eradication program across all know sites. Any detections of this plant should be reported to Douglas Shire Council on 1800 026 318.

Hiptage was most likely introduced as an ornamental garden plant. The Mossman infestation is the most northerly in Queensland and Australia. It is currently restricted to a region between Mossman township and Mossman Gorge.

An ongoing intensive control program is underway across all known infestations. The project is preparing all known infestations for an eradication goal in the future. Bi-annual surveys are conducted to monitor all known infestations and to ensure no new outbreaks have gone undetected. Aerial surveys are conducted annually to detect flowering plants in the rainforest canopy. Each site is then visited on foot to treat and the proximity is surveyed for additional plants.



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

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Hiptage benghalensis (Hiptage)

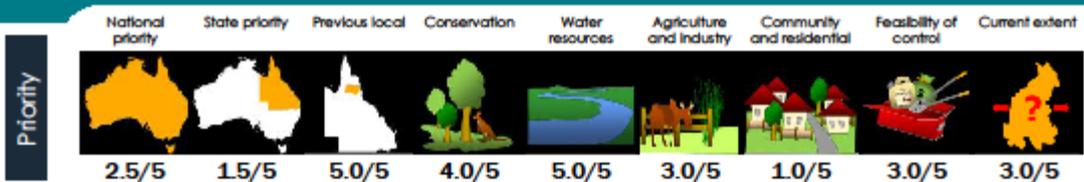
Douglas Shire Biosecurity Management Plan 2017-21

- Vine
- Terrestrial
- Perennial
- Local laws apply
- Must not breed
- Must not propagate
- Must not introduce
- Must not sell or supply
- Must not provide harbour
- Control
-
-
-
- Spread
-
-
-

What is my biosecurity obligation?

In the delimitation zone	Hiptage is most likely to have been introduced as a garden plant. Any suspected plantings, sales or other detections of this plant should be reported to Douglas Shire Council on 07 4099 9444.
In the prevention zone	
In the intensive control zone	Report any suspect plants to Douglas Shire Council on 07 4099 9444. Assist the control program by maintaining site access for the operations team to survey and control in forest and creek lines.

Annona glabra (Pond Apple)



Description: Tall semi-deciduous shrub or tree reaching around 15m but typically 3-6 m. Pond apple is most likely to occur in wetlands and along stream margins 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: Core infestations occur in the Daintree River and Baileys Creek Areas. Outlier infestations occur in the Mossman River, Port Douglas and Cowie Beach. 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 habitats. It forms dense thickets that exclude most native ground and shrub layer plants and prevents regeneration of trees.

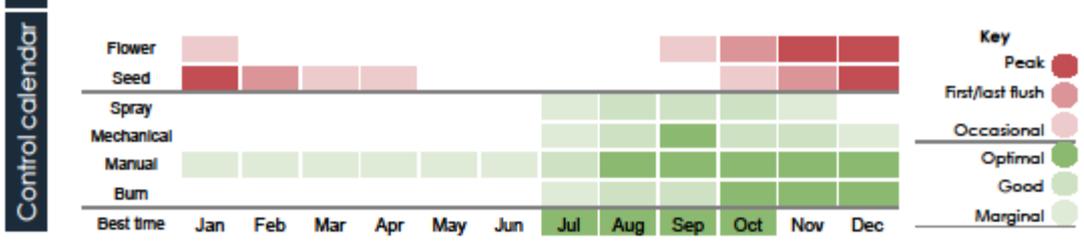
Key projects: Long term projects are continuing in the Daintree River catchment to reduce impacts and remove infestations from top of catchment down

Pond apple is most likely to grow along creeks and in wetlands but it may also be found in old orchards where it was used as graft stock in the past or appear along beaches and beach swales where it arrives as floating seeds. Keep an eye out for pond apple in swamps, mangroves, estuaries or islands and report any suspect plants to council.

The northern infestation in Cowie Bay is currently under monitoring to eradication. Pond apple can be confused with several mangrove species so contact the council team to assist identify and plan your management response.

The upper Daintree River and Mossman River are the target of top down management to remove upstream sources above tidal areas. Occasional plants occur in the Port Douglas and Four Mile Beach and are removed when detected.

Core infestations occur in the tidal areas of the lower Daintree River and the Melaleuca swamps of Baileys Creek in Cow Bay. These infestation are the source of seeds which wash up and form small infestations from Wonga Beach to Noah Head.



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

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1800 026 318

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Annona glabra (Pond Apple)

Douglas Shire Biosecurity Management Plan 2017-21

Woody

Aquatic

Perennial

Biosecurity Act Restricted matter category

2
Must be reported

3
Do not distribute

4
Do not move

5
Do not keep

6
Do not feed

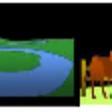
Control

Spread

What is my biosecurity obligation?

In the prevention zone	Report any suspected outbreaks or detections to Douglas Shire on 07 4099 9444
In the eradication zone	If you have an active infestation on your property you can assist the survey and control team by maintaining property access points.
In the intensive control zone	Control plants in creeks and drains. Assist management programs by improving access to infestations and coordinating control works with these programs.
In the asset protection zone	Reduce densities of plants in known sites. Prevent spread and establishment in new sites.

Pistia stratiotes (Water lettuce)

	National priority	State priority	Previous local	Conservation	Water resources	Agriculture and industry	Community and residential	Feasibility of control	Current extent
Priority									
	0.0/5	1.5/5	5.0/5	4.0/5	5.0/5	1.0/5	4.0/5	3.0/5	5.0/5

Description: A free floating aquatic weed which resembles an open head of lettuce. Leaves are spongy, light green and water repellent. Small green flowers. Reproduces from seeds or division.

Distribution: Isolated to water features and artificial water ways particularly in Wonga Beach area. Prefers slow moving water bodies with high nutrients.

Impacts: An aquatic weed that can choke waterways. It floats on still or slow-moving water and can grow rapidly to cover the entire water surface with a thick mat of vegetation. This shades out any submerged plant life and impedes oxygen exchange impacting fish and aquatic organisms. Provides breeding opportunities for mosquitoes

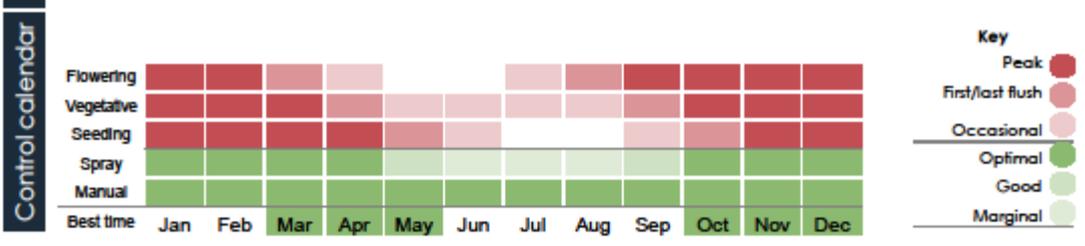
Key projects: Systematic top down management in infested catchments will be required to reduce the impacts of water lettuce

Background

Water lettuce is most likely to be introduced via aquariums or water features. The plant could be potentially be introduced as a contaminant in water plants sourced from the greater Cairns area. Ensure that sources of water plants like water lily are weed free and do not contain water lettuce or other water weeds. Do not empty aquariums into man made or natural waterways.

Water lettuce reproduces by seed and by division from stolons (runners). A top of catchment down approach is being used to systematically remove water lettuce from the water features and artificial waterways where it occurs in Douglas Shire.

