

Q u e e n s l a n d

w e e d s

s t r a t e g y

2002 – 2006



Queensland Government

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AgForce

CANEGROWERS

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Landcare and Catchment Management Council

Rural Lands Protection Board

Queensland Mining Council

Indigenous Land Corporation

tertiary institutions

local government officers and elected representatives

State agency officers

many other community and industry members.

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2002-2006



2002 - 2006

Foreword

One of the most significant environmental challenges facing Queensland is to minimise the impact of those weeds that pose a serious threat to many of the State's ecosystems, and impose high annual costs on agricultural industries.

Until European settlement, the natural barriers of oceans and deserts provided the isolation essential to the evolution of Queensland's unique species and ecosystems. In less than two centuries, these barriers have been rendered ineffective because of an increase in the global trade that enables weed species to travel vast distances.

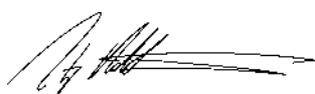
Invasion by alien species is now acknowledged as the second major threat to biological diversity after loss and degradation of habitat, and may be as damaging to native species and ecosystems on a global scale.

While considerable progress has been made in the fight against weeds, a Statewide planning framework is required to coordinate and enhance the efforts of the community, industry and government.

The *Queensland Weeds Strategy 2002-2006* provides the framework for improved management of weeds across the State and meets Queensland's commitment under the National Weeds Strategy.

This Strategy has been developed with the assistance of landholders, community organisations and local government. I commend their efforts and ask that everyone involved in land management works toward keeping the commitments made in this Strategy.

There are no 'quick fixes' to the weed problem, but this Strategy has set the direction and nature of weed management for the next 5 years and forms a solid basis for the long term management of weeds in Queensland.



STEPHEN ROBERTSON

Minister for Natural Resources and Minister for Mines

2002 - 2006 Summary

The *Queensland Weeds Strategy* is, of necessity, a broad, over-arching document. It establishes a Statewide planning framework to give direct management of weeds by government, community, industry and individuals. The Strategy has been developed to help achieve coordinated, effective weed management throughout Queensland.

The vision is:

For weeds to have an acceptable impact on people, production and the natural environment.

The mission is:

To establish and perpetuate cooperative management of the impacts of weeds in Queensland.

The vision and mission will be addressed through the following desired outcomes. Together, these outline a process for overcoming weed management problems:

- | | |
|---|--|
| <p>1. Awareness and Education</p> <p>Awareness, knowledge and ownership of weed management by all stakeholders are significantly increased and contribute to</p> | <p>cost efficiencies and successful control.</p> |
| <p>2. Assessment</p> <p>Reliable information is available as a basis for decision making in weed management.</p> | |
| <p>3. Planning, Responsibility and Resourcing</p> <p>Strategic directions are established, maintained and owned by</p> | <p>all stakeholders.</p> |
| <p>4. Prevention and Early Intervention</p> <p>Establishment and spread of weeds is prevented.</p> | |
| <p>5. Effective Management Systems</p> <p>Integrated systems for managing the impact of weeds are</p> | |

2002-2006

The Strategy contains objectives and strategic actions for achieving each desired outcome. A Queensland Weeds Strategy Management Committee will be formed to coordinate and monitor the implementation of the Strategy through action plans.

A State Strategy will provide clear direction to all parties involved in addressing the problem based on:

- clearly stated objectives and identified priorities
- making the best use of available resources.

The Strategy will have been implemented when the objectives and action plans are reflected in relevant pest management planning and onground projects.

2002-2006

Table of contents

Foreword	i
Summary	ii
Acronyms	v
1.0 Introduction	1
1.1 Queensland's Weed Problem	1
1.2 Strategy Purpose	2
1.3 Scope	3
1.4 Challenges	3
1.5 Context	4
1.6 Principles	5
2.0 Strategic Plan	6
2.1 Vision	6
2.2 Mission	6
2.3 Awareness and Education	7
2.4 Assessment	10
2.5 Planning, Responsibility and Resourcing	13
2.6 Prevention and Early Intervention	18
2.7 Effective Management Systems	21
3.0 Opportunities and Constraints	24
4.0 Stakeholder Responsibilities	25
5.0 Management Arrangements	28

2002-2006

Acronyms

CG	Community groups
CRC	Cooperative Research Centre for Australian Weed Management, or other relevant CRCs
CSIRO	Commonwealth Scientific and Industrial Research Organisation
NR&M	Department of Natural Resources and Mines
IN	Industry organisations
LG	Local governments
LM	Private and government land managers
SG	Queensland State Government and agencies
EDU	Universities and education facilities
WSQ	Weed Society of Queensland

2002-2006

1.0 Introduction

1.1 Queensland's weed problem

Weeds are a significant threat to the primary production, biodiversity and conservation values of the State. They increase the risk of fire, increase costs to infrastructure maintenance, and reduce the amenity of recreation areas. Some weeds have well-documented and sometimes serious effects on human health.

Sustainable land use is dependent on the retention of natural ecosystem functions to prevent natural resource degradation. Weeds have the potential to adversely alter ecosystem function, reduce primary industry productivity and profitability, and seriously limit the long-term sustainability of all the State's agricultural and natural resources.

In simple terms, a weed is a plant out of place. Weeds are plants that are able to spread rapidly and produce unwanted economic, environmental or social impacts. They may be plants accidentally or intentionally introduced to Australia, or they can be native plants that have become weedy due to inappropriate management. Most of Queensland's serious pest plants were introduced from overseas. Some have entered the country as contaminants; others were deliberately introduced to enhance rural production, or for ornamental use in domestic gardens and landscaping.

Such plants – being climatically suited to their new environment and able to successfully reproduce – have become established and naturalised.

Establishment and spread of introduced plant species have been helped by the absence of natural predators and diseases. This has given them a competitive edge over native species and commercially cultivated food and fibre plants.

The negative economic impacts of weeds include the following:

- competition with pasture species to reduce available grazing;
- toxicity to stock;
- competition with crops for space, water and nutrients; and
- impacts (of aquatic weeds) on water quality and irrigation.

Not only are there costs associated with such production losses, but there are also management costs arising from the use of physical, mechanical and chemical control methods. Estimates of the cost of weeds to Queensland range in the hundreds of millions of dollars each year. Just five declared (noxious) weeds – parthenium weed (*Parthenium hysterophorus*); rubber vine (*Cryptostegia grandiflora*); prickly acacia (*Acacia nilotica*); mesquite (*Prosopis* spp.) and parkinsonia (*Parkinsonia aculeata*)—cost the State more than \$50 million each year in lost production and costs of control.

