



Area Pest Management Plan 2015-2020



VERSION

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Local Government of Queensland

On 14 March 2008, the Central Highlands Regional Council was formed from the amalgamation of the former Bauhinia, Duarina, Emerald and Peak Downs Shire Councils.

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Executive Summary

The Central Highlands Regional Council's local government area pest management plan 2015-2020 (the plan) has been developed in accordance with the Queensland State Government's requirements under the '**Land Protection (Pest and Stock Route management) Act 2002**' section (25) for local governments to have a pest management plan for declared pests within their region.

The plan has been developed with input from many local stakeholders including representatives from local and state government agencies, the business sector, industry groups and consultants, natural resource management groups, community groups and landholders, for the benefit of the entire Central Highlands community living or working within the Council's boundaries, in order to achieve the following key objectives:

- to improve the delivery and outcomes of plant and animal pest management activities conducted by Council, State Government agencies, natural resource management groups, industry and the community within the Central Highlands region;
- to improve the use of resources and expertise available for managing plant and animal pests within the Central Highlands region; and
- to lessen the local impact of plant and animal pests on the environment, economy and community within the Central Highlands region.

Objective Statement

To establish and lead a cooperative and participative environment where government, industry, natural resource management groups and community contribute to the effective control of target plant and animal pests in order to best manage the impact of pests within the Central Highlands Regional Council controlled area.

Acronyms

APMP	Area Pest Management Plan
BQ	Biosecurity Queensland
CHRC	Central Highlands Regional Council
CHRRUP	Central Highlands Regional Resources Use Planning Co-operative Ltd
CPMG	Central Pest Management Group
DAF	Department of Agriculture and Fisheries
DEHP	Department of Environment and Heritage Protection
DNPRSR	Department of National Parks, Recreation, Sport and Racing
DNRM	Department of Natural Resources and Mines
FBA	Fitzroy Basin Association
LGAQ	Local Government Association of Queensland
SRN	Stock Route Network
WoNS	Weeds of National Significance

Definitions

Pests	Pests in the context of this document refers to plant and animal species that have been declared as pests under legislation by the either the Queensland Government or under Local Law by the Central Highlands Regional Council.
Environmental weeds	Environmental weeds are foreign or native plants that become weedy due to inappropriate management, or because they are outside their normal range and invade native ecosystems and adversely affect the survival of indigenous flora and fauna. Note: Whether the species is declared under legislation is irrelevant - it is the damage it is doing to the native environment that defines it as an environmental weed.

Part A: Preamble

1. INTRODUCTION

1.1 Purpose

This **Central Highlands Regional Council Area Pest Management Plan 2015 – 2020** (the Plan) has been prepared in accordance with requirements under the '*Land Protection (Pest and Stock Route management) Act 2002*' (the Act), to establish and promote a cooperative, best practice strategy for the management of declared plant and pest animals within the Central Highlands Regional Council (the Council) local government area.

1.2 Commencement and Duration

This Plan is a five-year plan, from 2015 to 2020. The Plan was approved and adopted by the Central Highlands Regional Council on 16 October 2015. The Plan will remain in force until year end of 2020, or until such time as a review establishes that the Plan be extended, amended or revoked.

The *Biosecurity Act 2014* received assent on the 13 March 2014 but will not commence until 1 July 2016. Under the *Biosecurity Act 2014*, there will be a requirement to have a Biosecurity Plan for local government areas (currently section 53). There is expected to be a grace period for this to occur and until such time, this plan will be in place.

1.3 Scope (Region and Species)

1.3.1 Region covered

This CHRC Area Pest Management Plan covers all land within the boundaries of the Central Highlands Regional Council, including state owned land. By agreement, land owned by the Australian Government or held by indigenous communities under a Deed of Grant in Trust may also be included.

The Central Highlands Regional Council is one of 73 local government areas in Queensland, covering 3.45 percent of the state with an area of 59,800 square kilometres, has a population of approximately 26,800, is located just below the Tropic of Capricorn and centred approximately 250 kilometres due west of the city of Rockhampton on the east coast (see regional map below). The Council boundaries includes the regional business centre of Emerald and the rural townships of Capella and Tieri to the north; Comet, Blackwater, Bluff, Dingo and Duaringa to the east; Springsure, Rolleston and Bauhinia to the south; and Anakie, Sapphire, Rubyvale and The Willows to the west.

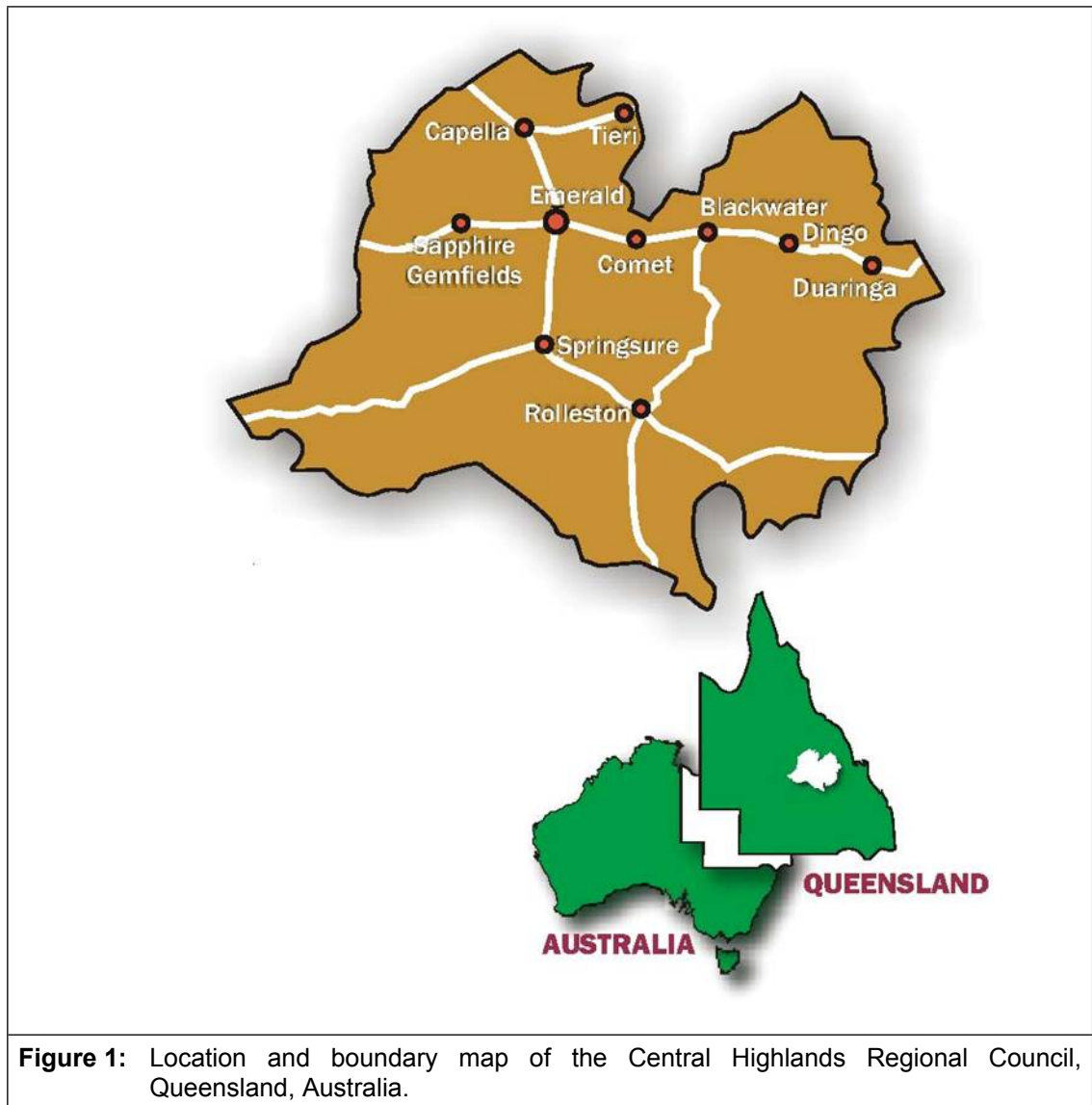


Figure 1: Location and boundary map of the Central Highlands Regional Council, Queensland, Australia.

1.3.2 Species considered

Pests targeted in this pest management plan include both exotic and indigenous species. For this plan, pests are defined as plant or animal species declared under the three declaration classes identified by the Act (see Table 1 below), local laws, or other non-declared species that are or have the potential to adversely impact on the region, such as environmental weeds.

Table 1: Queensland State Government declared pest classification classes

Class	Description
1	<p>A Class 1 pest is one that is not commonly present in Queensland, and if introduced would cause an adverse economic, environmental or social impact.</p> <p>Class 1 pests in Queensland are subject to eradication from the state.</p> <p>Landowners must take reasonable steps to keep land free of Class 1 pests.</p>

2	<p>Class 2 pests are established in Queensland and have, or could have an adverse economic, environmental or social impact.</p> <p>Management of these pests requires coordination and they are subject to programs led by local government, the community or landowners.</p> <p>Landowners must take reasonable steps to keep land free of Class 2 pests.</p>
3	<p>Class 3 pests are established in Queensland and have, or could have an adverse economic, environmental or social impact.</p> <p>Landholders are not required to control Class 3 pests unless their land is adjacent to an environmentally significant area.</p>

2. BACKGROUND

2.1 Why is it important to manage plant and animal pests within the Central Highlands region

Plant (weed) and animal pests have an adverse impact on economic, environmental and social values within the communities of the Central Highlands. The Central Highlands Regional Council is dedicated to limiting these effects within the local government area.

The Council is uniquely positioned to influence pest management across a large area of Central Queensland. It is the Council's good fortune that the majority of the local government area is not impacted by external catchments entering the region and providing an ideal vector for the introduction of pest plants from infestations outside the region. However, pest plants can readily migrate into, within and out of the Central Highlands region via extensive state controlled road and council controlled (1,450 km) rural road networks, spanning the region.

Plant pests that are already present within the CHRC boundaries do have the potential to impact large areas within the region via the extensive Nogoia River, Theresa Creek and Comet River catchments which then flow into the Mackenzie River and on towards the east coast through the Fitzroy River. In addition, there are few fencing or natural barriers to the migration of animal pests across and within the CHRC boundaries.

The Council must make efficient and effective use of available resources in order to deliver pest management outcomes that exceed conventional delivery expectations in a resource constrained environment. The purpose of this pest management plan is to detail how the Council intends to manage plant and animal pests within its boundary, with a view to having a positive impact that can be maintained and enhanced into the future.

This will be achieved by engaging all relevant stakeholders to contribute to coordinated control activities, and the pursuit of strategic, efficient and effective control methods for identified target plant and animal pest species, with the goal of eradication where feasible. Strategies that have been developed for priority plant and animal pests that are currently known to be present in the Central Highlands, are detailed in Part B of this plan.