Water lettuce can spread on flood water so operations will focus on areas at risk following major weather events



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

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Pistia stratiotes (Water lettuce)

Douglas Shire Biosecurity Management Plan 2017-21

Floating

Aquatic

Perennial

Biosecurity Act Restricted matter category

2
Must be reported

3
Do not distribute

4
Do not move

5
Do not keep

6
Do not feed

Control

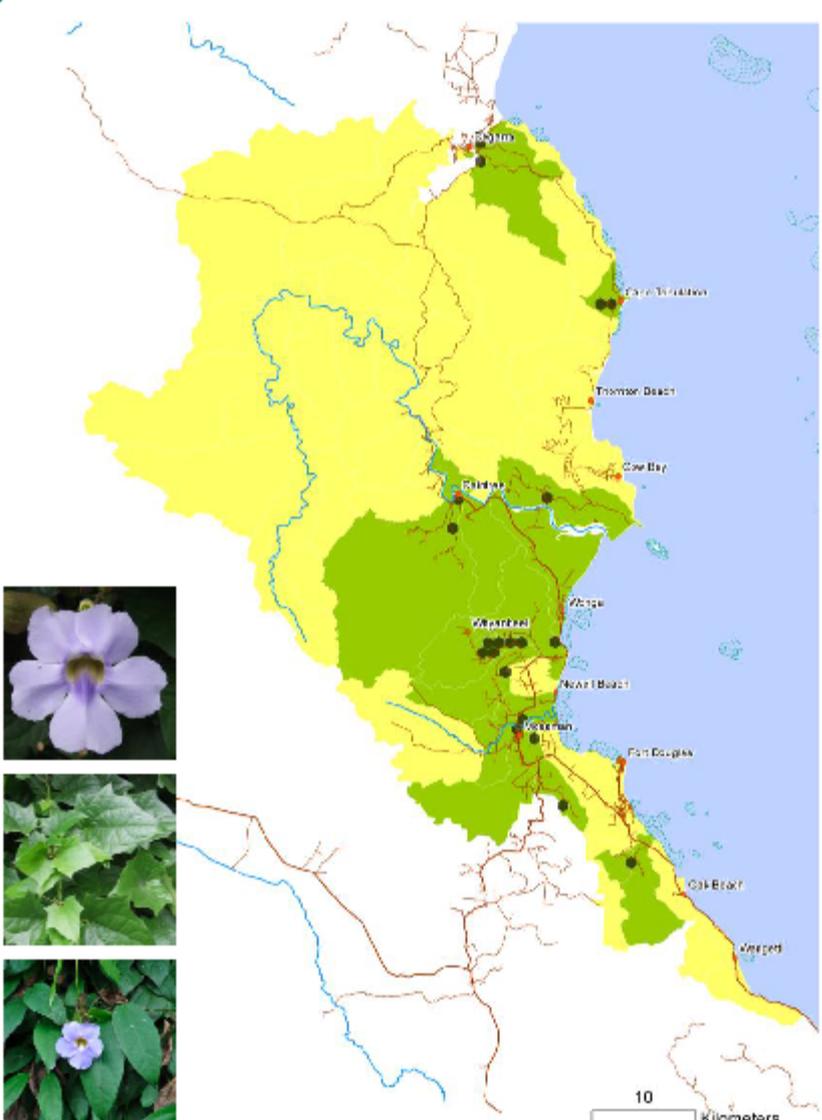
Spread

What is my biosecurity obligation?

In the prevention zone	Ensure wetland and pond plants are sourced from a reliable supplier from and are from a weed free area. Contact Douglas Shire Council to report any suspect plants on 07 40999444.
In the intensive control zone	Do not share water plants or dump into waterways as this is the most likely means of spread. Remove and bag specimens from water features and contact Douglas Shire Council to arrange disposal on 07 4099 9444.
In the eradication zone	Remove and bag specimens from water features and contact Douglas Shire Council to arrange disposal on 07 4099 9444.

Thunbergia grandiflora (Thunbergia)


Douglas Shire Biosecurity Management Plan 2017-21







Vine

Terrestrial

Perennial

Biosecurity Act Restricted matter category

2
Must be reported

3
Do not distribute

4
Do not move

5
Do not keep

6
Do not feed

Control







Spread



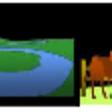




What is my biosecurity obligation?

In the prevention zone	<p>It is an offence under the Biosecurity Act to move, share, give away or sell this plant.</p> <p>Report any suspected outbreaks or detections to Douglas Shire on 07 4099 9444.</p> <p>Ensure any machinery or vehicles moving from the eradication zone are free from plant material and soil</p>
In the eradication zone	<p>Report any suspected outbreaks or detections to Douglas Shire on 07 4099 9444.</p> <p>Control any infestations and destroy plant material on your property. Seek advice prior to works in vicinity of known locations. Do not move or accept plant material or soil unless you are sure it is from a clean source</p>

Parthenium hysterophorus (Parthenium)

	National priority	State priority	Previous local	Conservation	Water resources	Agriculture and industry	Community and residential	Feasibility of control	Current extent
Priority									
	2.5/5	1.5/5	5.0/5	3.0/5	2.0/5	3.0/5	1.0/5	5.0/5	5.0/5

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.

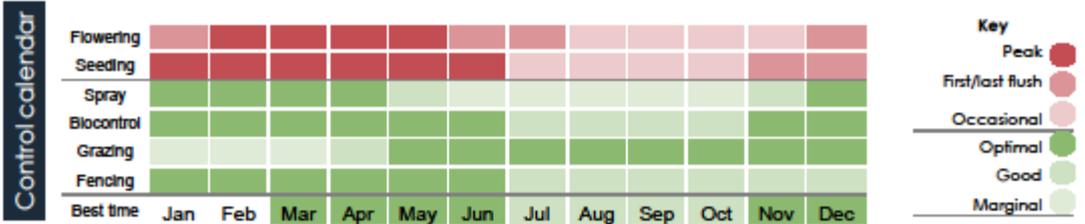
Distribution: Isolated infestation in Forest Creek

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: Only known site in Douglas Shire is under an ongoing monitoring program and progressing to eradication. Report any suspected outbreaks or detections to Douglas Shire on 07 4099 444

Parthenium weed is often spread as a contaminant in stock and poultry feed. Keep a close watch on areas where feed has been spread. Ensure that the supplier you source from can confirm the product is free from weed seed and not from a known infested area. Imported vehicles and machinery are free from weed seed and soil. Spell any stock in a holding paddock for at least 7 days.

Background



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

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Parthenium hysterophorus (Parthenium)

Douglas Shire Biosecurity Management Plan 2017-21

Herb

Terrestrial

Annual

Biosecurity Act Restricted matter category

2 Must be reported

3 Do not distribute

4 Do not move

5 Do not keep

6 Do not feed

Control

Spread

What is my biosecurity obligation?

In the prevention zone	<p>Ensure any machinery or vehicles moving from the infested areas are free from plant material and soil. Report any suspected outbreaks or detections to Douglas Shire on 07 4099 9444</p>
In the eradication zone	<p>Ensure best practice weed hygiene measures are in place to reduce risk of spread to new locations. Maintain weed free areas. Meet proof of freedom targets for eradication. Report any suspected outbreaks or detections to Douglas Shire on 07 4099 444</p>

Salvinia molesta (Salvinia)

	National priority	State priority	Previous local	Conservation	Water resources	Agriculture and industry	Community and residential	Feasibility of control	Current extent
Priority									
	2.5/5	1.5/5	5.0/5	4.0/5	5.0/5	1.0/5	4.0/5	3.0/5	2.0/5

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. Reproduces by rapidly dividing into smaller plants.