Inappropriate fire/stocking regimes in some areas can result in the proliferation of some native woody species, such as turkey bush (*Eremophila* species). The cost of reduced production in the Mulga lands of south-west Queensland,

caused by the intrusion of such woody weeds and the ensuing erosion, is estimated at over \$50 million each year. The estimated annual cost of weeds in winter crops in southern Queensland alone is \$40 million.

Weeds can also degrade natural vegetation and impact on biodiversity generally. For example, rubber vine has the potential to completely destroy all deciduous vine thickets in northern Queensland, which would lead to the loss of entire unique ecosystems and the extinction of many plant and animal species. Other examples of weeds having, or potentially having, serious environmental impacts are cat's claw creeper (*Macfadyena unguis-cati*) and bitou bush (*Chrysanthemoides monilifera* ssp. *rotundata*). There could also be flow-on, with environmental impacts to nature-based tourism also causing economic loss.

Weed management practices may also have environmental impacts. Tillage can result in soil erosion and subsequent pollution of river systems. Herbicides may have off-target impacts, particularly in aquatic habitats. Inappropriate use of fire in weed management programs may result in ecosystem modification.

Social impacts include effects on human health, recreation, safety and aesthetics. Parthenium weed has a significant impact on human health in heavily infested Central Highlands

2002-2006

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areas of Queensland. Humans can suffer serious allergic reactions, such as dermatitis and rhinitis or asthma, on contact with the plant or its pollen.

Many aquatic weeds, such as salvinia (*Salvinia molesta*), cause safety hazards. Small children have drowned when they thought the floating carpet of salvinia was solid

ground. Aquatic weeds also interfere with recreational activities (such as swimming and canoeing), and reduce the aesthetic value of lakes and streams.

The use of herbicides to control weeds in crops can result in unacceptable residues in food.

Weed control is an essential component of road and railway

corridor maintenance, especially with regard to safety considerations. Construction and maintenance of transport and utility infrastructure generally can be critical activities in the introduction and spread of weeds.

1.2 Strategy purpose

The serious threat posed by weeds will only be effectively and efficiently managed by integrating existing knowledge with other resources. This strategy provides a framework that encourages and supports all stakeholders in working together to achieve more effective management of existing weeds, and to limit the introduction and establishment of new species.

The *Queensland Weeds Strategy* aims to establish a Statewide planning framework to address the economic, environmental and social impacts of Queensland's current and potential weed problems. A State Strategy will provide clear direction to all parties involved in addressing the problem based on:

- Clear objectives and identified priorities.
- Making the best use of available resources.

By involving stakeholders in the development of the strategy:

- Stakeholder priorities are better reflected.
- Stakeholder awareness and commitment is increased.
- The likelihood of community endorsement and adoption is increased.

The *National Weeds Strategy* recognises that State and Territory governments have a role in encouraging the development of effective weed management strategies at local, regional, State and national level. A *Queensland Weeds Strategy* is essential to ensure the coordination of other levels of weed management planning in the State.

The Strategy provides strong linkages across all levels of natural resource and pest management planning, strategy development and implementation. It addresses the issue of weed management on a statewide basis by providing a strategic framework for weed management. Separate strategies or plans for

individual weed species, and for regional, catchment and local management, already exist or are in development. (See also 1.5 Relationship to other plans.)

The strategy was developed through extensive consultation with stakeholders. The process involved establishing a steering committee (with stakeholder membership), a stakeholder reference panel, and a small interdepartmental government working group. Regional workshops were held at Cairns, Mackay, Nambour, Roma and Longreach. A scoping and issues paper was also developed and circulated to reference panel members and workshop participants for their input.

Stakeholder representatives attended a State workshop to develop the detail of the Strategy. The process built on the outcomes achieved at the regional workshops and on comments received from members of the reference panel. Before the Brisbane

2002 - 2006

1.2

workshop, the working group met with a small group of key stakeholders to develop the vision and mission statements and a set of guiding principles for the Strategy.

This led to the development of the consultation draft of the Queensland Weeds Strategy. Comments received

were examined by the working group and the subsequent amendments to the Strategy were referred to the steering committee. The finalised Strategy was then submitted to Cabinet and key stakeholder groups for endorsement.

This approach was aimed at ensuring that there is optimal ownership of the Strategy by the whole community.

1.3 Scope

The following groups of plants will be included in the Strategy:

- Introduced (exotic) invasive weeds, including weeds of grazing land, aquatic weeds, environmental weeds, and weeds declared under the *Land Protection (Pest and Stock Route*

Management) Act 2002 (which replaces the *Rural Lands Protection Act 1985*).

- Native woody and aquatic species that have become weedy in the situations in which they exist, and native plants that have been introduced to areas outside their

native range and have become weedy in the new environment.

- Weeds of crops and sown pasture.

The strategy is aimed at weeds that have significant economic, environmental or social impacts.

1.4 Challenges

Significant challenges face stakeholders in minimising the impact of weeds in Queensland. These include not necessarily in order of priority:

- Finding new and more acceptable control practices.
- Achieving greater awareness of the problem.
- Achieving increased knowledge of weed distribution, ecology and impacts.
- Achieving greater acceptance of responsibility.
- Highlighting the need for landholders and land managers to undertake regular and ongoing monitoring of weeds.

- Making greater use of regulatory provisions.
- Improving coordination and planning between stakeholders, particularly at a local level.
- Responding more rapidly to emerging weed problems.
- Managing environmental weeds when there are few, if any, economic incentives to do so.
- Establishing a balance between public and private benefits in weed issues – for example, dealing with the perception of a plant as a resource versus that of a weed.
- Finding ways to restrict the spread of weeds.

- Addressing weed management within the broader contexts of resource and catchment management.
- Increasing stakeholder confidence that weed management problems will be acted upon.
- Using current resources more efficiently and effectively.
- Attempting to address the large scale and complexity of weed problems in Queensland.

2002-2006

1.5 Context

The development of this Strategy will not result in any new regulatory requirement. Instead, the aim is to build on existing and emerging planning processes to increase their efficiency. Pest management is a component of sustainable land

management, so this Strategy cannot be a stand-alone document. To be most effective, it should be linked to other plans and strategies that address individual weed species and weeds in general; and linked to natural resource management

regimes at various levels. Table 1 provides some examples of the scale and scope of various planning initiatives, their interrelationships, and how they form part of a holistic planning framework.