2.2 Principles of pest management

The desired objectives listed in Part B Section 6 of this plan are designed to be consistent with the principles of pest management, as listed in Table 2 below and described in Section 9 of the *Land Protection (Pest and Stock Route Management) Act 2002*.

Table 2: Principles of pest management

Essential links		Description
Principles of pest management	Integration	Pest management is an integral part of managing natural resources and agricultural systems.
	Public awareness	Public awareness and knowledge of pests must be raised to increase the capacity and willingness of individuals to manage pests.
	Commitment	Effective pest management requires a long-term commitment to pest management by the community, industry groups and government entities.
	Consultation and partnership	Consultation and partnership arrangements between local communities, industry groups, State government agencies and local governments must be established to achieve a collaborative approach to pest management.
	Planning	Pest management planning must be consistent at local, regional, State and national levels to ensure resources target priorities for pest management identified at each level.
	Prevention	Preventative pest management is achieved by: (a) preventing the spread of pests, and viable parts of pests, especially by human activity; and (b) early detection and intervention to control pests
	Best practice	Pest management must be based on ecologically and socially responsible pest management practices that protect the environment and the productive capacity of natural resources.
	Improvement	Research about pests, and regular monitoring and evaluation of pest control activities, is necessary to improve pest management practices.

3. STATUTORY AND PLANNING FRAMEWORK

3.1 Legislative environment

The *Land Protection (Pest and Stock Route Management) Act 2002* (the Act) covers the management of particular pests on land.

The Act specifically requires the Council to develop, adopt and implement this plan as part of an integrated planning framework for managing pest plants and animals across Queensland. This plan has been prepared in consultation with state government agencies and other stakeholders within the Council and neighbouring areas.

The Plan sets strategic directions, desired outcomes and the objectives, actions and success criteria for achieving the desired outcomes. Priority pest programs for the Council are set out in Part C of this plan. The Act empowers the Central Highlands Regional Council to exercise the relevant enforcement provisions in order to achieve the State Government approved objectives included in this plan.

3.2 Strategic links to other legislation and planning processes

When preparing a pest management plan in accordance with the Act, local governments must ensure that the plan does not breach the requirements of other legislation.

Legislation that local governments may need to consider include the:

- *Vegetation Management Act 1999* (e.g. permits for clearing native vegetation to control weeds);
- *Nature Conservation Act 1992* (e.g. protection of dingoes in conservation areas);
- *Water Act 2000* (e.g. the impact of management activities in watercourses);
- *Environmental Protection Act 1994* (e.g. the release of contaminants when undertaking pest management actions);
- *Wild Rivers Act 2005* (e.g. permits for clearing native vegetation to control weeds);
- *Transport Infrastructure Act 1994* and the *Land Title Act 1994* (e.g. managing road reserves that extend beyond identified state-controlled roads);
- *Animal Care and Protection Act 2001* (e.g. providing seized pest animal with appropriate food, shelter and water);
- *Agricultural and Veterinary Chemicals (Queensland) Act 1994* (e.g. using herbicides and pesticides appropriately);
- *Health Act 1937* (e.g. 1080 Poisons licensing, reporting and record keeping); and
- *Agricultural Chemicals Distribution Control Act 1966* (e.g. Commercial licensing, reporting and record keeping)

4. STAKEHOLDER RESPONSIBILITIES

Table 3: Responsibilities of stakeholders involved in strategic and operational pest management activities within the Central Highlands Regional Council area

Stakeholder / Agency	Roles and Responsibilities
Central Highlands Regional Council – (CHRC)	<ul style="list-style-type: none"> • Control of pests on council controlled land; • To support community, landholders and stakeholders in any relevant pest management activities conducted on land within the CHRC area; • Lead and coordinate stakeholder engagement in pest management activities within the CHRC area; and • Make available 1080 poison baiting services to landholders within the CHRC area.
Local Government Association of Queensland Incorporated – (LGAQ)	<ul style="list-style-type: none"> • To facilitate the drafting and review of the Memorandum of Understanding between Biosecurity Queensland, LGAQ and the Queensland Natural Resource Management Groups Collective for invasive weed and pest animal management throughout Queensland.
Department of Agriculture and Fisheries - (DAF) through Biosecurity Queensland – (BQ)	<ul style="list-style-type: none"> • Provide support, planning and technical advice to all stakeholders involved in pest management within the CHRC area; • Coordinating control of Class 1 pests detected in the CHRC area; and • As per roles and responsibilities outlined within the Memorandum of Understanding between BQ under the old Department of Employment, Economic Development and Innovation, LGAQ and the Queensland Natural Resource Management Groups Collective.
Department of Transport and Main Roads - (DTMR)	<ul style="list-style-type: none"> • Control of pests on state controlled (main) roads within the CHRC area. • To engage in any relevant pest management activities conducted on land under their control within the CHRC area.
Department of Natural Resources and Mines - (DNRM)	<ul style="list-style-type: none"> • Control of pests on unallocated state land and other land controlled by the Department within the CHRC area; and • To engage in any relevant pest management activities conducted on land under their control within the CHRC area.
Department of National Parks, Recreation, Sport and Racing – (DNPRSR)	<ul style="list-style-type: none"> • Controlling pests in National Parks and State Forests within the CHRC area. • To engage in any relevant pest management activities conducted on land under their control within the CHRC area.
Queensland Rail - (QR) and QR National	<ul style="list-style-type: none"> • Controlling pests on rail corridors and railway controlled land within the CHRC area. • To engage in any relevant pest management activities conducted on land under their control

	within the CHRC area.
Sunwater	<ul style="list-style-type: none"> Controlling pests within irrigation channels and Sunwater controlled land within the CHRC area. To engage in any relevant pest management activities conducted on land under their control within the CHRC area.
Central Highlands Regional Resources Use Planning Cooperative - (CHRRUP)	<ul style="list-style-type: none"> Provide support and partnering with project management and funding opportunities to landholders and Council.
Landholders	<ul style="list-style-type: none"> Control of declared pests on their land. To engage in any relevant pest management activities conducted on land under their control within the CHRC area.
Ergon Energy	<ul style="list-style-type: none"> Controlling pests along power lines within the CHRC area. To engage in any relevant pest management activities conducted on land under their control within the CHRC area.
Queensland Fire and Rescue Service – (QFRS)	<ul style="list-style-type: none"> Provide support for pest and stock route management activities involving hazard reduction and weed control burns.
Capricorn Pest Management Group – (CPMG)	<ul style="list-style-type: none"> Liaise with Council on pest management activities that impact on the eastern sector (Duaranga to Bauhinia area) of the CHRC area.

5. DEVELOPMENT, IMPLEMENTATION AND REVIEW

5.1 Development

Central Highlands Regional Council reports to, and chairs three reference groups covering the Council regions, which in turn report to an overarching reference group. Please refer to the terms of reference for each of these groups for specific information regarding their function. Local representation is invited to participate in, and resolution of issues is encouraged at these reference group meetings.

The role of the reference groups is two-fold: firstly, it is an opportunity for the community to bring matters of pest and stock-route management to the attention of Council; and secondly, for the Council to disseminate its intentions, current pest management activities and successful outcomes to the wider community.

Stakeholder and community consultation on the draft plan was conducted through this reference group structure illustrated in Figure 2.

Part B: Strategic program

6. DESIRED OUTCOMES, STRATEGIC OBJECTIVES AND ACTIONS

The strategic objectives of this Plan are to ensure:

1. Stakeholders are informed, knowledgeable, have ownership and control of their plant and animal pests management responsibilities.
2. Reliable information is made available to all stakeholders as a basis for the decision making process required to implement the plan and achieve the desired outcomes.
3. Strategic directions are established, supported multilateral (agreed), maintained, and owned by all stakeholders.
4. All stakeholders are committed and contribute to the coordinated management of plant and animal pests.
5. Introduction, spread, and establishment of new plant and animal pests is diligently inhibited (averted).
6. Integrated systems for managing the impacts of established plant and animal pests are developed and widely implemented.

These strategic objectives are examined in further detail in the following sections.

6.1 Awareness, Education and Training

Desired outcome 1: To ensure stakeholders are informed, knowledgeable and have ownership of pest plant & pest animal management.			
Applied Principles:			
<ul style="list-style-type: none"> • <i>Public Awareness</i> - Public awareness and knowledge of pests must be raised to increase the capacity and willingness of individuals to manage pests. 			
Issues	Strategic Objective	Strategic Action	Success Indicators
Awareness	<i>To increase community, industry, agribusiness and government awareness of pests and their impacts</i>	Organising awareness activities (e.g. local Landcare days, public meetings, etc.) on pest issues and provide advice to stakeholders	Number of promotional and educational events held and attended to promote pest management
		Development of periodic media releases to increase awareness in the local communities	Number of media releases published and circulated in the area
Education and Training	<i>To enhance stakeholder knowledge of pest impacts and improve skills in pest management</i>	Increased stakeholder awareness/ownership of pest plant and animal management through delivery of promotional activities and extension/educational material	Number of promotional and educational activities undertaken to build community skills to deal with pests
			Resources allocated for the purposes of delivering promotional/educational material

		Accredited training of Council's Ranger Services officers	Nationally accredited competency based training (weed & vertebrate pests, wash down certification)
			Participation in relevant local government training workshops, conferences and forums, offered by DAF
			Renewal (two yearly) of 1080 approval certification
		Provide technical knowledge and advise to assist landholders in the development of property pest management plans	Improved pest management planning at property level.
Issues	Strategic Objective	Strategic Action	Success Indicators
Availability of Information	<i>To ensure information about weeds and pest animals is available to all stakeholders</i>	Availability of CHRC LGPMP at Council offices.	CHRC LGPMP available to the public at Emerald, Capella, Springsure, Daringa & Blackwater Offices
		Availability of DSC LGPMP on Council's website.	CHRC LGPMP available to the public on Council's and CPMG's website.
		Availability of Urban district mapping at Council offices	Make urban district maps available to the public at Emerald, Capella, Springsure, Daringa and Blackwater offices for inspection, for destruction of particular dogs
		Investigate publishing Fact-sheets for pest species declared under Local Law	Dissemination of information to all relevant stakeholders for pests declared under Local Law, when required

6.2 Commitment, Consultation and Partnership

Desired outcome 2: To ensure all stakeholders are committed to and undertake coordinated management of pest plants & pest animals.			
Applied Principles:			
<ul style="list-style-type: none"> <i>Commitment</i> - Effective pest management requires a long term commitment to pest management by the community, industry groups and government entities. <i>Consultation and Partnership</i> - Consultation and partnership arrangements between local communities, industry groups, state government agencies and local governments must be established to achieve a collaborative approach to pest management. 			
Issues	Strategic Objective	Strategic Action	Success Indicators
Long term commitment	<i>To establish long-term stakeholder commitment to weed and pest animal management</i>	Stakeholders identified and invited to participate in CHRC, SRNM and PM Planning activities	Each stakeholder provides operational representation to each CHRC, SRNM & PMP meeting
		Demonstrated full commitment of all stakeholders at meetings and through operational activities	Full stakeholder representation at each CHRCC, SRNM and PMP meetings
		Building partnerships and maintaining strong relationships with all stakeholders	Regularly liaise with key stakeholders to maintain continued stakeholder representation
			On-going commitment towards implementation of state, regional & local strategies
Compliance and enforcement	<i>To ensure compliance with the Act in weed and pest animal management.</i>	Develop protocols and management strategies, to ensure consistency with legislative requirements, for on ground operational activities	Implement and incorporate strategies during on-ground operational activities
		Develop a register for pest control and entry notices	Maintain record of pest control and entry notices issued
		Investigate, record and monitor non-compliance issues under the legislation	Enforce the provisions of the legislation if required