Distribution: Widespread and occasional in disturbed creek systems in Port Douglas and Wonga Beach

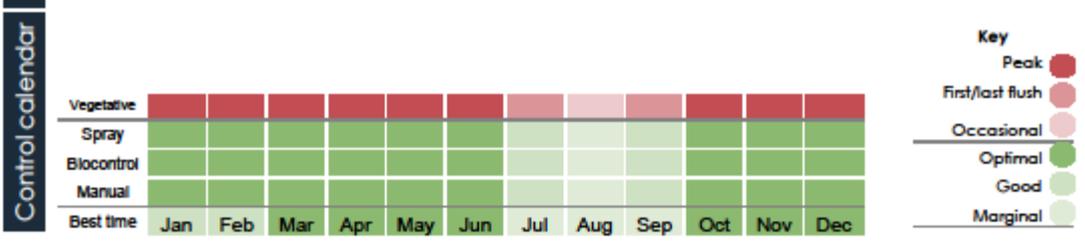
Impacts: An aquatic weed that can choke waterways. It floats on still or slow-moving water and can grow rapidly to cover the entire water surface with a thick mat of vegetation. This shades out any submerged plant life and impedes oxygen exchange impacting fish and aquatic organisms

Key projects: Long term management projects and taking place in Wonga Beach and Ferndale Wetlands reserve.

Salvinia is most likely to be introduced as a contaminant of wetland plants sourced from infested locations or aquariums. It may also spread on floodwaters from known locations.

The ongoing protection of the clean catchments identified within this plan will assist reduce the spread of Salvinia. Ensure that Salvinia is not introduced to ornamental ponds or water features. Report any suspected outbreaks or detections to Douglas Shire on 07 4099 9444.

There are ongoing intensive control projects in Wonga Beach and Port Douglas. Infestations are currently be controlled with herbicide follow-up surveys to ensure all plant fragments have been treated.



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

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Salvinia molesta (Salvinia)

Douglas Shire Biosecurity Management Plan 2017-21

Floating

Aquatic

Perennial

Biosecurity Act Restricted matter category

2
Must be reported

3
Do not distribute

4
Do not move

5
Do not keep

6
Do not feed

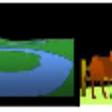
Control

Spread

What is my biosecurity obligation?

In the prevention zone	<p>Salvinia is a restricted plant under the Biosecurity Act 2014. It must not be distributed, given away or sold.</p> <p>Ensure sources of aquatic plants for aquariums and water features are weed free. Report any suspected outbreaks or detections to Douglas Shire on 07 4099 9444</p>
In the eradication zone	<p>Remove and bag potted specimens from water features and contact Douglas Shire Council to arrange disposal on 07 4099 9444.</p> <p>Ensure soil or vegetation from known infestations is not moved from the site or is disposed of correctly.</p>

Peuaria lobata (Kudzu)

	National priority	State priority	Previous local	Conservation	Water resources	Agriculture and industry	Community and residential	Feasibility of control	Current extent
Priority									
	0.0/5	1.5/5	5.0/5	4.0/5	4.0/5	2.0/5	3.0/5	3.0/5	5.0/5

Description: A perennial scrambling vine with alternate leaves. The large leaves are a lobed shape and form in groups of three (like a dinosaur footprint). It produces purple pea like flowers and spreads rapidly when nodes come in contact with soil

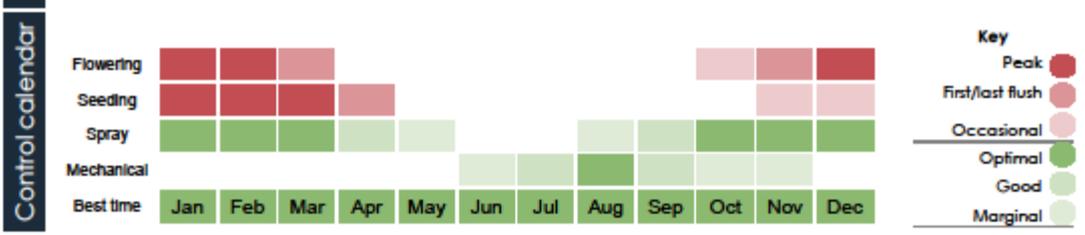
Distribution: All currently known infestations occur in the Mossman River Catchment

Impacts: A fast growing vine which has the potential to encroach into thick rainforest and riparian zones smothering native vegetation. Poses a significant threat to agriculture and infrastructure. Can grow to over 30 metres in height smothering vegetation and infrastructure. Seed pods can be spread by sticking to clothing and the fur of animals.

Key projects: All known infestations are under active programs toward eradication. Report any suspected outbreaks or detections to Douglas Shire on 07 4099 444

A delimitation survey is in operation which aims to determine the full extent of Kudzu across Douglas Shire. Kudzu is likely to have been introduced as a medicinal or cultural plant.

All known sites are to be surveyed mapped and scheduled for treatment. Any works conducted in vicinity of known active sites should seek advice on hygiene measures required to recue the risk of spread to new locations.

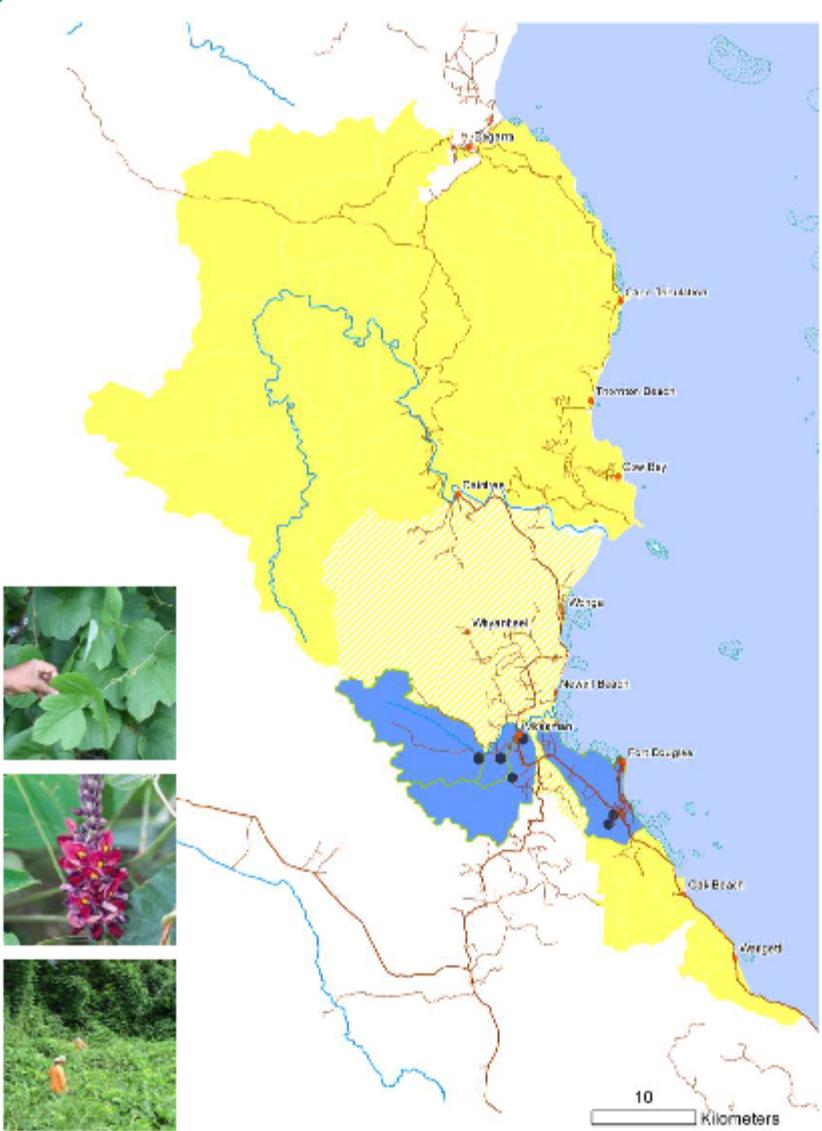


For more information on using this biosecurity action plan fact sheet, and further information on control tools, refer to the Douglas Shire Biosecurity Management Plan available at douglas.qld.gov.au and customer service centres.