Table 1. The scope and scale of weed planning and links with other natural resource management plans (including examples, where relevant)

	SCOPE		
SCALE	Resource Management	Pest Management	Pest Species
National	National Action Plan for Salinity and Water Quality; National Strategy for the Conservation of Australia's Biodiversity; National Rangeland Guidelines	National Weeds Strategy	Strategies for Weeds of National Significance
State	Qld Biodiversity, Conservation and Natural Resource Management Statement	Queensland Weeds Strategy	Queensland Parthenium Strategy
Regional/ Catchment	Regional Vegetation Management Plans; Lake Eyre Basin Strategic Plan	Coopers Creek and Georgina/Diamantina Cross Catchments Weeds Initiative; Central Highlands Pest Management Plan; SE Qld Environmental Weeds Strategy	APEC Parthenium Strategy for Southern Queensland
Local Government	Local government planning schemes	Local Government Pest Management Plans	
Property	Property management plans; Subcatchment action plans	Property pest management plans	Harrisia cactus property management plans

2002 - 2006

1.6 Principles

The development and implementation of the Queensland Weeds Strategy is based on the following principles:

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.

Commitment

Effective pest management requires a long-term commitment to by the community, industry groups and government entities.

Public awareness

Public awareness and knowledge of pests must be raised to increase the capacity and willingness of individuals to control pests.

Prevention

Preventative pest management is achieved by:

- preventing the spread of pests, and viable parts of pests, by human activity;
- 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.

Integration

Pest management is an integral part of managing natural resources and agricultural systems.

Planning

Pest management planning must be consistent at local, regional, State and national levels to ensure:

- Domestic and international obligations about pest management are met.
- Pest management resources are used to target priorities identified under domestic and international obligations.

Improvement

Research about pests, and regular monitoring and evaluation of pest control activities, is necessary to improve pest management practices.

In addition to the above principles, the *National Weeds Strategy* states that 'the primary responsibility for weed management rests with landholders/land managers, but collective action is necessary where the problem transcends the capacity of the individual landholder and land manager to address it adequately.'

If necessary, enforcement measures may be used to ensure landholders control declared weeds on their lands. This should be seen as the final option, undertaken only after other avenues to achieve cooperation have failed.



2002-2006 2.0 Strategic plan

2.1 Vision

For weeds to have an acceptable impact on people, production and the natural environment.

2.2 Mission

To establish and perpetuate cooperative management of the impacts of weeds in Queensland.

Five desired outcomes and related objectives and strategic actions have been developed to achieve the vision and to provide the means for undertaking the mission. They are:

- | |
|--|
| • Awareness and Education |
| • Assessment |
| • Planning, Responsibility and Resourcing |
| • Prevention and Early Intervention |
| • Effective Management Systems for Established |

Weeds



2002 - 2006

2.3 Awareness and education

Desired Outcome:

Awareness, knowledge and ownership of weed management by all stakeholders are significantly increased and contribute to cost efficiencies and successful control.

Background:

Weed problems can cross all administrative and land tenure boundaries. A successful strategic approach to weed management requires a high degree of coordination and integration between the different stakeholders. Part of the solution to managing weeds is raising public awareness of the causes of, and appropriate responses to, the problem. Often, people are not aware of the impact of weeds on the natural environment and primary production or that they may be contributing to the problem through their own actions.

Weeds impose economic, environmental and social costs on the whole community. Unfortunately, too few people are aware of this. The successful management of weeds in Queensland would be enhanced by greater awareness of the problem and commitment to addressing it. While Queenslanders and individual institutions are making progress in improving awareness, considerable work still needs to be done. Lack of awareness has resulted in insufficient resources being made available, and insufficient or tardy responses being taken to weed problems. Everybody needs to understand the current and potential impact of weeds on livelihoods, environment and health.

Increased availability of information about weeds and the promotion of good weed management practices will increase public knowledge and skills. This will help to address the situation. Considerable information on weeds and their management is publicly available from various sources, and is increasingly available through a range of communication modes. Information availability can be improved by using modern communication technologies and, a diversity of providers and information packaging.

Community awareness is currently addressed by the Weed Awareness Program and Weedbuster Week. Weedbuster Week started in Queensland in 1995 and has grown each year, becoming a national program. Water weeds are addressed through the Water Watch program. While community groups are undertaking a considerable number of weed awareness activities, there is enormous potential to increase weed awareness. The expansion of the Weed Awareness Program and the incorporation of weed issues into various community-based activities and programs are two examples. There is a need to promote to land managers the value of monitoring in the detection of new weeds on their

land. Awareness programs should include the fact that weed management is an integral part of achieving sustainable development.

Weed management in Queensland requires action from many individuals with appropriate knowledge and skills. These should include community members, land managers, weed scientists, weed control operators and State Government and local government staff. The latter groups need to meet newly developed competency standards for weed management.

Weed-related education and training is available from primary to tertiary level, but needs to be expanded and supported in the long term. Traditional landowners should be consulted on the potential impact of introduced plants on the heritage value of significant sites, and on ways that these plants should be treated as part of any weed planning.

Queensland's weed problems cannot be solved in the short term. New impacts may be preventable, but ongoing vigilance is essential. While current weed impacts can be reduced with consistent effort, a long-term commitment is needed from all Queenslanders. Increased awareness among stakeholders will help achieve this.

2002-2006

2.3.1 Availability of information

Objective:

To make relevant weed information more accessible to all stakeholders.

	Strategic Action	By Whom
2.3.1.1	Share information between all stakeholders on a cost-effective basis.	SG
2.3.1.2	Establish clear points of contact at all levels for access to information.	SG
2.3.1.3	Conduct reviews of information availability and the extent to which it is accessed.	SG
2.3.1.4	Maximise use of current communication technologies.	SG
2.3.1.5	Develop and disseminate enhanced information packages to all sections of the community.	SG

2.3.2 Promotion and communication

Objective:

To increase community, industry, agribusiness and government awareness of weeds and their impact.

	Strategic Action	By Whom
2.3.2.1	Support development and implementation of a Statewide communication strategy based on market research to improve community and government awareness and understanding of weed issues.	SG, LG
2.3.2.2	Enhance and coordinate existing, and develop and implement new, cooperative community-based weed awareness strategies.	SG, LG, CG
2.3.2.3	Establish improved networks at all levels for improved information flow.	SG, LG, CG, IN, WSQ
2.3.2.4	Improve public signage for weed risk areas, control needs, and cooperative control programs.	LG, CG, SG
2.3.2.5	Develop and promote a balanced perspective on controversial weed-related issues.	SG
2.3.2.6	Deliver a public awareness program to improve understanding of the potential for introduced plants, including garden plants, to become new weeds, and to promote the use of locally native plants or suitable alternatives.	SG, CG, IN, WSQ LG
2.3.2.7	Develop and deliver awareness and education programs on roles and responsibilities.	SG, LG

2002-2006

2.3.3 Education and training

Objective:

To enhance individual's skills and knowledge in weed management.