6.3 Improvement

Desired outcome 3: To ensure reliable information is available as a basis for decision-making.			
Applied Principles:			
<ul style="list-style-type: none"> <i>Improvement</i> - Research about pests, and regular monitoring and evaluation of pest control activities, is necessary to improve pest management practices. 			
Issues	Strategic Objective	Strategic Action	Success Indicators
Data collection and assessment	<i>To collect, use and make available data relevant to weed and animal pests</i>	Survey and mapping of pest distributions & populations throughout the CHRC area	Number of projects undertaken
		Contribute local pest data to NRM annual pest assessments (state-wide mapping)	Dissemination of local pest data to state & regional mapping
		Facilitate information sharing between all stakeholders	Coordinated distribution of research information to all stakeholders
		Monitor and evaluate the effectiveness of control activities	Improved efficiencies resulting from review of data collected and monitoring
Pest biology and pest impacts	<i>To further the understanding of the biology, ecology and impacts of weed and animal pests</i>	Consideration given to pest behaviour, impacts and control costs	Number surveys performed and recorded
		Consultation with stakeholders to determine the local impacts of animal and plant pests.	Number of plant and animal pests and associated impacts identified
			Identified areas for future research
			Dissemination of information to all relevant stakeholders

6.4 Planning and Integration

Desired outcome 4: To ensure strategic directions on all pest management issues are established, maintained and owned by all stakeholders.			
Applied Principles:			
<ul style="list-style-type: none"> • <i>Planning</i> – Pest management planning must be consistent at local, regional, State and National levels to ensure resources target priorities for pest management identified at each level. • <i>Integration</i> – Pest management is an integral part of managing natural resources and agricultural systems. 			
Issues	Strategic Objective	Strategic Action	Success Indicators
Planning	<i>To create a planning framework for weed and animal pest management</i>	To ensure consistency between CHRC's APMP & other pest management plans including CPMG	Plant and animal pest strategies at a local level are integrated and incumbent of management planning at regional, state & national levels
		Involvement of other state government agencies, such as: DNRM, DEHP, FBA, QR, Main Roads, DAF, CHRRUP and CPMG in pest management planning with the Council	Quantity and quality of stakeholder contribution and representation to the development of CHRC's APMP
		Review the annual action plan three months prior to the end of the financial year	Annual action plans reviewed annually in March. Any adopted changes made to the plan will be forwarded to DAF for consideration
Issues	Strategic Objective	Strategic Action	Success Indicators
Strategy management and coordination	<i>To implement, evaluate and review integrated weed and animal pest strategies</i>	Review and complete a new LGAPMP three months prior to the expiry of the existing plan	CHRC's APMP reviewed every four years in March
		Implement actions for priority plant & animal pest management	Improved outcomes resulting from the evaluation and review of operational plant & animal pest strategies & actions
Resources	<i>To efficiently and adequately resource weed and animal pest management</i>	Adequately resource pest management actions and allocate resources according to pest priorities	Increased resources expended on operational pest management activities and the development and implementation of best management practices

		Contribute to the state government fund for pest management research and plague pest control	Contributions made annually
		Share resources and knowledge with other stakeholders	Participation in FBA Neighbourhood Catchment Sub-Region Prioritisations
Holistic management	<i>To integrate pest management planning with other government, property, community and industry planning</i>	Weed and animal pest management is integrated and consistent between other relevant plans	Improved outcomes due to integrated approach

6.5 Prevention, eradication and containment

Desired outcome 5: To prevent the introduction, spread of distribution and establishment of pest plant & pest animal species.			
Applied Principles:			
<ul style="list-style-type: none"> • <i>Prevention</i> – Preventative pest management is achieved by – <ol style="list-style-type: none"> 1. Preventing the spread of pests, and viable parts of pests, especially by human activity; and 2. Early detection and intervention to control pests. 			
Issues	Strategic Objective	Strategic Action	Success Indicators
Prevention	<i>To prevent the introduction of new weed and animal pests</i>	Promote weed prevention protocols and their adoption by local stakeholders	Increase in the adoption of prevention protocols
		Promote the use of weed hygiene declarations or written statements	Number of stakeholders and user groups using hygiene declarations or written statements
		Promote the use of local wash-down facilities (public and private)	Early control and prevention of spread of priority pest species
		Ensure contractual Work Agreements contain weed prevention conditions	Number of contracts containing weed prevention conditions
		Number of locations of priority pest species identified, monitored and treated	Number of strategies established and implemented
Early detection and control measures implemented	<i>To prevent local establishment of new pests</i>	Prioritise pests for early detection and prevention	Number of potential pests identified and prioritised
		Implement and promote pest monitoring and survey programs	Number of pest monitoring and survey programs undertaken
		Develop response program for handling new infestations of pests	Number of target species identified and control methods implemented
Containment	<i>To minimise the spread of weed and animal pests to new areas</i>	Target priority pests for containment	Number of pests identified and prioritised
		Containment and management of localised weeds and animal pests to core infestations	Evaluation and review for weed and animal strategies and operational actions currently exists

6.6 Effective integrated systems

Desired outcome 6: To ensure integrated systems for managing the impacts of established pest plants & pest animals are developed and widely implemented.			
Applied Principles:			
<ul style="list-style-type: none"> • <i>Best Practice</i> – Pest management must be based on ecologically and socially responsible pest management practices that protect the environment and the productive capacity of natural resources. • <i>Improvement</i> – Research about pests, and regular monitoring and evaluation of pest control activities, is necessary to improve pest management practices. • <i>Commitment</i> – Effective pest management requires a long term commitment to pest management by the community, industry groups and government entities. 			
Issues	Strategic Objective	Strategic Action	Success Indicators
Adoption of management techniques	<i>To adopt and promote best practice in weed and animal pest management</i>	Pest management planning to incorporate best practice principles and integrated techniques	Integrated best practice management utilised in pest operations and updated practices adopted
		Ensure best practice publications are made available for distribution to all stakeholders	Number of best practice publications distributed to stakeholders
		Training and development for officers in best management practice techniques	Number of best management practice techniques implemented by officers
Population and impact management	<i>To reduce pest populations and impacts</i>	Coordinate strategic impact reduction programs under the principles of nil-tenure	Number of strategic baiting centres coordinated
			Increased stakeholder attendance and participation
		Distribute biological control agents	Number of release programs undertaken
Environmentally significant areas	<i>To protect environmentally significant areas from weed pests</i>	Identify environmentally significant areas	Number of areas identified and prioritised for management
		Prioritise weed management for environmentally significant areas	Collaborate with stakeholders to identify priority environmentally significant areas

Development of management practices	<i>Existing weed and animal pest management practices</i>	Identify inadequacies in existing pest management practices	Number of inadequacies identified and improvements recommended and implemented
Incentives	<i>To offer incentives to stakeholders for practicing pest management</i>	Assess potential incentives for stakeholders for pest management	Number of incentives identified
		Promote resource sharing by stakeholders	Involvement from community groups and individual stakeholders for pest management initiatives
			Established roles and responsibilities for pest weed and animal management that are accepted by landowners, community, industry and Government

Part C: Pest Specific Management Programs

7. PRIORITY PEST SPECIES

This part of the plan sets out the Council's four-year programs for local and state declared plant and animal pests identified as high priority within the Council area.

7.1 Overview

In the development of this plan, Council undertook a prioritisation process for the management of pest species that are present in the council area and are legislated for management under either the Act or Local Law, or are deemed to pose a significant threat to the region.

The management of these pest species has been prioritised in order with a categorised level of importance as either **high** priority, **medium** priority or **low** priority. The priority given to the management of a particular pest species is based upon the following factors:

- current declaration status;
- prevalence and distribution within the Council area;
- potential adverse detrimental impact to the region of not controlling the pest;
- threat status of the species; and
- beneficial impact of spending money now to control the pest (e.g. a weed is only present in very small numbers, meaning that for a small amount of money and effort the weed could be eradicated).

The following achievable objective categories have been set and applied to each pest species, with consideration given for the current downturn in the region's economic outlook:

- Exclusion** - exclusion from entering the Council area;
- Destruction** - destruction of isolated, strategic infestations or populations;
- Containment** - containment within specified areas;
- Control** - broad scale control with chemical, biological or trapping; and
- Monitoring** - ongoing survey and assessment of distribution, prevalence and risk.

For the high and medium priority plant and animal pest species, species-specific management programs have been prepared and are set out in following sections of the plan. The management of species identified as medium or low priority will however be addressed as time and resources permit, or in conjunction with the implementation of other strategic programs.

7.2 Pest management priorities

Table 4: Management priorities for Local and State Government declared plant pests in the Central Highlands Regional Council area

Priority (category and order)	Common name and (<i>Scientific name</i>)	Declaration status	Threats (potential and actual)	Distribution and Prevalence	Objective
1	HIGH Hudson pear (<i>Cylindropuntia rosea</i>)	Class 1	<ul style="list-style-type: none"> Potential impacts on recreation values and human and animal health – HIGH 	Isolated to one location and low number of detections	Destruction
2	HIGH Bunny ears (<i>Opuntia microdasys</i> , <i>Opuntia rufida</i>)	Class 1	<ul style="list-style-type: none"> Potential impacts on recreation values – HIGH 	Isolated to one location and low number of detections	Destruction
3	HIGH Thunbergia / Laurel clock vine (<i>Thunbergia laurifolia</i>)	Class 1	<ul style="list-style-type: none"> Potential impacts on native vegetation and ecosystems – HIGH 	Isolated to one area and low number of detections	Destruction
4	HIGH Mexican feather grass (<i>Nasella tenuissima</i>)	Class 1	<ul style="list-style-type: none"> Potential impacts on native grasses and grass ecosystems – HIGH 	Past isolated occurrence in one area and no known remaining detections	Exclusion
5	HIGH Weedy sporobolus grasses (<i>Sporobolus pyramidalis</i> , <i>Sporobolus natalensis</i>)	Class 2	<ul style="list-style-type: none"> Potential impacts on native grasses and grass ecosystems – HIGH Potential impact on agricultural production values - HIGH 	Isolated to less than ten known locations and low to medium density	Control
6	HIGH Prickly acacia (<i>Acacia nilotica</i>)	Class 2 (WONS)	<ul style="list-style-type: none"> Potential impacts on native vegetation and ecosystems – HIGH Potential impact on agricultural production values - HIGH 	Widespread across northern and western regions in low densities	Control
7	HIGH Bellyache bush (<i>Jatropha gossypifolia</i>)	Class 2	<ul style="list-style-type: none"> Potential impacts on native vegetation and ecosystems – HIGH Potential impacts on agricultural production values - HIGH 	Frequent occurrence in low density infestations	Control