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Peuaria lobata (Kudzu)


Douglas Shire Biosecurity Management Plan 2017-21







What is my biosecurity obligation?

In the delimitation zone	Report any suspected outbreaks or detections to Douglas Shire on 07 4099 9444 . Ensure any machinery or vehicles moving from infested areas are free from plant material and soil.
In the prevention zone	
In the intensive control zone	Landholders with infestations should seek advice on best control methods an develop a farm biosecurity plan to manage any infestations on your property contact Douglas Shire on 07 4099 9444.

Vine

Terrestrial

Perennial

Biosecurity Act Restricted matter category

2
Must be reported

3
Do not distribute

4
Do not move

5
Do not keep

6
Do not feed

Control







Spread







Phytolacca rivinoides (Venezuelan pokeweed)

	National priority	State priority	Previous local	Conservation	Water resources	Agriculture and industry	Community and residential	Feasibility of control	Current extent
Priority									
	0.0/5	0.0/5	5.0/5	4.0/5	4.0/5	1.0/5	3.0/5	3.0/5	5.0/5

Description: Medium to large shrub with distinctive multi-stemmed and tangled habit. Conspicuous elongated flowers spikes with bright red/purple stems and small green fruit ripening to deep purple, almost black berries. Fruits and tiny white flowers are held on short stalks which radiate out from the flower spike. Leaves are oval shaped with a pointed tip and soft to touch.

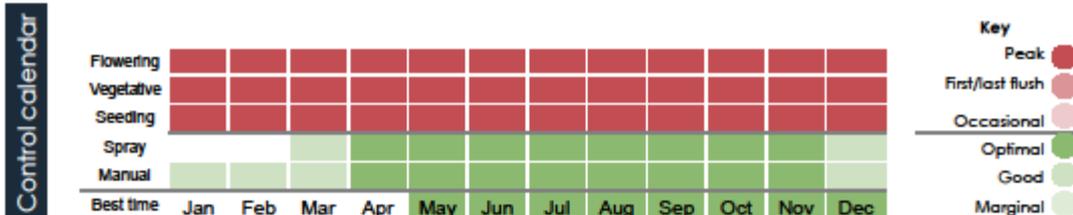
Distribution: Current incursion occurs in the Whyanbeel Valley where it has been spread from cultivation in gardens by birds.

Impacts: Venezuelan pokeweed is currently restricted in it's distribution but has shown the ability to disperse and establish in both disturbed and un disturbed tropical forests and water ways. The prolific fruiting and dense growth habit of the plant means it smothers and outcompetes many native plants and occupies niches in rainforest which are usually open or occupied by dormant seedlings.

Key projects:

Venezuelan pokeweed occupies the part of the foot-print of the operations of the Four Tropical Weeds Eradication Program for *Miconia calvescens* and *nervosa*. Determining the current extent of spread by mapping plants during other survey operations will assist to establish the boundaries of the know infestation. Bi-annual surveys are conducted to monitor all known infestations and to ensure no new outbreaks have gone undetected.

Venezuelan pokeweed was most likely introduced as an ornamental plant for the trial in the cut flower industry. It has since spread from cultivation in to occupy multiple sites on adjoining properties, forest and creek lines. It may be present in other area of the Douglas Shire or in nursery plants distributed from the properties in the Wyhanbeel Valley.



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

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Phytolacca rivinoides


Douglas Shire Biosecurity Management Plan 2017-21







Woody

Terrestrial

Perennial

Biosecurity Act Restricted matter category

2
Must be reported

3
Do not distribute

4
Do not move

5
Do not keep

6
Do not feed

Control







Spread







What is my biosecurity obligation?

In the delimitation zone	Report any suspected outbreaks or detections to Douglas Shire on 07 40999444 . Ensure any machinery or vehicles moving from infested areas are free from plant material and soil.
In the prevention zone	Ensure nursery plants and supplies are from a weed free source. Consider other less invasive for use in horticulture. Maintain access tracks entry points for survey operations.

Elephantopus mollis (Tobacco weed)

Priority	National priority	State priority	Previous local	Conservation	Water resources	Agriculture and industry	Community and residential	Feasibility of control	Current extent
	0.0/5	1.5/5	5.0/5	3.0/5	2.0/5	4.0/5	2.0/5	3.0/5	2.0/5

Description: Tobacco weed is a slender fast growing herb up to 1.5m with rough/hairy oblong/oval leaves bunching at the base. Small white flowers surrounded by three bracts are held in clusters at the end of upright stems. Leaves and stems are resinous and can irritate the skin.

Distribution: Widespread in coastal districts particularly along roadsides, pastures and areas of disturbance.

Impacts: A threat to grazing, pastures and horticulture through competition. Tobacco weed can rapidly occupy disturbed and heavily grazed areas. Dense masses of seedlings smother grass. Prefers moist and fertile ground so can be highly competitive in production areas.

Key projects: Annual treatments along roadsides to reduce to spread

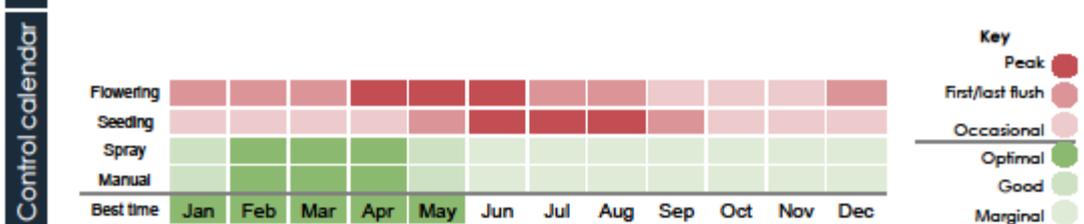
Spread to new areas can be reduced by spelling stock in holding paddocks prior to movement. Populations on roadsides should be treated as a priority to prevent further spread.

Tobacco weed prefers areas of disturbance and openings in the canopy in pastures and along roads. If left untreated it forms a dense ground cover which smothers grasses and native plants.

Careful management of pasture to maintain competition combined with periodic control prior to seeding can assist to reduce impacts on grazing enterprise.

Manage roadsides and pastures to prevent spread to adjoining paddocks and properties. Integrated control in grazing areas including pasture management, herbicide control and weed hygiene activities will assist keep pasture healthy. Spot spraying isolated outbreaks and prior to introducing stock or disturbing soil will reduce spread to new areas.

Tobacco weed may flower and seed any time of year but generally occurs in May after the wet season



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

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Elephantopus mollis (Tobacco weed)

Douglas Shire Biosecurity Management Plan 2017-21

Woody

Terrestrial

Perennial

Biosecurity Act Restricted matter category

2 Must be reported

3 Do not distribute

4 Do not move

5 Do not keep

6 Do not feed

Control

Spread

What is my biosecurity obligation?

In the delimitation zone	Report any suspected outbreaks or detections to Douglas Shire on 07 40999444 . Ensure any machinery or vehicles moving from infested areas are free from plant material and soil
In the asset protection zone	Treat infestation areas prior to seeding and maintain healthy pastures and stocking rates to provide competition. Manage roadsides and access areas to reduce of spread to new areas.