	Strategic Action	By Whom
2.3.3.1	Increase land manager knowledge and skills in weed management.	SG, LG, EDU
2.3.3.2	Conduct training based on national competencies to meet regional and organisational requirements.	SG, WSQ, LG
2.3.3.3	Increase tertiary education capacity to meet Queensland's future needs in weed science and management.	UNI, CRC
2.3.3.4	Develop and incorporate weed management content into school curricula.	SG, CRC, WSQ



2002-2006

2.4 Assessment

Desired Outcome:

Reliable information is available as a basis for decision making.

Background:

Reliable information is needed to ensure that effective weed management programs are developed. An understanding of the biology and ecology, distribution, abundance and impact of weed species is essential to providing a sound basis for their management. There has recently been an increased compilation of such baseline data for many important weeds.

Regular monitoring at the property level is a valuable tool for improving management practices. It allows individuals to determine whether a given resource situation is improving, stabilised or declining, and it helps to decide future actions.

Distribution and abundance databases, such as Pestinfo (NR&M) and Wildnet (EPA), and other databases such as the Queensland Herbarium's Herbreccs have been developed by the State Government. They are being used to store and analyse weed information and to act as a reference point for ongoing data collection. Such data are increasingly being used in determining the financial and environmental impacts of specific weeds. Even so, the scope of the weed problem in Queensland is poorly understood because of the limitations of available information.

This problem can be partially addressed by increased research into weed ecology and by more extensive weed mapping. Quantification of the

environmental and social impacts of weeds is also essential to a proper understanding of the issues. Additionally, it is important to have a better understanding of human attitudes to weed issues. This human dimension is the key to raising weed awareness and changing weed management practices.

Once the information is collected, it is analysed and used to determine the pest status of particular weed species and appropriate methods for their management across the State. Information is necessary for rapid assessment of potential and emerging weed threats, as early intervention is the most cost-effective way of managing weed impacts.



2002 - 2006

2.4.1 Data collection

Objective:

To acquire, and to make readily available, data on the distribution, abundance and current management status of weeds.

	Strategic Action	By Whom
2.4.1.1	Develop and promote a collaborative program for collection of data (on distribution, abundance, impacts and management status).	SG, LG
2.4.1.2	Establish a networked system for storage, analysis and retrieval of distribution and abundance data, based on the Pestinfo database.	SG, LG
2.4.1.3	Establish linkages between Pestinfo and related information systems.	SG, LG
2.4.1.4	Develop improved opportunities for community access to weed information systems.	SG, LG, CG, IN
2.4.1.5	Develop standardised protocols for data collection, validation and dissemination.	SG, LG
2.4.1.6	Establish mapping as a critical component of successful weed management.	SG, LG, CG
2.4.1.7	Develop ways of sharing information and knowledge between States and Territories	SG, CRC
2.4.1.8	Utilise catchment and subcatchment activities in data collection.	CG, SG, LG

2.4.2 Assessment and data analysis

Objective:

To determine future directions for managing individual weed species, based on sound data.

	Strategic Action	By Whom
2.4.2.1	Develop an enhanced process for rapid interim assessments of emerging, introduced and native weed problems.	SG
2.4.2.2	Maintain an assessment process for determining the potential impact of introduced and native weeds for Queensland.	SG
2.4.2.3	Determine the current and potential impact of established weed species as a basis for prioritisation for management purposes.	SG
2.4.2.4	Assess the effectiveness of current management programs, strategies and practices for individual weed species.	SG, LG
2.4.2.5	Establish policies, programs and priorities for management and research based on data analysis.	SG
2.4.2.6	Develop a decision-support system for property weed management	NR&M

2002-2006

2.4.3 Biology and impacts

Objective:

To develop an understanding of the biology, ecology and impacts of weeds.

	Strategic Action	By Whom
2.4.3.1	Improve understanding of the biology and ecology of priority weed species.	SG, EDU, CRC
2.4.3.2	Develop and apply models for understanding population dynamics and distribution.	SG, EDU, CRC
2.4.3.3	Quantify the impact of priority weeds on economic activities, natural ecosystems, landscapes and human welfare.	SG, IN, CG, CRC, LG
2.4.3.4	Quantify the impacts of land use, land management and ecosystem health on weed populations.	SG, CRC

2.4.4 Social assessment

Objective:

To develop and apply an understanding of community, government and individual attitudes.

	Strategic Action	By Whom
2.4.4.1	Assess community, government and individual attitudes to weeds.	SG, CG
2.4.4.2	Determine what makes people change their practices.	SG
2.4.4.3	Establish methodologies to raise awareness and commitment, and to change weed management practices.	SG

2002 - 2006

2.5 Planning, responsibility and resourcing

Desired Outcome:

Strategic directions are established, maintained and owned by all stakeholders.

Background:

Weed management in Queensland is a complex issue due to the variety of landscapes, landforms, ecosystems, enterprises and administrative boundaries. Effective weed management must be based on planned, coordinated actions and agreed directions and priorities, rather than conducted in an ad hoc manner. Some advances have been made recently, with the establishment of local government area pest management plans, catchment strategies and the *Herbicide Resistance Strategy*.

A planned approach to weed management involves setting goals and action plans, and monitoring and evaluating implementation at appropriate intervals. This will ensure the best use of available resources. All aspects of weed management, including research, should be well coordinated and address identified priorities. Weed management plans at all levels (from the property or paddock scale to the State scale) should be developed and implemented.

To maximise cooperation and use of resources, weed management programs must be coordinated at all levels – including State, regional, catchment and local government. Improved communication and cooperation between landholder groups, industry, local governments, and State government departments is

needed for the achievement of common goals and priorities. A perceived overlap of government roles has led to confusion among stakeholders over service provision. Community leadership and greater industry involvement in the planning and development of strategies must be promoted, so that benefits can be achieved across the community. In this way, a coordinated approach to dealing with Queensland's weed problems is possible.

Holistic natural resource management strategies are needed. Integration with other natural resource management plans must be strengthened to ensure weed management is identified as a priority natural resource management issue.

Despite the efforts of many stakeholders to combat weeds, there are others less willing to accept any responsibility for weed management. This Strategy contains a clear statement of the roles and responsibilities of major stakeholders. The common law duty of care requires that each person take all reasonable and practicable steps to avoid causing foreseeable harm to another person's use or enjoyment of their land. Accordingly, an individual may take legal action against another who has caused them harm by introducing or allowing the spread of weeds onto the individual's land. The *Environmental Protection Act 1994* extends this responsibility and requires everyone to

exercise a duty of care to prevent harm to the environment in general.

