

# WESTERN AUSTRALIA'S STATE WEED PLAN



## Draft for public comment

A NEW STRATEGY  
IN THE WAR ON WEEDS

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**DRAFT  
FOR PUBLIC COMMENT**

**A WEED PLAN FOR  
WESTERN AUSTRALIA**

Prepared by

**STATE WEED PLAN STEERING GROUP**

July 2000

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**Consultants to State Weed Plan Steering Group**

**DRAFT**

**State Weed Plan**

**Submissions due 29 September 2000**

**(See page 43-44)**

## FOREWORD

One of the most significant environmental challenges facing Western Australia is the minimisation of the impact of weeds. In the relatively short history of this State since European settlement, over 1350 exotic plant species have established as weeds in our diverse and generally fragile ecosystems. While development for agriculture, mining, transport and housing must by its nature result in some change to the State's flora, it is the unintended impacts of introduced plants which causes the greatest concern.

Weeds now pose a serious threat to many of the State's ecosystems, and impose high annual costs on agricultural industries. Weeds pose a more widespread risk to the State's bioregions than does salinity, recognised as Western Australia's most serious environmental challenge. Without a substantial change in the way weed problems are tackled, the long-term impact of weeds on the economy, environment and community may approach, or even exceed, that of salinity.

Development of *A Weed Plan for Western Australia* (referred to as the 'State Weed Plan') was initiated because a wide range of community, industry and government stakeholders recognised that there "had to be a better way" of reducing the impact of weeds.

The need for a closely coordinated approach, with appropriate participation at all levels, led to the establishment of the State Weed Plan Steering Group in March 1999 with membership broadly representative of stakeholders and issues. I commend and thank the Steering Group members for the commitment, innovation and cooperation they have brought to the development of the draft plan.

The principles on which the State Weed Plan is based, the broad approach adopted in framing a way forward, and the identified priorities have been presented to a wide range of stakeholders. Once again, the commitment of these Western Australians to developing a better way of managing weeds has resulted in very constructive input, which has been incorporated where appropriate.

The State Weed Plan is, by necessity, a broad, over-arching document in which it is not possible to provide full details of all current, planned and recommended activities. Considerable work has been completed toward drafting a State Weed Action Plan, which will be the work plan for implementing the State Weed Plan. The input of all stakeholders has contributed to development of the draft Action Plan.

I commend the draft State Weed Plan for your consideration and comment. The State Weed Plan Steering Group looks forward to your comments, and to finalising the State Weed Plan for formal consideration by government, industry and community organisations with respect to initial priorities for implementation.

**A cover sheet has been included at page 43-44 to assist contribution of your comments on the draft State Weed Plan and suggestions for the State Weed Action Plan by 29 September 2000.**