8	HIGH	Mesquite (<i>Prosopis spp.</i>)	Class 2 (WONS)	<ul style="list-style-type: none"> Potential impacts on native vegetation and ecosystems – MEDIUM 	Isolated to one location and low number of detections	Destruction
9	HIGH	Willows Cactus (<i>Cereus uruguayanus</i>)	Local Law 3	<ul style="list-style-type: none"> Actual impacts on native vegetation and ecosystems – MEDIUM Actual impacts on recreation values - MEDIUM 	Isolated to one location in high density	Control and Containment
10	HIGH	Sword Pear (<i>Acanthocereus pentagonus</i> <i>Acanthocereus tetragonus</i>)	Local Law 3	<ul style="list-style-type: none"> Potential impacts on recreation values – HIGH Potential impacts on native vegetation and ecosystems – MEDIUM 	Frequent occurrences in low to medium densities	Control
11	MED	Athel pine (<i>Tamarix aphylla</i>)	Class 3 (WONS)	<ul style="list-style-type: none"> Actual impacts on native vegetation and ecosystems – MEDIUM 	Isolated to one area with high density infestation	Destruction of weedy infestations
12	MED	Chinee Apple (<i>Zizphus mauritiana</i>)	Class 2	<ul style="list-style-type: none"> Potential impacts on recreation values and human and animal health – MEDIUM 	Isolated occurrences in low densities	Destruction
13	MED	Parkinsonia (<i>Parkinsonia aculeate</i>)	Class 2 (WONS)	<ul style="list-style-type: none"> Actual impacts on native vegetation and ecosystems – MEDIUM Actual impacts on agricultural production values - MEDIUM 	Widespread in low to high densities	Control
14	MED	Harrisia Cactus (<i>Eriocereus species</i>)	Class 2	<ul style="list-style-type: none"> Actual impacts on recreation values – HIGH Actual impacts on native vegetation and ecosystems – MEDIUM Actual impacts on agricultural production values - MEDIUM 	Widespread in low to medium densities	Control
15	MED	Salvinia (<i>Salvinina molesta</i>)	Class 2 (WONS)	<ul style="list-style-type: none"> Potential impacts on native vegetation and aquatic ecosystems – MEDIUM 	Isolated occurrence in medium densities	Containment

16	MED	Hymenachne (<i>Hymenachne amplexicaulis</i>)	Class 2 (WONS)	<ul style="list-style-type: none"> Potential impacts on recreation values - MEDIUM Actual impacts on native vegetation and ecosystems – MEDIUM 	Isolated occurrence in medium densities	Containment
17	MED	Water lettuce (<i>Pistia stratiotes</i>)	Class 2	<ul style="list-style-type: none"> Potential impacts on native vegetation and aquatic ecosystems – MEDIUM 	Isolated occurrence in medium densities	Control and Containment
18	MED	Rubber Vine (<i>Cryptostegia grandiflora</i>)	Class 2 (WONS)	<ul style="list-style-type: none"> Actual impacts on native vegetation and ecosystems – MEDIUM 	Widespread occurrence in low to medium densities	Control
19	MED	Thunbergia (<i>Thunbergia grandiflora</i>)	Class 2	<ul style="list-style-type: none"> Potential impacts on native vegetation and ecosystems – MEDIUM 	Isolated occurrence in low densities	Destruction
20	MED	Parthenium (<i>Parthenium hysterophorus</i>)	Class 2 (WONS)	<ul style="list-style-type: none"> Potential impacts on recreation values and human and animal health – HIGH Actual impacts on native vegetation and ecosystems – HIGH Actual impacts on agricultural production values - HIGH 	Widespread occurrence in low to high densities – endemic across many areas in the region	Control
21	MED	Feral Leucaena (<i>Leucaena leucoccephala</i>)	Local Law 3	<ul style="list-style-type: none"> Actual impacts on native vegetation and ecosystems – MEDIUM 	Widespread occurrence in low to high densities	Control and Containment
22	MED	Mother-of-millions (<i>Bryophyllum species</i>)	Class 2	<ul style="list-style-type: none"> Potential impacts on agricultural production values - LOW 	Frequent occurrences in low densities	Control
23	MED	Coral Cactus (<i>Cylindropuntia fulgida</i>)	Class 2	<ul style="list-style-type: none"> Potential impacts on agricultural production values - LOW Potential impacts on native vegetation and ecosystems – MEDIUM 	Isolated occurrences in medium densities	Control

24	MED	Sisal (<i>Various species</i>)	Local Law 3	<ul style="list-style-type: none"> Actual impacts on native vegetation and ecosystems – LOW 	Frequent occurrences in low to medium densities	Control
25	LOW	Lantana (<i>Lantana camara</i>)	Class 3 (WONS)	<ul style="list-style-type: none"> Actual impacts on native vegetation and ecosystems – MEDIUM Potential impacts on agricultural production values - MEDIUM Potential impacts on recreation values - LOW 	Frequent occurrences in low to medium densities	Control
26	LOW	African Love Grass (<i>Eragrostis curvula</i>)	Local Law 3	<ul style="list-style-type: none"> Potential impacts on native vegetation and ecosystems – LOW 	Isolated occurrence in low densities	Control


Table 5: Management priorities for Local and State Government declared animal pests in the Central Highlands Regional Council area

Priority (category and order)		Common name and (<i>Scientific name</i>)	Declaration status	Threats (potential and actual)	Distribution and Prevalence	Objective
1	HIGH	Wild Dog Dingo (<i>Canis familiaris</i>) (<i>Canis familiaris dingo</i>)	Class 2	<ul style="list-style-type: none"> Actual impacts on agricultural production values - HIGH Actual impacts on native fauna – MEDIUM 	Widespread occurrence in low to medium densities	Control
2	MED	Feral Pig (<i>Sus scrofa</i>)	Class 2	<ul style="list-style-type: none"> Actual impacts on agricultural production values - MEDIUM Actual impacts on native vegetation and ecosystems – MEDIUM 	Widespread occurrence in low to medium densities	Control
3	MED	Feral Cat (<i>Felis catus</i>)	Class 2	<ul style="list-style-type: none"> Actual impacts on native fauna – HIGH 	Widespread occurrence in low to medium densities	Control in urban areas and monitor elsewhere
4	MED	Fox (<i>Vulpes vulpes</i>)	Class 2	<ul style="list-style-type: none"> Actual impacts on native fauna – MEDIUM Actual impacts on agricultural production values - LOW 	Widespread occurrence in low to medium densities	Control
5	LOW	Feral Deer (<i>Various species</i>) Chital deer (<i>Axis axis</i>) Rusa deer (<i>Cervus timorensis</i>) Red deer (<i>Cervus elaphus</i>) Fallow deer (<i>Dama dama</i>)	Class 2 Class 2 Class 3 Class 3	<ul style="list-style-type: none"> Actual impacts on native flora and ecosystems – LOW Potential impacts on agricultural production values - LOW 	Isolated occurrence in low densities	Monitoring

Priority (category and order)		Common name and (<i>Scientific name</i>)	Declaration status	Threats (potential and actual)	Distribution and Prevalence	Objective
6	LOW	Rabbit (<i>Oryctolagus cuniculus</i>)	Class 2	<ul style="list-style-type: none"> Actual impacts on native flora and ecosystems – LOW Potential impacts on agricultural production values - MEDIUM 	Widespread occurrence in low to medium densities	Control
7	LOW	Australian Plague Locust Migratory Locust Spur-Throated Locust (<i>Chorotoicetus terminifera</i>) (<i>Locusta migratoria</i>) (<i>Austracris guttulosa</i>)	Class 2	<ul style="list-style-type: none"> Potential impacts on agricultural production values - HIGH 	Widespread occurrence in low to high densities	Control
8	LOW	Common Starling (<i>Sturnus vulgaris</i>)	Local Law 3	<ul style="list-style-type: none"> Potential impacts on native fauna and ecosystems – MEDIUM Potential impacts on agricultural production values - LOW 	Isolated occurrence in low densities	Monitoring
9	LOW	Common or Indian myna (<i>Acridotheres tristis</i>)	Environmental	<ul style="list-style-type: none"> Potential impacts on native fauna and ecosystems – MEDIUM 	Isolated occurrence in low densities	Monitoring

8. PRIORITY PLANT AND ANIMAL PESTS

8.1 High and medium priority pest plants


Pest species: HUDSON PEAR (<i>Cylindropuntia rosea</i>)				
Declared status: Class 1		Priority: HIGH		
Description: Hudson Pear is an invasive cactus species of Mexican origin. It is a branched cactus which grows to 1.5 m high and up to 3 m wide. It has a cylindrical trunk and rope-like segments, upright and erect in posture and heavily spined. The stem segments are green to grey-green in colour, cylindrical, up to 90 cm long, 4 cm wide and easily detached. New plants will grow from any stem segment. Depressions on segments contain small bristles and clusters of 4–8 spines. The spines, which may reach up to 3.5 cm in length on the outer segments, are particularly nasty and capable of penetrating footwear and even vehicle tyres and once lodged in the skin are not easily removed. New plants grow vegetatively from segments of any size that break off the main plant and then come in contact with the ground. Hudson Pear does not produce viable seed. This plant literally attaches itself to anything that moves and propagates vegetatively, so weed hygiene and transfer prevention practices are imperative. Hudson Pear also poses a threat to native fauna and has been known to cause the deaths of native animals such as kangaroos, wallabies and koalas.				
Local distribution and prevalence: <ul style="list-style-type: none"> The Willows township area west of Emerald 		Objectives: <ol style="list-style-type: none"> Total control and destruction of all existing infestations within the Council area. Minimise social and economic impacts on Primary Production/ Environment. Promote alternative, non-invasive species and replace existing ornamentals. 		
Strategic action	By who	When	Status	Comments and milestones
Surveys of local communities and townships	Rangers Biosecurity Officers	Ongoing		6 detections found in an ornamental garden.
Monitoring	Rangers Biosecurity Officers	Ongoing		
Removal and Destruction of plants identified	Rangers Biosecurity Officers	When required		