Coccinia grandis (Ivy gourd)

	National priority	State priority	Previous local	Conservation	Water resources	Agriculture and industry	Community and residential	Feasibility of control	Current extent
Priority									
	0.0/5	0.0/5	5.0/5	3.0/5	3.0/5	1.0/5	5.0/5	4.0/5	5.0/5

Description: Perennial and fast growing vine up to and over 10 metres tall. Heart to pentagon shaped leaves are alternate on slender stems which become thicker and succulent with age. White star shaped flowers in August/September. Produces red fruits to 6 cm long. Is a member of the passion fruit family and has simple tendrils and separate male and female flowers. Ivy gourd has a tuberous root system which can make control efforts difficult.

Distribution: Current incursions occur in isolated occurrences in the Mossman Catchment.

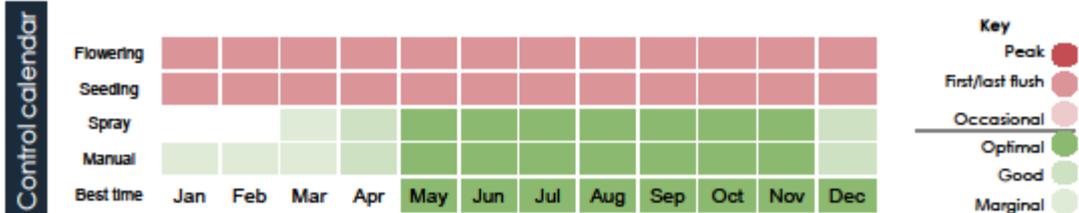
Impacts: Ivy gourd is a smothering vine which covers other vegetation forming a dense canopy. Ivy gourd was most likely introduced as culinary or medical plant and so is likely to have established in forest margins, creek lines and other areas adjoining towns and gardens. Seeds are distributed by pigs and birds locally.

Key projects: All known infestations are surveyed and treated regularly.

Ivy gourd is most likely to be introduced as a food plant as the growing tips and ripe fruits are used in cooking in many parts of Asia. It is also used for a range of medicinal uses are also. The long distance dispersal is usually always human-assisted. In Far North Queensland it is likely to be passed between people and has also been detected at food markets.

There are many less invasive options for cooking greens or medicinal plants which can be used as an alternative.

An eradication program is underway on all known infestations in the Mossman catchment. Bi-annual surveys are conducted to monitor known locations and to treat any regrowth or germination of seed.



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Coccinia grandis (Ivy gourd)

Douglas Shire Biosecurity Management Plan 2017-21

Vine

Terrestrial

Perennial

Biosecurity Act Restricted matter category

2
Must be reported

3
Do not distribute

4
Do not move

5
Do not keep

6
Do not feed

Control

Spread

What is my biosecurity obligation?

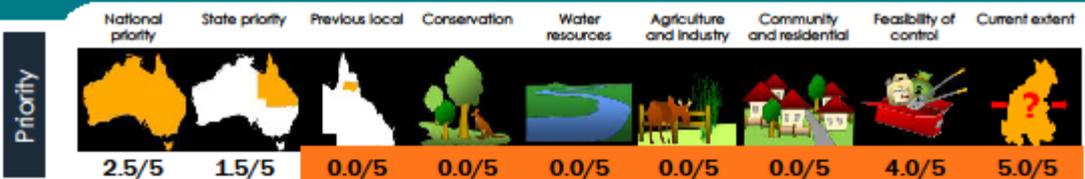
In the prevention zone

Report any suspected outbreaks or detections to Douglas Shire on 07 4099 9444 . Use alternative food and medicinal plants. Dispose of garden waste responsibly and always avoid dumping of green waste. Assist control operations by maintaining access to management sites.

In the eradication zone

Report any suspected outbreaks or detections to Douglas Shire on 07 40999444 . Ensure any machinery or vehicles moving from infested areas are free from plant material and soil.

Andropogon gayanus (Gamba grass)



Description A robust, upright perennial grass that grows to 4m with distinctive plumed seed heads. Gamba grass forms thick and strong tussocks that remain upright even when fully cured in the dry season.

Distribution Gamba grass is currently restricted to isolated occurrences in the Mowbray valley and the Finlayvale/Santacatterina area.

Impacts Gamba grass was planted as tropical pasture but has escaped from intensively managed grazing systems. It outcompetes native pastures and fuels intense fires. Late season Gamba grass fires are very difficult to manage and pose a significant threat to life and property.

Key projects: An monitoring and control program is in place on to eradicate Gamba grass from all known sites within the Douglas Shire.

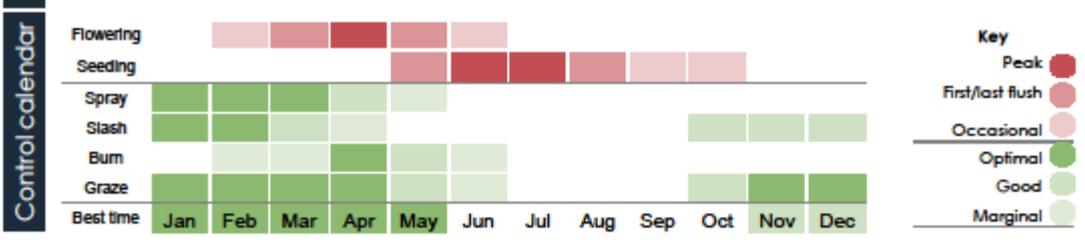
Background

Up until its declaration as an invasive weed, Gamba grass was widely promoted as a tropical pasture grass. Gamba grass is a serious environmental weed in the Darwin and Bachelor regions of Northern Territory and Venezuela and is a weed of major concern and a priority for management across Cape York Peninsula and Far Northern Queensland.

Gamba grass is a highly competitive grass generating up to ten times the biomass of native species. This impacts of is two-fold; out-competing native species, and significantly increasing fuel loads and fire intensity to 3-8 times that of native savannah grasses. As a major competitor in native pasture Gamba grass can reduce available soil nutrients and significantly reduce water penetration by intercepting it the soil surface.

Gamba grass can colonize a variety of natural habitats from open savannah woodlands to margins of watercourses and wetlands. It is particularly well suited to the disturbed soils of roadsides and service corridors and this presents one of the key modes of spread

Ensuring vehicles, machinery and raw materials including hay are from a clean source will assist to reduce the risk of accidental introduction and spread of Gamba grass.



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Andropogon gayanus (Gamba grass)

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Douglas Shire Biosecurity Management Plan 2017-21

What is my biosecurity obligation?

In the prevention zone	Report any suspected outbreaks or detections to Douglas Shire on 07 4099 9444 .Ensure machinery and vehicles moving from the infested areas are free from plant material and soil. Do not sell, cart, introduce or transport contaminated hay or silage.
In the eradication zone	Report any suspected outbreaks or detections to Douglas Shire on 07 40999444 . Ensure best practice weed hygiene measures are implemented to reduce risk of spread elsewhere. Assist in annual survey operations and control isolated plants before they seed. Do not sell, cart, introduce or transport contaminated hay or silage.