Acceptance of responsibility can be addressed to some extent by awareness programs but, for declared weeds, enforcement measures should be adopted where there is clear refusal to accept any responsibility for control. Enforcement should be seen as action to support the majority – who carry out weed control – to mitigate the threat created by a minority; after all other approaches to gain cooperation have failed.

With the establishment of local government area pest management plans for declared weeds, land managers can become informed of the targets and objectives for weed management in their area and also have input into plan development. With this process in place, enforcement will become an easier task for local governments.

This Strategy is intended to guide weed management in Queensland. Implementation should be through a partnership approach that involves all major stakeholders.

Legislation and policy provide the rules and guidelines for weed management in Queensland. Both need to be understood easily, and adopted and implemented by the general public. They should be consistent with the needs and aspirations of stakeholders.

2002-2006

2.5.1 Strategic planning

Objective:

To refine and implement a weed management planning framework for Queensland.

	Strategic Action	By Whom
2.5.1.1	Integrate key weed issues into regional and catchment management planning and use these processes to engage all stakeholders.	SG, LG, CG
2.5.1.2	Develop and implement pest management plans incorporating weed management in all local government areas.	LG, CG, SG
2.5.1.3	Implement property weed management plans.	LM
2.5.1.4	Develop and implement weed management plans for State-managed lands consistent with the <i>State Land Pest Management Policy</i> .	SG
2.5.1.5	Develop plans at appropriate scales for critical individual species and issues.	SG, LG, CG
2.5.1.6	Monitor progress and regularly review all plans.	SG, LG, CG
2.5.1.7	Incorporate weed management in the property management planning process.	SG, CG, LM, LG

2.5.2 Holistic management

Objective:

To integrate weed management planning with other community, industry and government planning processes.

	Strategic Action	By Whom
2.5.2.1	Address weed issues in an integrated natural resource management context, e.g. catchment and other relevant plans, and in general land management activities.	SG, LG, CG, IN
2.5.2.2	Identify and maintain two-way link across all weed-related planning activities.	SG, LG, CG, IN
2.5.2.3	Ensure that weed management planning at all levels addresses all legislated requirements.	SG, LG, CG

2002-2006

2.5.3 Roles and responsibilities

Objective:

To identify and achieve acceptance of roles and responsibilities across all land managers, community, industry and government.

	Strategic Action	By Whom
2.5.3.1	Clearly identify, and document all roles and responsibilities consistent with statutes, common law, and duty of care.	SG, IN, LG
2.5.3.2	Establish agreement for roles and responsibilities that require clarification, and promote greater recognition and reward for those employed in weed management roles.	SG, LG
2.5.3.3	Incorporate role and responsibility messages in ongoing planning and networking activities.	SG, LG, IN, CG

2.5.4 Long-term commitment

Objective:

To achieve long-term stakeholder commitment to address weed management issues.

	Strategic Action	By Whom
2.5.4.1	Encourage all land managers including Government to use a 'good neighbour' approach to weed management.	LM, LG, SG, CG
2.5.4.2	Build ownership of weed management through long-term partnerships between community, industry and government.	CG, LG, IN, SG
2.5.4.3	Initiate a system of rewards and recognition for responsible weed management.	SG, WSQ, LG,

2002-2006

2.5.5 Legislation, policy and compliance

Objective:

To implement clear and workable legislation and policy in support of weed management.

	Strategic Actions	By Whom
2.5.5.1	Provide a legislative and policy framework, that enables consistent management of the State's weed problem.	SG
2.5.5.2	Harmonise legislation and policy with that of other States and Territories where this would be beneficial to Queensland.	SG
2.5.5.3	Provide guidelines, training and consistency in undertaking enforcement.	SG, LG
2.5.5.4	Use existing powers of enforcement where stakeholders have not met their duty of care.	SG, LG
2.5.5.5	Establish a support network for enforcement officers.	SG, LG

2.5.6 Coordination

Objective:

Coordinate the implementation, evaluation and review of weed management in Queensland.

	Strategic Actions	By Whom
2.5.6.1	Establish a representative management committee to ensure the strategy is communicated and implemented.	SG
2.5.6.2	Address the issue of liaison between agencies by forming an interdepartmental working group.	SG
2.5.6.3	Ensure coordination mechanisms are in place for the implementation of the Strategy.	SG
2.5.6.4	Collaborate with community groups and agencies in adjoining States in dealing with cross-border issues.	SG, CG, LG

2002 - 2006

2.5.7 Resourcing

Objective:

To acquire and manage the resources necessary to effectively implement weed management in Queensland.

	Strategic Action	By Whom
2.5.7.1	Identify common objectives and opportunities for sharing resources.	SG, LG, IN
2.5.7.2	Use existing government resources to provide seed funds for long-term community and industry commitment to improved resourcing of weed management.	SG, LG
2.5.7.3	Identify and capitalise on opportunities for obtaining resources from sponsors, government programs and industry.	SG, LG, CG
2.5.7.4	Establish mechanisms for ensuring that beneficiaries are contributors (including the community as a whole, e.g. environmental weeds).	SG, CG, LG
2.5.7.5	Within the context of whole of agency priorities, allocate realistic resources for weed management.	SG, LG
2.5.7.6	Establish and promote weed management as a long-term investment by land managers in the economic and ecological viability of their properties.	SG, IN, CG, LG
2.5.7.7	Establish mechanisms to attract, direct and acknowledge the efforts of community volunteers.	SG, LG, CG
2.5.7.8	Develop and promote strategies for addressing individual lack of capacity to undertake weed management programs	SG, CG, IN, LG



2002-2006

2.6 Prevention and early intervention

Desired Outcome:

The introduction and early spread of weeds is restricted.

Background:

The maxim 'prevention is better than cure' can be applied to the introduction of new weeds into Queensland from overseas and interstate, and the introduction of weeds already in Queensland to uninfested areas of the State. Biosecurity Australia is responsible for preventing the introduction into Australia of weeds with the potential to have serious environmental, economic and social impacts.

The Weed Risk Assessment (WRA) system is used by Biosecurity Australia to determine whether a plant species may be imported. As it has been instrumental in reducing the number of potential weed species brought into Australia in the last few years, it is an important weed management tool. However, the policy currently only applies to species not known in Australia, and assessed as being potential weeds or species already in Australia and under official control. Many of our problem weeds and sleeper weeds are not under official control. In other words, new accessions of weedy species can still be introduced to the country legitimately. The new Cooperative Research Centre for Weed Management will be re-examining the issue of weed risk assessment in the hope of coming up with a better system.