Liaise with Landholders to promote alternative, non-invasive species and replace existing ornamentals	Rangers Biosecurity Officers	When required		6 occurrences of ornamentals targeted and removed.
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Pest species: BUNNY EARS (<i>Opuntia microdasys</i>)				
Declared status: Class 1		Priority: HIGH		
Description:				
<p>There are many species of <i>Opuntia</i> but the name is more commonly associated with the Prickly Pear Cactus. Though <i>Opuntia microdasys</i> or <i>O. rufida</i> are correctly classified these species are at times thought of as the same species. Both species are native to Mexico.</p> <p>These species have been a popular cultivator's choice due to its low maintenance and friendly appearance. This species usually does not possess spines though the coloured 'polka dots' (glochids) covering the surface of the plant can be dislodged easily and may cause skin irritation. These two species are closely related and may be distinguished by the colour of their glochids; <i>O. microdasys</i>; white or yellow and <i>O. rufida</i>; red. Flowers are red-yellow in colour and usually bloom in mid spring. When it bears fruit it is usually green in colour and is edible. This plant is able to reproduce vegetatively or via seed.</p> <p>Because this plant can reproduce both vegetatively and via seed it can make it very difficult to control. These plants provide edible fruit which are sort by native animals which then aid the spread of these species. Segments of this plant can easily be broken off and if left on the ground, will reshoot and create a new plant. They can form dense thickets 40-60cm tall (1.2m <i>O. rufida</i>) and can cover a 6 foot squared area. If this plant was allowed to spread it could degrade pastures, impede stock movement and may cause severe skin reactions in animals.</p>				
Local distribution and prevalence:			Objectives:	
<ul style="list-style-type: none"> Willows/Gemfields 			<ol style="list-style-type: none"> Total control and destruction of all existing infestations within the Council area. Minimise social and economic impacts on Primary Production/ Environment. Promote alternative, non-invasive species and replace existing ornamentals. 	
Strategic action	By who	When	Status	Comments and milestones
Surveys of local communities and townships	Rangers Biosecurity Officers	Ongoing		17 occurrences of ornamentals detected.
Monitoring	Rangers Biosecurity Officers	Ongoing		



Removal and destruction of plants identified	Rangers Biosecurity Officers	Ongoing		
Liaise with Landholders to promote alternative, non-invasive species and replace existing ornamentals	Rangers Biosecurity Officers	As required		14 occurrences of ornamentals targeted and removed; 2 landholders to be identified and 3 further detections to be removed

Pest species: LAUREL CLOCK VINE (<i>Thunbergia laurifolia</i>)				
Declared status: Class 1		Priority: HIGH		
Description:				
<p><i>Thunbergia species</i> are native to northern India, Malaysia and tropical Africa, and grow best in frost-free locations. They are perennial, living for many years.</p> <p>Initially it was believed <i>Thunbergia</i> did not set viable seed, but this has now been disproved. Most propagation however is from stem cuttings or shoots from the tuberous roots, particularly when damaged or severed.</p> <p>Dispersal of <i>Thunbergia</i> can often be traced to transport of root pieces along river banks during floods, or transport from infested sites with earth removed for fill or other soil use.</p> <p><i>Thunbergia laurifolia</i> is a perennial climbing vine native to India and Malaysia. It is very similar in appearance and habit to <i>Thunbergia grandiflora</i>. It has similar flowers; leaves are similar size but a different shape and texture, being oval and narrowing to a pointed tip. Infestations of <i>T. laurifolia</i> are not as large as <i>T. grandiflora</i> but more and more infestations are being found over a wide area. This plant was introduced to Australia as a garden ornamental but has escaped into native vegetation. In the past <i>Thunbergia laurifolia</i> were promoted and sold in Queensland as attractive garden plants, and became widespread in Queensland gardens.</p> <p>These vigorous plants soon escaped into native bushland and began causing considerable environmental damage. The plant climbs and blankets native vegetation often pulling down mature trees with the weight of the vine. Smothered vegetation also has dramatically reduced light levels to lower layers of vegetation drastically limiting natural growth, and killing many native plants. Large tubers degrade creek and river banks and make destruction of the pest difficult.</p>				
				
Local distribution and prevalence:			Objectives:	
<ul style="list-style-type: none"> Emerald Township 			<ol style="list-style-type: none"> Total control and destruction of all existing infestations within the Council area; Minimise social and economic impacts on Primary Production/ Environment; Promote alternative, non-invasive species and replace existing ornamentals. 	
Strategic action	By who	When	Status	Comments and milestones


Surveys of local communities and townships	Rangers Biosecurity Officers	Ongoing		3 occurrences of ornamentals detected.
Monitoring	Rangers Biosecurity Officers	Ongoing		
Removal and destruction of identified plants	Rangers Biosecurity Officers	Ongoing		
Liaise with Landholders to promote alternative, non-invasive species and replace existing ornamentals	Rangers Biosecurity Officers	When required		3 occurrences of ornamentals detected and removed

Pest species: MEXICAN FEATHER GRASS (<i>Nassella tenuissima</i>)				
Declared status: Class 1		Priority: HIGH		
Description: In 2008, Mexican feather grass (<i>Nassella tenuissima</i>) was mislabelled and sold through Queensland nursery and landscape outlets as <i>Stipa capriccio</i> . Landscapers have planted the grass in gardens or other areas as part of landscaping projects. Mexican feather grass is a low-protein, high-fibre grass that has no grazing value. Pure stands of Mexican feather grass would render a paddock worthless. It is closely related to several other exotic grasses, including serrated tussock (<i>N. trichotoma</i>) and Chilean needle grass (<i>N. neesiana</i>), both of which are Weeds of National Significance. Serrated tussock costs New South Wales agricultural industries more than \$40 million annually and is causing severe environmental damage to native grasslands. Mexican feather grass is similar to serrated tussock, in terms of ecology and growth.				
Local distribution and prevalence: <ul style="list-style-type: none"> Emerald township and surrounding areas 		Objectives: <ol style="list-style-type: none"> Total control and destruction of all existing infestations within the Council area. Promote alternative, non-invasive species and replace existing ornamentals. 		
Strategic action	By who	When	Status	Comments and milestones
Surveys of local communities and townships	Rangers Biosecurity Officers	Ongoing		
Removal and destruction when/if identified	Rangers Biosecurity Officers			
Liaise with Landholders to promote alternative, non-invasive species and replace existing ornamentals	Rangers Biosecurity Officers			

<p>Pest species: WEEDY SPOROBOLUS GRASSES <i>(Sporobolus pyramidalis, natalensis, jacquemontii, fertilis and africanus)</i></p>					
<p>Declared status: Class 2</p>		<p>Priority: HIGH</p>			
<p>Description:</p> <p>Giant rats tail (GRT) grass and other weedy <i>Sporobolus</i> grasses are aggressive grasses that can reduce pasture productivity, out-compete desirable pasture grasses, and cause significant degradation of natural areas.</p> <p>Five species of introduced <i>Sporobolus</i> grasses are declared in Queensland. These are giant rats tail (GRT) grass (<i>S. pyradmidalis</i> and <i>S. natalensis</i>), American rats tail grass (<i>S. jacquemontii</i>), giant Parramatta grass (<i>S. fertilis</i>) and Parramatta grass (<i>S. africanus</i>).</p> <p>These species were originally introduced as contaminants in pasture seed. Parramatta grass was introduced in the early 1800s, while <i>S. pyramidalis</i> and <i>S. natalensis</i> (collectively referred to as GRT grass) were introduced as early as 1960. All species have adapted well to large areas of eastern Australia.</p> <p>Weedy <i>Sporobolus</i> grasses can be difficult to identify, as they can be very similar to some native and other exotic <i>Sporobolus</i> species. Weedy <i>Sporobolus</i> grasses can set seed throughout the frost-free period of the year. For example, GRT can set seed throughout the frost-free period of the year and is capable of producing up to 85,000 seeds/m²/year with initial seed viability of about 90%. Established stands of GRT have large soil seed banks (up to 20,000 seeds/m²). It is estimated that a significant proportion of this seed can remain viable for up to 10 years.</p>					
<p>Local distribution and prevalence:</p> <ul style="list-style-type: none"> • Capricorn Highway, Duaringa-Bauhinia Road, Dawson Highway • Mungabunda Road, Palmgrove Road, Taroom Developmental Road • Rhydding Road, Tieri Road near Oaky Creek; and • Two properties in the south east region 			<p>Objectives:</p> <ol style="list-style-type: none"> 1. Total containment and reduction of existing infestations within the Council area. 2. Promote weed seed hygiene and prevention protocols, including landowner awareness. 		
<p>Strategic action</p>		<p>By who</p>	<p>When</p>	<p>Status</p>	<p>Comments and milestones</p>
<p>Promote concerns about potential impacts of Weedy Sporobolus grasses</p>		<p>Rangers Biosecurity Officers</p>	<p>Ongoing</p>		



Assist landholders to positively identify Weedy Sporobolus grasses	Rangers Biosecurity Officers	As required		
Monitor infestations on roads throughout the Council area	Rangers Biosecurity Officers	Ongoing		To be monitored after initial treatments
Treat new incursions on roadways throughout the Council area	Rangers	Ongoing		5 detections identified and treated
Monitor control projects being conducted on two private properties in south east region ('Seracold')	Rangers			
Monitor infestation on private property in the Gemfields region ('Tadcaster')	Rangers			
Inspect and spray Tieri Road	Rangers	Ongoing		To be monitored after initial treatments

Pest species: PRICKLY ACACIA (<i>Acacia nilotica</i>)				
Declared status: Class 2 (WONS)		Priority: HIGH		
Description: A native of Pakistan, Prickly acacia was introduced into Queensland for shade and fodder early this century. Now it can be found throughout the state, with widespread infestations in areas of north west and central west Queensland. Prickly acacia is a thorny shrub or small tree that typically grows 4–5 m high and up to 10 m. The umbrella shape and pods are characteristic features. The young shrubs form dense thorny thickets, while mature trees are usually single stemmed, with spreading branches that have lost most of their thorns. Bark on saplings are orange and/or green tinged. Older trees have dark, rough bark. Once established along bore drains and watercourses, the trees spread out onto adjacent grassland. Thorny thickets interfere with mustering, movement of stock and access to water. Trees along bore drains use valuable water, make maintenance of bore drains more costly, and provide seed to further increase the spread of prickly acacia. Pasture decreases as the tree size increases, because little grows under the canopy as the tree out competes pasture for water.				
Local distribution and prevalence: <ul style="list-style-type: none"> • Bluff Creek, Blackwater Creek, Burngrove Creek • Eulan Downs, Boonal Downs • Glendarivell Road • Mostyndale – infestation treated • Rolleston – infestation treated • Gemfields – Gemfields eradication project • Wangalea – Prickly acacia eradication project • Langton Downs – Prickly acacia eradication project • Craigywarren, Moreen Burns, Carnemore, Belcong 		Objectives: <ul style="list-style-type: none"> • Total control and reduction of existing infestations within the Council area; • Promote weed seed hygiene and prevention protocols, including landowner awareness. 		
Strategic action	By who	When	Status	Comments and milestones
Spray trees	Rangers	Ongoing		