Grass

Terrestrial

Perennial

Biosecurity Act Restricted matter category

2 Must be reported

3 Do not distribute

4 Do not move

5 Do not keep

6 Do not feed

Control

Spread

Appendix 1

The current Biosecurity Working Group consists of representatives from the following groups:

NAME	ORGANISATION
Peter Logan	Douglas Shire Council
Bradley Everett	Douglas Shire Council
Travis Sydes	Far North Queensland Region Of Councils
Michael Graham	Department of Agriculture and Fisheries
Kim Erbacher	Department of Agriculture and Fisheries
David Leyden	Queensland Parks and Wildlife Service
Kylie Goodall	Queensland Parks and Wildlife Service
Jeff Arneth	Jabalbina Aboriginal Corporation
Drew Watson	Mossman Canegrowers
Laurie Taylor	AgForce Daintree
John Anich	Mossman Botanical Gardens

DOUGLAS SHIRE COUNCIL INVASIVE PLANTS AND ANIMALS SURVEILLANCE PROGRAM

2019-2020

DOUGLAS SHIRE
COUNCIL

Engaging, Planning, Partnering
Muruku Kirraji - Eastern Kuku Yalanji
Nganyji pina ngunda-lum ... Ma:Inyjiirri-yngku - Yirrganydji

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Biosecurity Program

PROGRAM NAME

The biosecurity surveillance program for invasive biosecurity matter for the Douglas Shire Council local government area, will be known as the **Douglas Shire Council Invasive Plants and Animals Surveillance Program 2019-2020** and referred to as “**the Program**” throughout this document.

Requirement for a surveillance program

PURPOSE AND RATIONALE

The main biosecurity function of each local government continues to be the management of invasive plants and animals in its area s48 (1) (a-d). These include those listed as *invasive biosecurity matter* (defined to include only invasive plants and animals that are listed as prohibited and restricted matter in schedules 1 and 2 of the Act).

The Act provides a more comprehensive range of response tools and associated powers tailored to address the unique nature and tactical challenges presented by individual biosecurity threats including the establishment of surveillance programs.

Douglas Shire has a Biosecurity Plan that provides strategic direction for the management of invasive biosecurity matter and other priority pests on all land tenures within the Douglas Shire Council area and has been developed by and for the entire community. The plan has identified species that pose or are likely to pose a significant biosecurity risk to agricultural production and the environment in the Douglas Shire Council area.

Douglas Shire Biosecurity Plan 2017 to 2021 (DSCBP), aims to benefit the community by preventing or reducing the impacts of pests and weeds on the economy, environment and people of the area through:

- Addressing the obligations under the Biosecurity Act 2014 for all stakeholders.
- Prioritization invasive pests and prevent the introduction and spread of invasive plants and animals within Douglas Shire based on best practice.
- Identifying the roles and responsibilities of all stakeholders involved and providing direction on managing biosecurity risks
- Building partnerships and enable better use of resources available within the community and across all land managers
- Better coordination between all stakeholders, including integrated catchment management approaches, state-wide land protection strategies and management of conservation areas.

The plan identifies the goal for managing biosecurity in the Douglas Shire Council as:

“All stakeholders working together to implement ongoing, coordinated and effective biosecurity management across the Douglas Shire Council area.”

The Program has been developed to ensure Council are meeting their legislative requirements and have the necessary authorisation to ensure that the outcomes of the DSCBP are being implemented.

The Program is directed at the following:

- To confirm the presence, or determine the extent of the presence, of *invasive biosecurity matter* in the DSC area.
- To confirm the absence of *invasive biosecurity matter* in the DSC area.
- To monitor compliance with the Act to ensure all people who deal with local priority *invasive biosecurity matter* or a carrier are meeting their obligations as identified in the DSCBP (*pest specific action plans and specific actions* landholders can take to satisfy general biosecurity obligations).
- To monitor the effects of measures taken to control local priority *invasive biosecurity matter* (for the purpose of improving best practice management and/or to determine if the general biosecurity obligation has or will be discharged) in the DSCBP, *pest specific action plans*.
- To monitor compliance with requirements relating to local priority *invasive biosecurity matter*, restricted matter categories (as identified in the DSCBP, *pest specific action plans* and listed in Tables 1 & 2).

Table 1

Top 15 priority weeds (invasive biosecurity matter) as listed in the DSCBP pest specific action plans. (Locally declared and environmental pests are not considered biosecurity matter under the Act).

#	Common Name	Species	Categories
1	Miconia	<i>Miconia spp.</i>	2,3,4,5
2	Water Hyacinth	<i>Eichhornia crassipes</i>	3
3	Siam weed	<i>Chromolaena odorata</i>	3
4	Gamba grass	<i>Andropogon gayanus</i>	3
5	Mexican bean tree	<i>Cecropia spp.</i>	2,3,4,5
7	Pond Apple	<i>Annona glabra</i>	3
8	Water Lettuce	<i>Pistia stratiotes</i>	3
9	Parthenium	<i>Parthenium hysterophorus</i>	3
10	Salvinia / Water fern	<i>Salvinia molesta</i>	3
11	Kudzu Vine	<i>Pueraria montana, var lobata</i>	3
13	Thunbergia Sp	<i>Thunbergia Species</i>	3
15	Tobacco weed	<i>Elephantopus mollis</i>	3

Table 2

Top 3 pest animals (invasive biosecurity matter), as listed in the DSCBP pest specific action plans.

#	Common Name	Species	Categories
1	Pig (feral)	<i>Sus scrofa</i>	3,4,6
2	Dog (wild/feral)	<i>Canis familiaris</i>	3,4,6

- Category 1 restricted matter must be reported to an inspector person within 24 hours.
- Category 2 restricted matter must be reported to an inspector or authorised person within 24 hours.
- Category 3 restricted matter must not be distributed or disposed. This means it must not be given as a gift, sold, traded or released into the environment unless the distribution or disposal is authorised in a regulation or under a permit.
- Category 4 restricted matter must not be moved. To ensure that it does not spread into other areas of the state.
- Category 5 restricted matter must not be possessed or kept under person’s control without a permit under the Biosecurity Act 2014.
- Category 6 restricted matter must not be fed unless kept under a permit of the Biosecurity Act 2014 or another Act. Feeding for the purpose of preparing for or undertaking a control program is exempted.

Figure 1.

An example of a pest specific action plan taken from the DSCBP.

The DSCBP, **pest specific action plans** can be accessed via the DSC website:
https://douglas.qld.gov.au/download/community_engagement/FINAL-VERSION-Biosecurity-Management-Plan-Douglas-Area.pdf

The screenshot shows a detailed pest specific action plan for *Eichhornia crassipes* (Water hyacinth). The plan includes a distribution map of Douglas Shire, a management calendar, and various informational sections. Callout boxes provide the following details:

- Priority scores:** The results of the prioritisation process from the pest management work.
- Distribution and zoning map:** designated management zones and 1km resolution distribution map.
- Weed type:** identifies the type of weed across three categories
Form: woody/grass/vine/herb
Lifecycle: perennial/annual
Habitat: Terrestrial/aquatic
- Legislated requirements under the Biosecurity Act or Local laws.**
- Control methods:** identifies the recommended methods of control. See management principles for icon descriptions.
- Methods of spread:** identifies the primary methods of spread. See management principles for icon descriptions.
- Management calendar:** peak flowering and fruiting times and when types of control activities are recommended. The green bar indicates when management activities should take place.
- Identification images:** the key features of the pest to help with identification.
- Biosecurity obligations:** what do you need to do to meet your obligations within each zone.
- Details:** a brief description of the pest, its distribution, impacts and key projects underway.
- Background:** an outline of weed or pest to provide advice on the best way to approach management.

Table 3

Specific actions landholders can take to satisfy general biosecurity obligations.