Rob Delane  
CHAIRMAN  
STATE WEED PLAN STEERING GROUP

17 July 2000

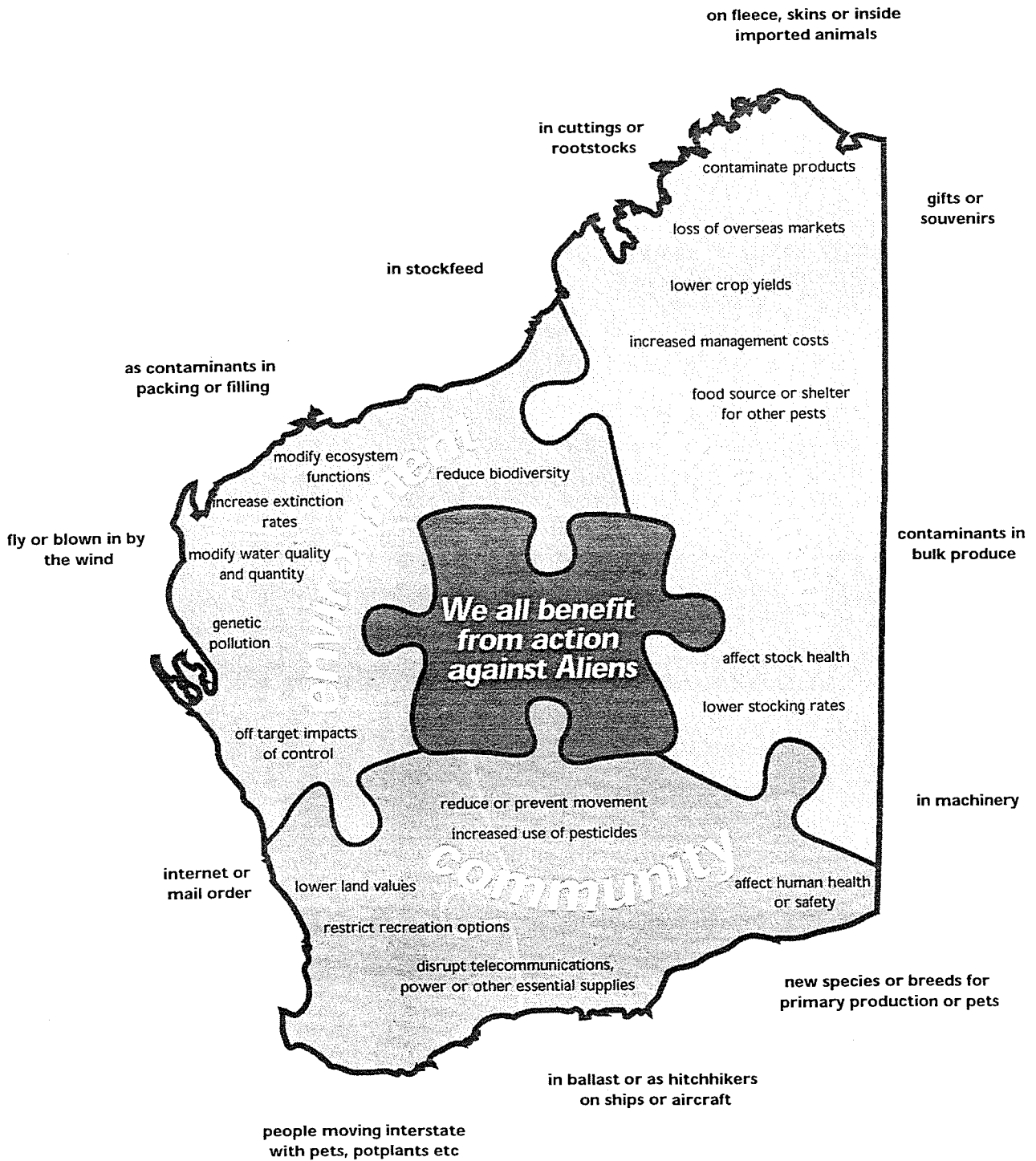
## ACRONYMS

AABR	Australian Association of Bush Regenerators
ABS	Australian Bureau of Statistics
AGWEST	Agriculture Western Australia
ANZECC	Australian and New Zealand Environmental and Conservation Council
APB	Agriculture Protection Board
AQIS	Australian Quarantine and Inspection Service
ARRPA	<i>Agriculture and Related Resources Protection Act 1976</i>
ARMCANZ	Agriculture and Resource Management Council of Australia and New Zealand
CALM	Department of Conservation and Land Management
CRC	Cooperative Research Centre
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DOLA	Department of Land Administration
DEP	Department of Environmental Protection
EWAN	Environmental Weeds Action Network
EWSWA	Environmental Weed Strategy for Western Australia
GRDC	Grains Research and Development Corporation
IBRA	Interim Biogeographical Regionalisation for Australia
IWM	Integrated Weed Management
LCDCs	Land Conservation District Committees
LGAs	Local Government Authorities
MRWA	Main Roads Western Australia
NIAWA	Nursery Industry Association of Western Australia
NWS	National Weeds Strategy
NWSEC	National Weeds Strategy Executive Committee
RAC	Regional Advisory Committee
R&D	Research and Development
RCC	Roadside Conservation Committee
SCARM	Standing Committee on Agriculture and Resource Management
SLCC	Soil and Land Conservation Council
SWCC	State Weed Coordinating Council
SWP	State Weed Plan
UWA	University of Western Australia
UBC	Urban Bushland Council
WAHRI	Western Australian Herbicide Resistance Initiative
WAMA	Western Australian Municipal Association
Weeds CRC	Cooperative Research Centre for Weed Management Systems
WONS	Weeds of National Significance
WOSS	Weeds of State Significance
WRC	Water and Rivers Commission

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## EXECUTIVE SUMMARY

The State Weed Plan has been developed to help achieve coordinated, effective weed management throughout Western Australia.