It is proposed that, in future, before pasture and fodder plants can

be imported or released by DPI, CSIRO, or the relevant universities in Queensland, they must be assessed for weediness under the Biosecurity Australia WRA system. This is in line with the draft *Code of Practice for Evaluation and Release of Tropical Pasture Plants*. The nursery and other industries could make significant contributions to reducing the introduction and spread of weeds to Queensland through voluntary adoption of such codes of practice.

Biosecurity Australia is also responsible for preventing accidental or deliberate pest incursions into Australia. The function of its Northern Australia Quarantine Strategy (NAQS) is to provide early warning (and prevention of movement, if possible) of new pest, disease and weed threats in the remote coastal regions of Australia and in neighbouring countries. Regular surveys are conducted in the Torres Strait Islands, Indonesia and Papua New Guinea. Within Australia, NAQS officers are responsible for surveying areas within 20 km of the coast across northern Australia, from Broome to Cairns. NAQS officers in North Queensland have assisted greatly in the detection of incursions of serious weeds, such as Siam weed (*Chromolaena odorata*) and mikania (*Mikania micrantha*) into Queensland.

Many weeds not yet present in Queensland, but which pose serious

potential threat, have been identified. These are declared under the *Land Protection (Pest and Stock Route Management) Act 2002* (which replaces the *Rural Lands Protection Act 1985*). All stakeholders need a high level of awareness of these weeds; the means by which they may be introduced; and how the risk of introduction can be reduced. The capability to detect and identify these weeds is critical to reducing major infestations of high impact weeds in the future. Once an incursion is recognised, an early response control capability is required.

While many weeds have become established in Queensland, some are not widespread and have not yet reached their potential distribution. It may be possible to limit the spread of those species that would have the greatest potential impact. For many species, the key means of distribution is assisted, often inadvertently, by human activities. Minimising this mechanism for spread will be the most effective way of limiting both the distribution of the weeds and their future impact. If isolated infestations away from core infested areas do occur, these centres for potential future spread need to be eradicated.

2002 - 2006

2.6.1 Prevention of introduction

Objective:

To prevent the introduction of new weeds to Queensland.

	Strategic Action	By Whom
2.6.1.1	Urge industry, government and research organisations to take a more responsible approach to the deliberate introduction of new plant species to Queensland.	SG, IN, CSIRO, EDU, WSQ
2.6.1.2	Limit the release of new species, cultivars and genetically modified plants present in Queensland to those which pass the Biosecurity Australia weed risk assessment.	SG, CSIRO, IN, EDU
2.6.1.3	Increase public awareness of the potential to introduce new weed species from interstate and overseas.	SG, WSQ
2.6.1.4	Determine high priority potential weeds for Queensland.	SG, EDU, CSIRO, WSQ
2.6.1.5	Urge Biosecurity Australia to prevent introductions of new genetic material of weedy, or potentially weedy, species already in Australia.	SG, other States
2.6.1.6	Collaborate with other States and Territories on strategies to prevent introduction of new weeds across borders.	SG

2.6.2 Early detection and eradication

Objective:

To detect and eradicate new weed species.

	Strategic Action	By Whom
2.6.2.1	Promote the need for communities to be on the lookout for, and report presence of, new and unusual plants in the environment.	SG, IN, CSIRO, EDU, WSQ
2.6.2.2	Develop an enhanced network of mobile people skilled in weed identification.	SG, CSIRO, IN, EDU
2.6.2.3	Maintain a capacity for rapid and accurate identification of potential weed species in the field.	SG, WSQ
2.6.2.4	Establish a coordinated system for reporting new weed infestations.	SG, EDU, CSIRO, WSQ
2.6.2.5	Maintain a rapid response capability for the eradication of new infestations of target weeds.	SG, other States
2.6.2.6	Monitor for new weed invasion at the property and catchment levels.	SG

2002-2006

2.6.3 Prevention of spread

Objective:

To minimise the spread of weeds to new areas.

	Strategic Action	By Whom
2.6.3.1	Establish a statutory duty of care, and promote the common law duty of care, for limiting weed spread.	SG
2.6.3.2	Establish protocols to enable industry, community and government to meet the duty of care.	SG, IN, CG
2.6.3.3	Establish and implement statutory provisions for preventing all human assisted movement of weeds.	SG
2.6.3.4	Contain critical weeds to core infestation areas.	SG, LM, LG
2.6.3.5	Develop and implement targeted programs for improving industry, community and government weed hygiene practices.	SG, IN, CG, LG
2.6.3.6	Encourage the nursery, aquarium, aquaculture, organic farming, and other industry and community groups to take a responsible approach to the sale, distribution and control of weeds.	SG, IN
2.6.3.7	Ensure transport corridors are given high priority in weed management programs	DMR, QR, SG, CG, LG



2002-2006

2.7 Effective management systems

Desired Outcome:

Integrated systems for managing the impacts of weeds are widely implemented.

Background:

Weed invasion occurs for a variety of reasons; consequently, it is unlikely that effective and sustainable management can be achieved by any one means. The use of integrated suites of management tools, which may be used in a variety of situations for a range of weed species, is increasingly being recognised as the preferred management option.

In order to manage weed infestations, land managers must have adequate knowledge of suitable control methods. Queensland has a strong history of research into weeds of crops, introduced invasive weeds and native woody weeds, with research stations established by the departments of Primary Industries and Natural Resources and Mines, CSIRO, various universities and private companies. Many new weed management practices have been developed, including the introduction of many biocontrol agents. As a result, some weed species, which caused significant impacts in the past, no longer pose a serious threat. However, many weed species still have an extensive impact, and the potential for research to deliver new or improved practices remains enormous.

For each major weed problem, a package of best practice management methods should be developed for a range of land uses and situations. Integrated weed management may

include combinations of agricultural practices, along with chemical, physical, mechanical and biological methods of control. Land managers sometimes require the necessary information to deal with a range of weeds in the same situation. The efficacy of control methods must be measured and evaluated to ensure that cost-effective weed management solutions are provided to land managers. By the same token, off-target impacts should be monitored and evaluated, and appropriate action taken to ensure that weed management methods have a minimal effect on the environment.

Once the appropriate weed management information has been developed, it must be delivered to land managers efficiently and effectively using high standard extension methods. Conversely, land managers need to accept the responsibility for acquiring and implementing new management technologies. In certain instances, it may be appropriate to provide assistance to land managers, by way of incentives, to help them gain the capacity to manage weeds.

Not only do land managers need to know how to control particular weeds, they also need to know how to restore the affected land to its previous or desired state. This may involve adopting appropriate stocking regimes to allow desirable pasture species to return, or it may involve

planting native species to rehabilitate a native vegetation area. The community and governments are giving increasing emphasis to the management of weeds that impact on bushland and other natural ecosystems; whereas less than two decades ago, the predominant emphasis was on weeds of production systems. This difference in focus requires changes to the ways weed problems are perceived and tackled by land managers. In some cases, it requires a shift from the species-based approach, traditionally used to manage weeds in agricultural systems, to a site-based approach, which is necessary to protect areas, perceived to contain valuable natural ecosystem remnants.