Sector	General biosecurity obligations	Actions
Primary producers horticulture	<ul style="list-style-type: none"> • Be aware of the priority risks to your industry and local government area. 	<ul style="list-style-type: none"> • Survey for pest weeds/animals during routine maintenance. • Maintain vehicle/machinery hygiene protocols. • Use appropriate control methods¹⁸ • Erect property and site-specific signs. • Rotate crops and plant cover crops. • Participate in baiting and trapping programs • Manage weeds on watercourses and roadways.
Primary producers: grazing	<ul style="list-style-type: none"> • Report new or suspected pests to your industry contact, DSC or Biosecurity Queensland. • Don't move soil or machinery that has biosecurity risks such as weed seeds or dirt. 	<ul style="list-style-type: none"> • Conduct boundary/risk area checks. • Survey for weeds/animals during routine maintenance • Maintain vehicle/machinery hygiene protocols. • Use appropriate control methods • Participate in baiting and trapping programs • 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	<ul style="list-style-type: none"> • Prevent the spread of declared weeds on and off your property by controlling, prior to the flowering period, in high risk areas (watercourses/ roadways/ boundaries). 	<ul style="list-style-type: none"> • Conduct crop/risk area checks. • Survey for weeds/animals during routine maintenance. • Ensure equipment leaving or entering properties is clean of contaminants. • Use appropriate control methods • Erect property and site-specific signs. • Provide/maintain access for programs. • Provide groundcover management. • Develop a property pest management plan and/or farm biosecurity plan. • Install pest-appropriate fencing. • Participate in baiting and trapping programs. • Reduce priority weeds.
Nursery industry and plant sellers	<ul style="list-style-type: none"> • Reduce DSC priority weeds on your property. • Monitor and record the presence of and damage caused by feral animals on your property. 	<ul style="list-style-type: none"> • Research information on new stock lines before introduction. • Report unusual plants and animals. • Prevent sale of state, local and problem pest plants. • Manually remove pest weeds and bag seed heads. • Erect property and site-specific signs.
Landholders: rural residential, lifestyle and urban residential	<ul style="list-style-type: none"> • Participate in coordinated feral animal control programs. 	<ul style="list-style-type: none"> • Report unusual plants and animals. • Responsibly dispose of green waste. • Select 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. • Participate in baiting and trapping programs

	<ul style="list-style-type: none"> • Provide/maintain access for management programs. 	<ul style="list-style-type: none"> • Develop property pest management plan and/or a farm biosecurity plan. • Install pest-appropriate fencing. • Reduce priority weeds.
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This could include spot spraying; manual removal, bagging seed heads, and use fire or other control methods to reduce infestations.

MEASURES THAT ARE REQUIRED TO ACHIEVE THE PURPOSE

The key activities undertaken by the Program include but are not limited to:

Surveillance to monitor presence, absence, control measures and compliance.

- Surveillance to check for the presence, extent or levels of the presence, or absence of *invasive biosecurity matter* in the DSC area. This surveillance will be conducted by entry of ground teams onto a place using a variety of vehicles and on foot to conduct visual inspections, however, aerial survey by visual or photographic inspection using manned helicopters or unmanned aerial vehicles (UAVs) may also be utilised. Surveillance in riparian and adjacent areas may also be undertaken utilising watercraft including but not limited to boats and amphibious vehicles.
- During surveillance and monitoring activities, Authorised Officers may take samples for identification, research and educational purposes.
 - For weed species this may require taking a whole or part of a plant specimen.
 - For animal species this may require luring and or collecting whole or parts of an animal or collecting animal leavings such as scats.
- Surveillance at suspected or existing pest infestation locations using surveillance measures such as, but not limited to, cameras using a variety of imaging techniques in order to determine prevalence, frequency of visitation and verification of control of pests.
- Monitoring of treated areas to determine the effectiveness of control, for invasive plants this is also to ensure no recruitment, by monitoring the seed bank until it is exhausted, this may take many years depending on the species.
- Surveillance to establish compliance and collection of evidence in cases of suspected non-compliance.

POWERS OF AUTHORISED OFFICERS

Entry of place

The Act provides that authorised officers appointed under the Act may, at reasonable times, enter a place situated in an area to which a biosecurity program applies, to take any action authorised by the biosecurity program¹. These activities must be done in a timely and efficient manner to ensure that the measures are as effective as possible. The Program will authorise entry into places to allow these measures to be undertaken.

¹ See section 261 (Power to enter a place under biosecurity program) of the Act.

In accordance with the Act a reasonable attempt will be made to locate an occupier² and obtain the occupier's consent to the entry prior to an authorised officer entering a place to undertake activities under the Program. Nevertheless, an authorised officer may enter the place if³—

- (a) The authorised officer is unable to locate an occupier after making a reasonable attempt to do so; or
- (b) The occupier refuses to consent to the entry.

If after entering a place an authorised officer finds an occupier present or the occupier refuses to consent to the entry—an authorised officer will make reasonable attempts to produce an identity card for inspection and inform the occupier of the reason for entering and the authorisation under the Act to enter without the permission of the occupier. An authorised officer under the biosecurity program must make a reasonable attempt to inform the occupier of any steps taken, or to be taken, and if steps have been taken or are to be taken, that it is an offence to do anything that interferes with a step taken or to be taken.

An authorised officer must leave a notice in a conspicuous position and in a reasonably secure way. This notice must state the date and time of entry and information addressing the reason for entry, authorisation to enter a place and the steps undertaken by the authorised officer after entry.

Power to carry out aerial controls measures

The power to carry out aerial control measures is authorised by a biosecurity program under the Act⁴.

Obligations

The following obligations may be imposed on a person who is an occupier of a place to which the program relates, limited to the extent of requirements in this surveillance program.

- Obligations associated with restricted matter categories for all invasive biosecurity matter on all land tenure within the DSC local government area. (Tables 1 & 2)
- Specific actions landholders can take to satisfy general biosecurity obligations as per Table 3.
- And the management outcomes outlined in the pest specific strategies, under the section entitled "What is my Biosecurity Obligation" from the DSBP. (Figure 1.)

General powers of authorised officers

Nothing in the Program or its associated Authorisation limits the powers of authorised officers under Chapter 10 of the Act.

CONSULTATION

If DSC Authorised Officers work in collaboration with authorised Officers from another organisation (i.e. Biosecurity QLD):

² The Act defines an **occupier**, of a place, generally to include the person who apparently occupies the place (or, if more than 1 person apparently occupies the place, any of the persons); any person at the place who is apparently acting with the authority of a person who apparently occupies the place; or if no-one apparently occupies the place, any person who is an owner of the place.

³ See section 270 (Entry of place under sections 261 and 262) of the Act.

- Information sharing of biosecurity risks extents and locations and any documentation and identifying information required to do so will be expected to be shared. This will be limited to information that is no more than is required for those purposes.
- Authorisation will be shared between organisations (where appropriate) allowing authorised Officers to work and contribute on each other's projects.

The Program was sent to Biosecurity Queensland as at 1st October 2019 for review and comment.

Authorisation of a surveillance program in the Douglas Shire Council area.

AUTHORISATION STATEMENT

The CEO of Douglas Shire Council acting pursuant to section 235 of the *Biosecurity Act 2014* (the Act), authorises the Program for *invasive biosecurity matter s48(1)(a-d)* (the Program) in Douglas Shire Council Local Government area, on the basis that:

I am satisfied that the pests listed in the biosecurity surveillance program, the Douglas Shire Council Invasive Plants and Animals Surveillance Program 2019-2020, pose a significant biosecurity risk to biosecurity considerations in Queensland; and

I am satisfied that surveillance activities are required to determine the presence or absence of these pests; and

I am satisfied that checking compliance with the Act and enforcement are required for the restriction category requirements; and

I am satisfied that activities are required to monitor the effects of the measures taken in response to the biosecurity risk of the pests listed in the biosecurity surveillance program.

Council resolves to adopt the Douglas Shire Council Invasive Plants and Animals Surveillance Program as passed by council resolution on the 12th November 2019.