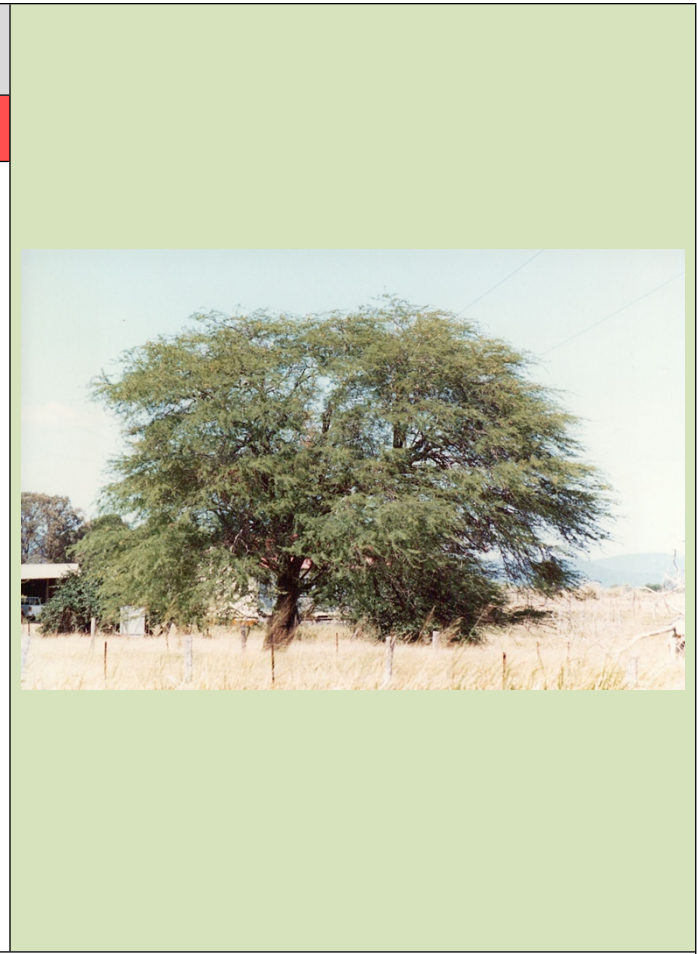
Liaise with landholders	Rangers Biosecurity Officers	Ongoing		
Monitor infestations	Rangers Biosecurity Officers	Ongoing		

Pest species: BELLYACHE BUSH (<i>Jatropha gossypifolia</i>)				
Declared status:	Class 2	Priority:	HIGH	
Description:				
<p>A native of tropical America, bellyache bush is sometimes grown as a garden plant. It has escaped and become naturalised in various areas of north Queensland. A number of smaller infestations occur throughout the remainder of Queensland. It is common along riverbanks and roadsides.</p> <p>It is generally acknowledged that the shallow root system and canopy cover of bellyache bush precludes growth of other plants, often out competing native vegetation and reducing pasture growth. Dense infestations may occur on river flats and other areas of good, loamy soil. It has taken over extensive sections of river frontage in several locations reducing biodiversity and increasing mustering costs.</p> <p>The fruits of the plant are poisonous to humans and animals. The toxic substance is a toxalbumin which, when eaten, leads to symptoms of gastro-enteritis and eventual death of some animals. There have been many stock deaths reported due to bellyache bush poisoning mainly in times of severe drought.</p>				
Local distribution and prevalence:			Objectives:	
<ul style="list-style-type: none"> • Duaringa Dump • Unallocated State Land – Duaringa • Duaringa Township • Emerald Township • Springsure Creek/Dilly Station • Gemfields / The Willows • Maraboon Caravan Park 			<ul style="list-style-type: none"> • Total control and reduction of existing infestations within the Shire. • Minimise social and economic impacts on Primary Production/ Environment. • Promote alternative, non-invasive species and replace existing ornamentals. 	
Strategic action	By who	When	Status	Comments and milestones
Spray Duaringa Dump & Victoria Street	Rangers			Follow-up treatment completed with 5000L herbicide mix
Liaise with DNRM re USL at Duaringa.	Rangers			




Conduct burn Duaringa Dump and USL infestations	Rangers DTRFB DNRM (SLAM)			
Survey Springsure Creek	Rangers			
Survey Dilly	Rangers			
Monitor Gemfields	Rangers			
Monitor Caravan Park	Rangers			


Pest species: MESQUITE (<i>Prosopis species</i>)				
Declared status: Class 2 (WONS)		Priority: HIGH		
Description:				
<p>Mesquite <i>Prosopis</i> species are native to North and South America. They were introduced to Australia as fodder for stock, ornamentals in station homestead or town gardens, and used in mine dumps and other soil stabilisation programs. There are three known species of mesquite plus a hybrid present in Queensland. Mesquite has also been commonly called algaroba, Cloncurry prickly bush, or Quilpie algaroba. Mesquite, once a favoured shade tree around homesteads, has spread significantly in Queensland.</p> <p>Species vary in growth characteristics. Mesquite can occur as a multi-stemmed shrub with branches drooping to the ground, around 3–5 m high, or as a single-stemmed tree with a spreading canopy growing to 15 m. Older bark is rough and grey or brown. Small branches have smooth bark, dark red or green in colour, and in a zigzag shape. Mesquite has a rather untidy appearance, with individual zigzagged twigs sticking out beyond the main canopy.</p> <p>Mesquite was originally favoured as a shade tree around homesteads and as fodder for stock. However, sparse stands will often form into impenetrable thickets. Many infestations are along waterways, both natural and constructed. However, plants will do just as well away from water. Even in rangelands it is an aggressive competitor and can quickly invade upland country. Mesquite thickets can out-compete other vegetation, interfere with mustering and block access to watering places.</p> <p>The sharp thorns can injure animals and puncture vehicle tyres. Seeds can lay dormant for years, and mesquite seedlings can therefore reappear in areas that have been previously cleared.</p> <p>Mesquite has spread along waterways and floodplains, along roadsides, and in horse-paddocks near homesteads across Queensland and has been recognised as a Weed of National Significance due to its invasiveness and potential impacts.</p>				
Local distribution and prevalence:			Objectives:	
<ul style="list-style-type: none"> Duaringa – Baralaba Road 			<ul style="list-style-type: none"> Total control and destruction of all existing infestations within the Shire; Minimise social and economic impacts on Primary Production/ Environment. 	
Strategic action	By who	When	Status	Comments and milestones



Monitor Duaringa-Baralaba Road	Rangers			Nil reoccurrence since initial treatments
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Pest species: WILLOWS CACTUS (<i>Cereus uruguayanus</i>)				
Declared status:	Local Law No.3	Priority:	HIGH	
Description: Willows cactus is also known as Apple cactus, Torch cactus, Candelabra cactus or Night-blooming cereus and is a perennial green cactus introduced from Peru. It has been used as an ornamental garden plant and can grow to heights of 5 – 6 metres in the right conditions. The plant fruits prolifically and produces a succulent fruit around the size of a golf ball that can vary in colour from yellow to a reddish purple, with a white flesh and small black seeds. The fruit is highly attractive to and readily eaten by birds which aid the spread of this pest plant. Willow cactus is a plant that has become a pest in the Willows township area since being introduced to the area as a potted plant several years ago.				
Local distribution and prevalence: <ul style="list-style-type: none"> • Willows • Yamala • Duaringa 			Objectives: <ul style="list-style-type: none"> • Control strategic infestations to minimise the impacts on environment. • Minimise social and economic impacts on Primary Production. • Promote alternative, non-invasive species and replace existing ornamentals. 	
Strategic action	By who	When	Status	Comments and milestones
Liaise with Landholders to promote alternative, non-invasive species and replace existing ornamentals	CHRC			
Survey Willows	Rangers			Conducted Jan/Feb 2012
Continue Willows control project	CHRC CHRRUP	When required		Proposed project to commence July 2016. Allocation if approval received will occur November 2015.

Target isolated occurrences for eradication in the remainder of the Council area	Rangers			
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Pest species: SWORD PEAR (<i>Acanthocereus tetragonus</i>)				
Declared status:	Class 2	Priority:	HIGH	
Description: Sword pear is an elongated branching shrub grows in clumps up to 4 m high. The stems are erect, up to 1.5 m long, 3–8 cm wide and divided into many joints. Sword pear stems are three-, four- or five-angled and resemble star-picket posts. The areoles are found on the edges of the joints and produce many white spines 1–4 cm long. The flowers are white, funnel-shaped and 14–20 cm long. The flowers open at night between spring and summer. Sword pear produces bright red sphere-shaped fruits that are 5 cm in diameter. The fruit has a red pulp and black seeds.				
Local distribution and prevalence:		Objectives:		
<ul style="list-style-type: none"> • Willows • Anakie • Blackwater 		<ul style="list-style-type: none"> • Control strategic infestations to minimise the impacts on environment. • Minimise social and economic impacts on Primary Production. • Promote alternative, non-invasive species and replace existing ornamentals. 		
Strategic action	By who	When	Status	Comments and milestones
Liaise with Landholders to promote alternative, non-invasive species and replace existing ornamentals				
Conduct control				

Target isolated occurrences for eradication				
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Pest species: ATHEL PINE (<i>Tamarix aphylla</i>)			
Declared status:	Class 2 (WONS)	Priority:	MEDIUM
Description:			
<p>Athel pine is a spreading tree to 15 m with pendulous, jointed branches. Immature trees have light grey trunks and stems. Mature trees have a thick, rough, dark grey to black bark, and grey-brown stems, and can be up to 1 m in diameter. The minute, dull green leaves superficially resemble pine tree ‘needles’. However, athel pine is misleadingly named as it is a flowering plant, not closely related to true pine trees (conifers).</p> <p>Its small flowers are pinkish-white without stalks, growing on 30–40 mm long spikes from the ends of the previous year’s branches. The fruit is bell shaped with a hairy tuft, and contains numerous small cylindrical seeds. The seeds have a tuft of fine hairs which assists wind dispersal. The trees have strong woody roots which penetrate and spread deeply throughout the soil.</p> <p>Athel pine is a <i>Weed of National Significance</i>. It is regarded as one of the worst weeds in Australia because of its invasiveness, potential for spread, and economic and environmental impacts. Athel pine affects the pastoral industry by forming dense stands along inland rivers. It consumes water more quickly than native plants, thereby reducing the number and quality of watering holes. It concentrates salt, which is excreted by its leaves. This makes the ground beneath athel pines more salty and excludes native pasture grasses and other salt-sensitive plants. It can change river flow patterns and cause overland flooding and bank erosion.</p> <p>It is harder and more expensive to muster cattle in athel pine infestations. Because they are drought tolerant and fire resistant, athel pines decrease the frequency of fires and alter vegetation structure. Infestations reduce the cultural and aesthetic value of affected land and may impact on tourism in the region.</p> <p>There are several other <i>Tamarix</i> species, all commonly known as tamarisks, that are weeds in Australia.</p>			
Local distribution and prevalence:		Objectives:	
<ul style="list-style-type: none"> • Surveys of local communities and townships 		<ul style="list-style-type: none"> • Reduction of all occurrences of Athel pine in CHRC, with the aim of eradication of weedy infestations where possible. • Promote public awareness and control of existing infestations with the aim of reduction and spread. <p>Control strategic infestations to minimise the impacts on environment.</p>	