Occasionally, opportunities arise for commercial uses of weed species with the potential for substantial reduction in the size of the infestation. Such activity must not be seen to be sustainable, but must result in significantly reducing the size of the infestation. At the same time, the spread of the weed must be prevented, and the responsibility and ability of land managers to control plants wherever possible must not be compromised.

2002-2006

2.7.1 Development of weed management practices

Objective:

To develop new or improved weed management practices.

	Strategic Action	By Whom
2.7.1.1	Develop integrated management systems for different suites of weeds, across land uses, natural ecosystems, climatic zones and administrative boundaries.	SG
2.7.1.2	Improve specific control methods, as required, to support integrated management.	SG
2.7.1.3	Develop management practices both for new weeds, and to replace techniques that are no longer available.	SG
2.7.1.4	Develop weed management practices for new crops, herbicide resistant crops, organic crops, new production systems and native woody weeds.	SG
2.7.1.5	Foster improved collaborative arrangements between State, national and international research providers.	SG
2.7.1.6	Develop practices for minimising all off-target impacts of weed management, including environmental harm.	SG, LG
2.7.1.7	Investigate potential productive uses of weed species, and monitor any implementation, in support of reducing negative impact.	SG, IN, CG, LG

2.7.2 Adoption of weed management practices

Objective:

To promote and adopt best practice weed management.

	Strategic Action	By Whom
2.7.2.1	Document, and make readily available, best practice management for key species.	SG, IN, LG
2.7.2.2	Implement weed components of agency extension strategies and plans.	SG
2.7.2.3	Integrate weed management into good land-use and property management practices.	LM
2.7.2.4	Adopt best practice to prevent development of herbicide resistance and to minimise off-target impacts.	LM
2.7.2.5	Adopt safe workplace and herbicide-use practices.	IN, LM
2.5.2.6	Maximise integrated weed management methods, including use of biocontrol and cultural practices, and minimise the use of herbicides and tillage.	IN, LM
2.5.2.7	Implement weed control programs consistent with plans and best practice.	LM
2.5.2.8	Adopt restoration/rehabilitation practices in concert with weed control activities.	LM

2002-2006

2.7.3 Landholder incentives

Objective:

To use weed management incentives that enhance public benefit.

	Strategic Action	By Whom
2.7.3.1	Determine the availability and effectiveness of existing incentives.	SG, LG
2.7.3.2	Identify, evaluate and minimise impacts of disincentives.	SG, LG
2.7.3.3	Develop and promote new and revised incentives.	SG, IN, CG, LG

2.7.4 Environmentally significant areas

Objective:

To protect environmentally significant areas from weed impacts.

	Strategic Action	By Whom
2.7.4.1	Identify and prioritise environmentally significant areas and associated weed threats.	LG, SG, CG
2.7.4.2	Establish strategic site-based management programs for onground, long-term management of serious weeds.	LG, SG, CG
2.7.4.3	Encourage direct local community involvement in management of weeds in environmentally significant areas.	SG, CG, LG



2002-2006

3.0 Opportunities and constraints

Opportunities

Implementation of this strategy will provide a basis on which:

- A common vision can be stated.
- The performance of weed management in the State can be judged.
- The support of community leaders can be gained.
- Wider natural resource management objectives can be achieved.
- Resources for weed management can be negotiated in the light of additional emphasis on natural resource management by the community.
- A higher profile for weed management in the community, by industry and all levels of government can be achieved.

- A *can do* ethos can be established.
- All contributions and stakeholders can be acknowledged.
- Queensland can be recognised as a world leader in weed management.
- Informed decision making in sustainable, holistic management can occur.

Constraints

Implementation of this strategy may be restricted by:

- Competing community priorities.
- The ability of the community and, in particular, rural landholders, to invest in natural resource management.
- Changing demographics and rural economics.

- Severe long-term climatic fluctuations.
- The varying economic viability of rural land uses.
- Short-term funding approaches for long-term weed management objectives.
- The perception about weed management delivering private benefits, which limits government funding opportunities.
- Continued lack of coordination of activities.
- Lack of clarity on roles and responsibilities regarding implementation.



2002-2006

4.0 Stakeholder responsibilities

Responsibility for implementing the strategic actions contained in the *Queensland Weeds Strategy* are outlined below.

State Government

The Queensland Government develops and implements weed management policy through legislation, research, extension and education programs; provides assistance to landholders; and undertakes an overall coordination role in the State response to the weed problem. The Government consults widely with key stakeholders and the general community on these issues. Specific State Government agency responsibilities are outlined below.

Department of Natural Resources and Mines (NR&M)

Ensuring that the social, economic and environmental impacts of weeds are kept to a minimum throughout the State by:

- Overseeing the management of declared plants – including research; policy and legislation development; planning; strategic control programs; data collection; awareness; extension of information; and provision of guidance and assistance to local governments.
- Promoting best practice in weed management.
- Undertaking research, policy development and extension of information on non-declared weeds with significant economic, environmental or social impacts.
- Controlling declared plants on

unallocated State land and other areas under the control of the Department.

- Controlling other weeds in the above areas which have a significant impact and, for which there is community expectation that they be controlled.

Department of Primary Industries (DPI)

- Undertaking research; policy and legislation development; and awareness; and extension of information to landholders on native woody weeds and weeds of crops. The department is also responsible for specific research and extension on pasture management for serious weeds of native and sown pasture.
- Ensuring genetic material imported or released is assessed for weediness in line with the draft *Code of Practice for Evaluation and Release of Tropical Pasture Plants*.
- Controlling declared plants on State forest plantation areas and other areas under the control of the department.
- Controlling other weeds in the above areas which have a significant impact, and for which there is a community expectation that they be controlled.

Environmental Protection Agency (EPA)

Monitoring and regulating any environmental impacts of weed management methods.

Queensland Parks and Wildlife Service (QPWS)

- Providing input into policy for weeds with environmental impacts.
- Promoting awareness of these impacts.
- Controlling declared plants in protected areas, such as National Parks, and in certain State Forest areas, Timber Reserves and other areas under its control.
- Controlling other weeds in the above areas which have a significant impact, and, for which there is a community expectation that they be controlled.

Department of Main Roads (DMR)

- Promoting weed management practices (as part of the operation of the State-controlled road network) that prevent the spread of existing problem weeds and the incursion and spread of new weeds.
- Actively participating in local government area working groups established to develop local government area pest management plans.