BIOSECURITY MATTER

The biosecurity matter to which the Program relates is *invasive biosecurity matter s48(1)(a-d)*.

PURPOSE OF THE PROGRAM

The purpose of the Program is to identify the extent and location of infestations of *invasive biosecurity matter* pests in the Douglas Shire Council Area as identified in the Douglas Shire Biosecurity Plan 2017-2021.

The Program has been developed to ensure Council are meeting their legislative requirements and have the necessary authorisation to ensure that the outcomes of the DSCBP are being implemented.

The Program is directed at the following:

- To confirm the presence, or determine the extent of the presence, of *invasive biosecurity matter* in the DSC area.
- To confirm the absence of *invasive biosecurity matter* in the DSC area.
- To monitor compliance with the Act to ensure all people who deal with local priority *invasive biosecurity matter* or a carrier are meeting their obligations as identified in the DSCBP, *pest specific action plans*.
- To monitor the effects of measures taken to control local priority *invasive biosecurity matter* (for the purpose of improving best practice management and/or to determine if the general biosecurity obligation has or will be discharged) in the DSCBP, *pest specific action plans*.
- To monitor compliance with requirements relating to local priority *invasive biosecurity matter*, restricted matter categories (as identified in the DSCBP, *pest specific action plans* and listed in Tables 1 & 2).

AREA AFFECTED BY THE PROGRAM

The Program will apply to all land's tenure within the Douglas Shire Council Area.

For priority invasive biosecurity matter both weeds and animals, sub-catchment management zones have been specified in the Douglas Shire pest Specific Action Plans as appendices to the Douglas Shire Biosecurity Plan 2017-2021. This specifies, for each of these pests, surveillance and management strategies per region within the Douglas Shire Council area. This gives direction on surveillance effort and surveillance strategy for each of these weeds in the identified areas.

As the public is an important source of information for DSC, any reported pest specific information will inform direction of investigations for extent and location of biosecurity risks.

POWERS OF AUTHORISED OFFICERS

An authorised officer of the Program appointed under the *Biosecurity Act 2014*, may enter a place—other than a residence⁵—without a warrant and without the occupier's consent within the State of Queensland under the Program⁶ 7. An authorised officer can exercise the powers of an authorised officer under the Act in relation to the Program, if the authorised officer is appointed by the chief executive⁸.

An authorised officer may make a requirement (a **help requirement**) of an occupier of the place or a person at the place to give the authorised officer reasonable help to exercise a general power⁹.

An authorised officer may carry out, or direct another person to carry out, aerial control measures for invasive biosecurity matter. Under the Program these measures include aerial survey by visual or photographic inspection using an airborne machine, person in an aircraft vehicle (i.e. plane, helicopter), Unmanned Aerial Vehicles (UAVs) or Satellite in line with legislative requirements for the use of such.

⁵ The Act defines a *residence* to mean a premises or a part of a premises that is a residence with the meaning of section 259(2) and 259(3).

⁶ See section 259 (General powers to enter places) of the Act.

⁷ See section 261 (Power to enter a place under biosecurity program) of the Act.

⁸ See section 255 (3) (Powers of particular authorised officers limited) of the Act.

⁹ See section 297 (Power to require reasonable help) of the Act.

An authorised officer has general powers after entering a place to do any of the following¹⁰:

General powers in the Act	Measures an authorised officer may take under the Program
Search any part of the place	<i>Destroy biosecurity matter or a carrier if the authorised officer believes on reasonable grounds the biosecurity matter or carrier poses a significant biosecurity risk and the owner of the biosecurity matter or carrier consents to its destruction.</i>
Inspect ¹¹ , examine ¹² or film ¹³ any part of the place or anything at the place	<i>Searching a place to check for the presence or absence of invasive biosecurity matter.</i>
Take for examination a thing, or a sample of or from a thing, at the place	<i>Inspect, examine and film to assist with tracing of carriers to and from a place.</i>
Place an identifying mark in or on anything at the place	<i>Take samples for the purposes of diagnostic analysis, to ascertain the presence or absence of invasive biosecurity matter.</i>
Place a sign or notice at the place	<i>Identify carriers such as Hay Bales with tags, notices, flags or signs for any purpose consistent with the Program.</i>
Produce an image or writing at the place from an electronic document or, to the extent it is not practicable, take a thing containing an electronic document to another place to produce an image or writing	<i>Producing a written and/or electronic note(s) to support Program activities.</i>
Take to, into or onto the place and use any person, detection animal, equipment and materials the authorised officer reasonably requires for exercising the authorised officer's powers under this division	<i>Taking GPS coordinates to ensure accuracy of location details of carriers or invasive biosecurity matter.</i>
Destroy biosecurity matter or a carrier if: <ul style="list-style-type: none"> • the authorised officer believes on reasonable grounds the biosecurity matter or carrier presents a significant biosecurity risk; and • the owner of the biosecurity matter or carrier consents to its destruction 	<i>Take a document such as sale/movement record that are relevant to the objectives of the Program.</i>
Remain at the place for the time necessary to achieve the purpose of the entry	
The authorised officer may take a necessary step to allow the exercise of a general power	
If the authorised officer takes a document from the place to copy it, the authorised officer must copy and return the document to the place as soon as practicable	
If the authorised officer takes from the place an article or device reasonably capable of producing a document from an electronic document to produce the document, the authorised officer must produce the document and return the article or device to the place as soon as practicable	

¹⁰ See section 296 (General powers) of the Act.

¹¹ Section 296(5) defines **inspect**, a thing, to include open the thing and examine its contents.

¹² Section 296(5) defines **examine** to include analyse, test, account, measure, weigh, grade, gauge and identify.

¹³ Section 296(5) defines **film** to include photograph, videotape and record an image in another way.

OBLIGATIONS IMPOSED ON A PERSON UNDER THE PROGRAM

The following obligations may be imposed on a person who is an occupier of a place to which the program relates, limited to the extent of requirements in this surveillance program.

- Obligations associated with restricted matter categories for all invasive biosecurity matter on all land tenure within the DSC local government area. (Tables 1 & 2)
- Specific actions landholders can take to satisfy general biosecurity obligations as per Table 3.
- And the management outcomes outlined in the pest specific strategies, under the section entitled “What is my Biosecurity Obligation” from the DSBP. (Figure 1.)

COMMENCEMENT AND DURATION OF THE PROGRAM

The Program will begin on 12 November 2019 and will continue until 31st December 2020. The duration of the program is considered to be reasonably necessary to achieve the Program’s purpose.

CONSULTATION WITH RELEVANT PARTIES

As required by the Act¹⁴, the chief executive officer of Douglas Shire Council has consulted, prior to the authorisation of the Program, with the chief executive, Department of Agriculture and Fisheries.

NOTIFICATION OF RELEVANT PARTIES OF REQUIREMENTS

As required by the Act¹⁵, the chief executive officer of Douglas Shire Council will give public notice of the Program 14 days before the Program starts by:

- giving the notice to each government department or government owned corporation responsible for land in the area to which the Program relates; and
- publishing the notice on the Douglas Shire Council website: <https://douglas.qld.gov.au/>

From the start of the Program, the Authorisation and the Douglas Shire Council Invasive Plants and Animals Surveillance Program 2019-2020 will be available for inspection or purchase ¹⁶ at the Douglas Shire Council Administration office at: 64-66 Front Street, Mossman.

¹⁴ See section 239 (Consultation about proposed biosecurity program) of the Act.

¹⁵ See section 240 (Notice of proposed biosecurity program) of the Act.

¹⁶ See section 241 (Access to authorisation) of the Act.