Strategic action	By who	When	Status	Comments and milestones
Continue Gemfields Control Project	CHRC CHRRUP DAF WONS Coordinator			Funding Sourced for Control Project; Surveyed and infestations recorded by GPS; Mechanical Control initiated
Liaise with Landholders to promote alternative, non-invasive species and replace existing ornamentals				


Pest species: CHINEE APPLE (<i>Ziziphus mauritiana</i>)				
Declared status:	Class 2	Priority:	MEDIUM	
Description:				
<p>Native to southern Asia and eastern Africa, chinee apple was first recorded in the Torres Strait in 1863 and Townsville in 1916. It is widespread in North Queensland, mainly around the areas associated with mining early last century.</p> <p>Chinee apple (or Indian jujube) is a large shrub or small spreading tree up to 8 m high and 10 m in canopy diameter. The plants are densely branched, from ground level in some cases.</p> <p>Stands of chinee apple grow as open forests, or form thorny thickets along waterways. Branches are zig-zag in shape and have a leaf and a thorn at each angle. Leaves are rounded, growing on alternating sides of the branches, glossy green above and almost white underneath. Flowers are small and inconspicuous, greenish-white, and emit an unpleasant smell. The edible fruits are similar in size and structure to a cherry, but pale yellow or orange when ripe.</p>				
Local distribution and prevalence:			Objectives:	
<ul style="list-style-type: none"> • Springsure town including show grounds & Springsure Creek • Gap Road, Meteor Downs, Arcturus Road • Opposite pig box, 5 Mile Reserve • Emerald Town, Capella Town 			<ul style="list-style-type: none"> • Destruction of all infestations of Chinee apple in the Central Highlands. 	
Strategic action	By who	When	Status	Comments and milestones
Liaise with Landholders				
Continue control in Springsure				
Target isolated occurrences for destruction				




Pest species: PARKINSONIA (<i>Parkinsonia aculeata</i>)				
Declared status:	Class 2 (WONS)	Priority:	MEDIUM	
<p>Description:</p> <p>Parkinsonia can form dense and often impenetrable thorny thickets along watercourses and bore drains. This restricts access of stock to drinking water and can make mustering virtually impossible. The ability of seeds to float means flooded country is particularly susceptible to invasion by parkinsonia. Some infestations in the Gulf of Carpentaria Region and Fitzroy catchment are now up to several kilometres across. Such infestations provide a harbour for feral pigs, which can predate on livestock, damage crops, and seriously degrade the environment. Parkinsonia has been recognized as a Weed of National Significance.</p> <p>Parkinsonia is fast growing and may flower in early summer of its second or third year of growth. Once established, flowering can occur opportunistically to exploit variable seasonal conditions. Pods mature in late summer, float on water and are hence readily dispersed by floodwaters. Seeds have a thick and extremely hard coat and so remain viable for many years to allow germination under favourable conditions. Seeds require wet soil conditions for several days to induce germination.</p>				
<p>Local distribution and prevalence:</p> <p>Widespread in low to high densities</p> <ul style="list-style-type: none"> • Glencoe / Burrabeem • Springsure Creek, Arcturus Road, Mosquito Creek • Aggravation • Rolleston 			<p>Objectives:</p> <ul style="list-style-type: none"> • Promote Best Management Practices, including the use of biological control in dense infestations. • Control of scattered infestations and containment of large core infestations within the remainder of the Shire. 	
Strategic action	By who	When	Status	Comments and milestones
Follow-up Spraying				
Monitor and follow-up				
Survey				




Follow-up Spraying				
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<p>Pest species: HARRISIA CACTUS <i>(Harrisia martinii, H. tortuosa and H. pomanensis)</i></p>					
<p>Declared status:</p>	<p>Class 2</p>	<p>Priority:</p>	<p>MEDIUM</p>		
<p>Description:</p> <p>Harrisia cactus can form dense infestations that will reduce pastures to a level unsuitable for stock. Harrisia cactus will choke out other pasture species when left unchecked. The spines are a problem for stock management, interfering with mustering and stock movement. Harrisia cactus produces large quantities of seed that is highly viable and easily spread by birds and other animals. As well as reproducing from seed, Harrisia Cactus has long trailing branches that bend and take root wherever they touch the ground. Any broken off portions of the plant will take root and grow.</p> <p>Harrisia cactus is mainly a pest of brigalow and associated softwood country. However, infestations are now appearing in box and ironbark stands and also in pine forests. The cactus is shade tolerant and reaches its maximum development in the shade and shelter of brigalow scrub, though established infestations can persist once scrub is pulled.</p>					
<p>Local distribution and prevalence:</p> <ul style="list-style-type: none"> • Widespread in northern Daringa • Spreading in north west Bauhinia – Humbolt, Redrock & Planet Downs • Spreading in eastern Emerald • Bogantungan • Gindie • Spreading in northern Capella 			<p>Objectives:</p> <ul style="list-style-type: none"> • Control and reduce infestation at Bogantungan. • Control infestations in Peak Downs area. • Control infestation in eastern Emerald & Gindie areas. • Control of isolated infestations- West of Expedition & Tolmies Ranges. • Trial the use of biological control in dense infestations. 		
<p>Strategic action</p>	<p>By who</p>	<p>When</p>	<p>Status</p>	<p>Comments and milestones</p>	
<p>Monitor Mungabunga Road</p>	<p>Rangers</p>				
<p>Spread Bio-control</p>	<p>Rangers</p>				
<p>Liaise with landholders</p>	<p>Rangers</p>				


Continue with Bogantungan project				
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<p>Pest species: OTHER AQUATIC WEEDS <i>(Salvinia molesta and Pistia stratiotes)</i></p>					
<p>Declared status:</p>	<p>Class 2 (WONS)</p>	<p>Priority:</p>	<p>MEDIUM</p>		
<p>Description:</p> <p>Salvinia is a free-floating water weed native to South America. It has spread over considerable areas of the state and has the potential to spread further, especially in the Murray–Darling catchment. It has been named a Weed of National Significance (WONS).</p> <p>Water lettuce is a free-floating waterweed possibly native to the Northern Territory. It has spread over considerable areas of Queensland and has the potential to spread further, especially in the Murray–Darling catchment.</p> <p>Under favourable conditions, Salvinia and Water lettuce can form dense mats over the surface of slow-moving waterways, including dams and reservoirs. Prolific growth can prevent recreational activities (such as swimming, boating, and fishing), block irrigation equipment, provide a habitat for mosquitoes, and displace native plants and wildlife. Enforced control is essential to prevent spread and to protect landholders in uninfested areas, particularly in the Murray–Darling catchment. Prohibiting the sale of salvinia and water lettuce can also help to prevent its spread.</p>					
<p>Local distribution and prevalence:</p> <ul style="list-style-type: none"> • Baralaba Weir / Dawson River Anabranch • Duinga • Gemfields / The Willows 			<p>Objectives:</p> <ul style="list-style-type: none"> • Reduction of all infestations of Salvinia and Water Lettuce in Council area, with the aim of eradication where feasibly. • Promote alternative, non-invasive species to replace existing ornamentals. 		
<p>Strategic action</p>	<p>By who</p>	<p>When</p>	<p>Status</p>	<p>Comments and milestones</p>	
<p>Control program with Baralaba Landcare Hymenachne Project</p>	<p>Rangers</p>				
<p>Monitor infestations around Dawson Anabranch</p>	<p>Rangers</p>				
<p>Monitor MacKenzie Park, Duinga</p>	<p>Rangers</p>			<p>Nil reoccurrence found since treated</p>	

Willows Salvinia Control project	Rangers			Introduction of Bio-Control
Liaise with Landholders to promote alternative, non-invasive species and replace existing ornamentals	Rangers			2 occurrences of ornamentals detected

Pest species: HYMENACHNE (<i>Hymenachne amplexicaulis</i>)				
Declared status:	Class 2 (WoNS)	Priority:	MEDIUM	
Description:				
<p>Hymenachne is used as a ponded pasture species for cattle production but it can escape cultivation and invade waterways including drains, lagoons, creeks and rivers. Hymenachne can increase flooding by reducing the flow capacity of the drainage networks. Under flood conditions, rafts of plant material build up at fences and bridges, collecting other floating debris. The combined weight may cause such structures to collapse.</p> <p>Water flow to irrigation equipment can be reduced due to the restrictive action of the roots, thus increasing pumping times and costs. Hymenachne infestations are a physical barrier for aquatic and semi-aquatic animals, restricting their territorial movements and breeding activities. Fishery biologists believe that carrying capacity and fish populations available for both commercial and recreational uses are being significantly reduced. The mats of weed also degrade the quality of swimming and make fishing impossible. Hymenachne also reduces access to waterways for recreation and wildlife.</p>				
Local distribution and prevalence:			Objectives:	
<ul style="list-style-type: none"> • Baralaba Weir / Dawson River anabranch • Serocold • Nogoia River • Winton Creek 			<ul style="list-style-type: none"> • Reduction of all infestations of Hymenachne in CHRC, with the aim of eradication where possible. • Promote control of existing core infestations with the aim of reduction and spread. 	
Strategic action	By who	When	Status	Comments and milestones
Baralaba Landcare control project with landowners	Rangers			
Survey Serocold	Rangers			
Survey Nogoia, McKenzie River	Rangers			

Continue with control project.	Rangers			
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Pest species: RUBBER VINE (<i>Cryptostegia grandiflora</i>)				
Declared status:	Class 2 (WoNS)	Priority:	MEDIUM	
Description:				
<p>Rubber vine generally invades waterways first, where the seeds germinate in moist silt layers after rain. The plant smothers riparian vegetation and forms dense, sometimes impenetrable thickets. This decreases biodiversity and prevents access to both stock and native animals, whilst harbouring feral animals.</p> <p>Infestations expand outward from waterways, hillsides and pastures, resulting in loss of grazing land and increased difficulty in mustering stock. The plant is poisonous to stock, though seldom eaten. Most deaths due to rubber vine occur after stock have been stressed, or when other feed is scarce. Rubber vines ability to spread and colonise areas quickly has led to it becoming a threat to many other areas of northern Australia. Due to this ability rubber vine is listed as a Weed of National Significance.</p> <p>Rubber vine flowers at any time of year if sufficient moisture is available. Usually, June and July are the only non-flowering months. Plant stem diameter must be approximately 20 mm before flowering can occur. Seed pod formation occurs from spring to late autumn, with peak seed production corresponding to maximum flowering. Eventually, pods dry out and split open, with pod splitting occurring approximately 200 days after formation. Seeds are scattered by wind, but also carried downstream by water. Approximately 95% of seed is viable, although germination requires favourable temperature and soil moisture conditions.</p>				
Local distribution and prevalence:				
<p>Widespread</p> <ul style="list-style-type: none"> • Springsure Creek, Duckworth Creek, Abor Creek • Springton Creek, Bridgewater Creek, Medway Creek, Grasstree Creek • Langton-Magenta Road, Capella 			Objectives:	
			<ul style="list-style-type: none"> • Reduction of all infestations of Rubber vine in CHRC, with the aim of eradication where possible. • Promote Best Management Practices, including the use of biological control in dense infestations. • Destruction of isolated infestations. 	
Strategic action	By who	When	Status	Comments and milestones
Monitor	Rangers			
Liaise with landholders	Rangers			