2002-2006

4.0

Queensland Health

- Playing a leading role in maintaining public health and safety in issues associated with poisons used to control pests (including enforcement of legislation).
- Maintaining a role in the regulation of gene technology (in particular the genetic manipulation of crops).

Government landholders (not mentioned above)

- Controlling weeds declared under the *Land Protection (Pest and Stock Route Management) Act 2002* (which replaces the *Rural Lands Protection Act 1985*) and, where necessary, implementing the State Land Pest Management Policy.
- Controlling other weeds which have a significant impact, and for which there is a community expectation that they be controlled.

Commonwealth Government

- Agriculture, Fisheries and Forestry Australia (AFFA) and Environment Australia (EA) provide funds for programs dealing with Weeds Of National Significance (WONS).
- Biosecurity Australia is responsible for preventing the introduction of potential weeds into Australia.
- National committees which deal with weed issues include the Australian Weeds Committee (AWC), the Standing Committee on Agriculture and Resource

Management (SCARM), and the Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ).

Local governments (LG)

- Controlling declared weeds on all land under its control, including stock routes, local roads and town commons.
- Controlling other weeds in the above areas which have a significant impact, and for which there is community expectation that they be controlled.
- Having a key onground role in administering the *Land Protection (Pest and Stock Route Management) Act 2002* (which replaces the *Rural Lands Protection Act 1985*).
- Surveying and monitoring weed infestations on private land.
- Sponsoring the development of local government area pest management plans.

Local government is increasingly aware of the significance of the weed problem at a local level, and there is a need to ensure that adequate resources are applied to the fight against weeds. In recognition of this locally important weeds not declared under the *Land Protection (Pest and Stock Route Management) Act 2002* (which replaces the *Rural Lands Protection Act 1985*) may be declared under Local Law.

Industry organisations

- Promoting awareness among their members of weed issues and the

need for early and sustained action regarding weed management.

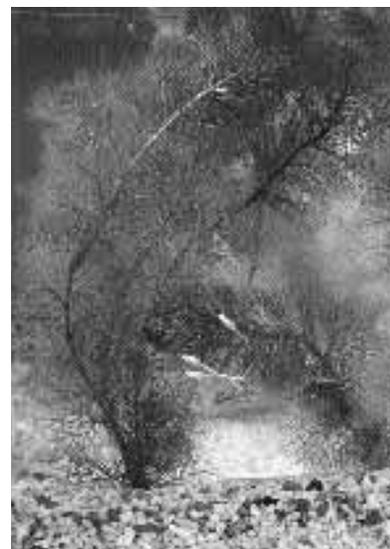
- Becoming increasingly involved in development of guidelines and protocols.

Community groups

- Promoting awareness of weed problems among their members and the community.
- Mapping and monitoring of weeds.
- Planning and implementation of weed management, including catchment/regional weed management strategies.

Land Protection Council

- Making recommendations to the Minister for Natural Resources and Mines on strategic matters for declared plants.
- Providing advice to the Minister based on reports from the State Strategies Management Committee.



2002-2006

4.0

Research bodies

Universities and other education facilities are playing a vital role linking academic research to practical natural resource problems. In relation to weed management, they are:

- Undertaking and promoting research.
- Training and educating groups and individuals in pest management science and technology.
- Ensuring genetic material imported or released is assessed for weediness in line with the draft *Code of Practice for Evaluation and Release of Tropical Pasture Plants*.

CSIRO

- Undertaking and promoting applied research into natural resource issues, including weed management.
- Ensuring genetic material imported or released is assessed for weediness in line with the draft *Code of Practice for Evaluation and Release of Tropical Pasture Plants*.

Cooperative Research Centre for Australian Weed Management (CRAWM)

Undertakes research and community education activities in accordance with the following programs:

- annual cropping systems
- perennial pasture systems
- natural ecosystems
- education, communication and adoption.

Other CRCs may have programs that include weed impact and management components (e.g. CRC for Tropical Savannah Management).

Private landholders

All landholders have weed management responsibilities, including:

- Preventing weeds from spreading from their land.
- Controlling weeds declared under the *Land Protection (Pest and Stock Route Management) Act 2002* (which replaces the *Rural Lands Protection Act 1985*).
- Producing products free from weed contamination.
- Taking steps to minimise the introduction onto their land of any declared weeds or weeds that have significant impacts.

Vocational and Professional Associations

The Weed Society of Queensland has a significant role to play in promoting commitment to weed issues in the State, and in assisting in awareness and education activities.

One of the ways in which the Society can make an impact is in the organisation of State, national and international symposia and conferences.



2002-2006

5.0 Management arrangements

Purpose

To coordinate and monitor the implementation of the Queensland Weeds Strategy and the Queensland Pest Animal Strategy.

A combined Queensland Weeds Strategy and Pest Animals Strategy Management Committee will be formed to guide and coordinate the implementation of the Strategy. The Department of Natural Resources and Mines will play a key role in coordinating the formation of this Committee. Representatives from key stakeholder and interest groups involved in weed and pest and problem animal management will be invited to nominate for membership. Each member will bring highly developed skills and appropriate expertise to issues such as animal welfare, agricultural production, conservation, Indigenous participation, or other relevant area. Additional technical expertise in environmental, economic or social research will be available through relevant government departments.

Terms of Reference

- Develop an implementation plan for the strategy identifying:
 - the status of pest species and their impacts targets to be achieved
 - actions to achieve the targets
 - time frames and investment resources needed
 - roles and responsibilities of stakeholders
 - performance measures
 - monitoring and evaluation

processes and reporting mechanisms.

- Identify industry specific actions to be referred to relevant industry bodies.
- Coordinate, promote, monitor and report on the implementation of the actions within the Strategy.
- Establish and ensure ongoing consultation with key stakeholders.
- Establish link with other natural resource planning, implementation, capacity building, information dissemination, extension and research activities.
- Evaluate the effectiveness of implementation in reducing the impact of weeds and pest and problem animals in Queensland.
- Review strategic actions after four years. At the earliest possible stage it is crucial that the committee establish the time frames, benchmarks, interim performance indicators and criteria to enable the evaluation and review process.
- Report annually through the Landcare and Catchment Management Committee; Lands Protection Council (which replaces the Rural Lands Protection Board); Local Government Association of Queensland; Australian Weeds

Committee; Vertebrate Pests Committee; and through future State of Environment and State of Region reporting processes.

- Ensure that opportunities are utilised and constraints addressed.

The need for resources to support implementation have been identified in section 2.5.7 and the Department of Natural Resources and Mines will provide secretariat support to the Committee within existing budget constraints.