Pest species: THUNBERGIA (<i>Thunbergia grandiflora</i>)						
Declared status:	Class 2	Priority:	MEDIUM			
Description:						
<p><i>Thunbergia species</i> are native to northern India, and tropical Africa, and grow best in frost-free locations. They are perennial, living for many years.</p> <p>Initially it was believed <i>Thunbergia</i> did not set viable seed, but this has now been disproved. Most propagation however is from stem cuttings or shoots from the tuberous roots, particularly when damaged or severed.</p> <p>Dispersal of <i>Thunbergia</i> can often be traced to transport of root pieces along river banks during floods, or transport from infested sites with earth removed for fill or other soil use.</p> <p>In the past <i>Thunbergia grandiflora</i> were promoted and sold in Queensland as attractive garden plants, and became widespread in Queensland gardens. These vigorous plants soon escaped into native bushland and began causing considerable environmental damage.</p> <p>The plant climbs and blankets native vegetation often pulling down mature trees with the weight of the vine. Smothered vegetation also has dramatically reduced light levels to lower layers of vegetation drastically limiting natural growth, and killing many native plants. Large tubers degrade creek and river banks and make destruction of the pest difficult.</p>						
Local distribution and prevalence:		Objectives:				
<ul style="list-style-type: none"> Isolated and localised 		<ul style="list-style-type: none"> Identification of all infestations of Blue Trumpet vine in CHRC with the aim of eradication. 				
Strategic action	By who	When			Status	Comments and milestones
Surveys of local communities and townships	BIOSECURITY OFFICERS Rangers	Ongoing		2 occurrences of ornamentals detected		

<p>Liaise with Landholders to promote alternative, non-invasive species and replace existing ornamentals</p>	<p>Rangers</p>			
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Pest species: MOTHER-OF-MILLIONS (<i>Bryophyllum species</i>)				
Declared status:		Class 2	Priority: MEDIUM	
Description:				
<p>Mother of millions are escaped ornamental plants. Originally from Madagascar, Five species are commonly naturalised in Queensland; three of these are increasing over substantial areas.</p> <p>Mother of millions is highly toxic to stock and because of its succulent features is well adapted to dry areas. As the name suggests one plant can reproduce a new general from masses of embryoids (plantlets) that are formed on the leaf edges. This makes these plants hard to eradicate. Follow up controls are essential. These plants, and especially their flowers, are poisonous to stock and occasionally cause a significant number of cattle deaths. When cattle are under stress or in unusual conditions they are more likely to eat strange plants. Shifting cattle to new paddocks, moving stock through infested rubbish dumps and reduction of availability of feed due to flood or drought, can all contribute to poisoning. Since the plant flowers from May to October, during the dryer months of the year, the scarcity of feed may cause cattle to consume lethal amounts of mother of millions.</p>				
Local distribution and prevalence:			Objectives:	
Widespread except in Springsure:			Reduction of infestations of Mother of millions in CHRC, with the aim of eradication where possible. Promote control of existing core infestations with the aim of reduction and spread.	
Strategic action	By who	When	Status	Comments and milestones
Ensure infestations in Springsure are controlled.	Rangers			



Pest species: PARTHENIUM WEED (<i>Parthenium hysterophorus</i>)				
Declared status:	Class 2	Priority:	MEDIUM	
Description:				
<p>Parthenium weed readily colonises weak pastures with sparse ground cover. It will colonise disturbed, bare areas along roadsides and heavily stocked areas around yards and watering points. Parthenium weed can also colonise brigalow, gidgee and softwood scrub soils. Its presence reduces the reliability of improved pasture establishment and reduces pasture production potential. In 1992, it was estimated that parthenium weed cost the beef industry \$16.5 million per year, including reduced beef production and control costs. Parthenium weed costs cropping industries several million dollars per year also. Parthenium weed is also a health problem as contact with the plant or the pollen can cause serious allergic reactions such as dermatitis and hay fever.</p> <p>Parthenium weed normally germinates in spring and early summer, produces flowers and seed throughout its life and dies around late autumn. However, with suitable conditions (germinating rain, available moisture, mild soil and air temperatures), parthenium weed can grow and produce flowers at any time of the year. In summer, plants can flower and set seed within 4 weeks of germination particularly if stressed.</p>				
Local distribution and prevalence:			Objectives:	
Widespread			Promote control of existing core infestations with the aim of reduction and spread.	
Strategic action	By who	When	Status	Comments and milestones
Funding for TMR roadside spraying	TMR	Annually		




Continue roadside spraying programs		Annually		
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Pest species: SISAL/SISAL HEMP (<i>Agave sisalana</i>)				
Declared status:	Class 2	Priority:	MEDIUM	
Description:				
<p>This is a cultivated introduced species that is thought to be native to Mexico and has become a problem in the Central Highlands Region. This weed species has a rosette leaf structure with leaves growing 2m tall and are often spined along the edge. Its flower forms well above the plant, sometimes on a stem which can grow to over 5m tall.</p> <p>Because of the high fibre content in this plant it was traditionally used for the production of rope, twine and even dart boards. In the present day this species fills many garden beds as a low maintenance garden feature.</p> <p>Sisal hemp is a prolific reproducer and is able to produce seeds or have many suckers at any one time. It can cause serious impacts on the environment via forming rapidly dense stands impeding livestock movement and prevent natural bush/grass regeneration. It can easily out-compete native species if given the chance which impacts on biodiversity as well as the food and habitat of native animals.</p>				
Local distribution and prevalence:		Objectives:		
<ol style="list-style-type: none"> 1. Herbert Creek 2. 7 Mile Gully 3. Springton Creek 4. local communities and townships 		<p>Identification of all infestations of Laurel Clock Vine in CHRC, with the aim of eradication</p>		
Strategic action	By who	When	Status	Comments and milestones
Monitor infestations around Duaringa & Dingo	Rangers	Ongoing		


Liaise with Landholders to promote alternative, non-invasive species and replace existing ornamentals				
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Pest species: CORAL CACTUS (<i>Cylindropuntia fulgida</i>)				
Declared status:	Class 2	Priority:	MEDIUM	
<p>Description:</p> <p>Large infestations of Coral Cactus is difficult and expensive to control, isolated and scattered plants should be controlled before they have the opportunity to develop into much large infestations.</p> <p>The plant reproduces when pads or fruits come into contact with the ground, take root and produce shoots. The pads are easily transported by wild and domestic animals.</p>				
<p>Local distribution and prevalence:</p> <p>1. Gemfields – small infestations</p>			<p>Objectives:</p> <p>Reduce the infestations of Coral Cactus in CHRC</p>	
Strategic action	By who	When	Status	Comments and milestones
Liaise with Landholders to promote alternative, non-invasive species and replace existing ornamentals	Rangers Biosecurity QLD	As required		
Treat new incursions on the Gemfields common as identified	Rangers Common Committee Biosecurity QLD	As required		



WILD DOGS (<i>Canis familiaris</i>)				
Declared status:	Class 2	Priority:	HIGH	
Description:				
<p>Wild Dogs are non-domestic dogs including dingoes and dingo hybrids. They are present throughout the state and kill, harass and maim livestock, domestic pets and native wildlife and are known vectors for other diseases capable of impacting on humans and livestock.</p> <p>Wild dogs are a Class 2 pest under the Act and the section 77 of the <i>Land Protection (Pest and Stock Route management) Act 2004</i> provides that landholders must take reasonable steps to keep land free of class 1 and class 2 pests.</p>				
Local distribution and prevalence:		Objectives:		
Widespread		Manage, control and work towards reducing the impact on livestock industry in the Central Highlands. Promote and adopt best practice methodologies to control		
Strategic action	By who	When	Status	Comments and milestones
Provide a 1080 service to landholders on an as needs basis as identified by wild dog syndicates	Rangers	When required		
Maintain council owned land	Rangers	When required		
Promote best practice methodologies	Rangers Biosecurity Qld	When required		

FERAL PIG (<i>Sus scrofa</i>)				
Declared status:	Class 2	Priority:	MEDIUM	
Description:				
<p>Feral pigs have a significant impact on the environment and agricultural production and are a potential vector for exotic diseases. Control methods including poisoning, trapping, exclusion fencing, ground and helicopter shooting.</p> <p>Feral pigs will damage pasture and crops by grazing, trampling and uprooting the ground and damage stored grain facilities, fencelines and watering points. They have a significant impact on the natural environment along water courses and ephemeral wetlands.</p> <p>They are carriers of endemic diseases such as leptospirosis, QFever, brucellosis and sparganosis.</p>				
Local distribution and prevalence:		Objectives:		
Widespread		Landholders to control and manage populations Local Government to provide 1080 baiting services		
Strategic action	By who	When	Status	Comments and milestones
Provide a 1080 service to landholders on an as needs basis as identified	Rangers	When required		
Maintain council owned land	Rangers	When required		
Promote best practice methodologies	Rangers Biosecurity Qld	When required		

Fox (<i>Vulpes vulpes</i>)				
Declared status:	Class 2	Priority:	MEDIUM	
<p>Description:</p> <p>European red foxes are adaptable and can be found in a variety of habitat dependent on the availability of food and shelter. They are opportunistic feeds and are particularly susceptible to 1080 baiting programs.</p>				
				
Local distribution and prevalence:			Objectives:	
Widespread			Landholders to control and manage population numbers Council to provide a 1080 service	
Strategic action	By who	When	Status	Comments and milestones
Provide a 1080 service to landholders on an as needs basis as identified	Rangers	When required		
Maintain council owned land	Rangers	When required		
Promote best practice methodologies	Rangers Biosecurity Qld	When required		

FERAL CATS (<i>Felis Catus</i>)				
Declared status:	Class 2	Priority:	MEDIUM	
Description:				
<p>Feral cats are highly adaptable animals that can survive and reproduce in all habitats. Very few environmental factors limit their distribution. They are opportunistic feeders and studies conducted have demonstrated their diet includes many native animals including small mammals, birds, reptiles, amphibians, insects and fish.</p> <p>Feral cats are able to increase their numbers very quickly in favourable conditions.</p>				
Local distribution and prevalence:		Objectives:		
Widespread		To continue to reduce population numbers		
Strategic action	By who	When	Status	Comments and milestones
Provide a 1080 service to landholders on an as needs basis as identified	Rangers	When required		
Maintain council owned land	Rangers	When required		
Promote best practice methodologies	Rangers Biosecurity Qld	When required		
Provide a cat trap service to rate payers in urban areas	Rangers	When required		