Western Australia comprises one third of the Australian land mass and contains a high diversity of natural ecosystems and primary production areas. Weeds pose a serious threat to such diversity and will only be effectively managed through strategies that successfully integrate existing knowledge and innovation with human effort and other resources at statewide, regional and local levels.

All Western Australians can help reduce the impact of weeds on the economy, environment, natural resources and human health. This can be achieved through choices about the plants we grow for pleasure or profit, how we dispose of plant wastes, how we manage the land under our control, and our contribution to weed management on public lands and support for publicly funded weed management activities. The way we use our land can dramatically reduce the impact and spread of weeds. Local communities have the most detailed knowledge of public and private land in their area and are the frontline in prevention of, surveillance for, and action against, harmful weeds.

In order to achieve cost-effective weed management, a coordinated approach involving all levels of government, industry, community and individual landholders is required. The State Weed Plan offers such an approach through raising the awareness of all Western Australian of weed problems, by providing opportunities for their involvement in weed management through integrated and prioritised programs, and by support services for landholder and community action.

The State Weed Plan is based on the following principles.

- Weed management is an essential component of sustainable natural resource management.
- Prevention, early detection and early intervention are the most cost-effective means of weed management.
- Effective weed management requires a long-term commitment from managers of both private and public land.
- Effective weed management requires a coordinated approach involving all relevant stakeholders.
- Appropriate and effective policy and legal frameworks are required to support the statewide management of weeds.
- A simple and effective priority setting and planning process is required to best utilise available weed management resources.
- Maintaining public awareness, information, training and research services is an essential part of weed management.
- Contributions to weed management costs will reflect the relative importance of each weed problem and will be shared by the contributors to the problem and the beneficiaries of that management.
- Government will consider support for weed management where economic, environmental and community benefits are demonstrated and technically sound solutions are available or warrant development.

*The Weed Plan for Western Australia* considers weeds on land and in waterways.



The Plan does not include the marine environment.

The State Weed Plan advocates the establishment of a broad, skills-based State Weed Coordinating Council to facilitate the implementation of the Plan.

Key actions under the Plan will include the following activities.

- Increase public awareness to gain community acceptance of the significance of weeds and their responsibilities for weed management.
- Coordinate weed management planning, implementation and monitoring across all land.
- Encourage cooperative local and regional programs based on assessed priorities.
- Apply risk assessment methodology for determining weed management priorities in coordinated management programs.

- Encourage the development and implementation of efficient processes for the identification, reporting and removal of new weed infestations.
- Promote weed management as an integrated process based on the principles of sustainable natural resource management.
- Establish an appropriate policy and legislative base for effective management of all serious weeds across the State.
- Ensure efficient use of new and existing resources in weed management.
- Monitor regularly the implementation and effectiveness of all aspects of the State Weed Plan.

The achievement of the objectives of the State Weed Plan will be realised through the cooperation of all organisations and individuals in Western Australia who will benefit from effective management of weeds – and that is all of us.

**VISION:** *Healthy and resilient landscapes where weed impacts on environmental values and primary production are minimised*

**GOAL:** *To achieve coordinated and effective weed management throughout Western Australia*

## 1. INTRODUCTION

Western Australia comprises over one third of the Australian land mass, with a total area of approximately 2.5 million square kilometres. Over 40 percent of Australia's bioregions (see below) are found within the State including tropical 'dry' rainforest and savannah woodlands in the north, sandy deserts and spinifex plains in the centre, and sandplain heaths, mallee and tall temperate forests in the southwest. These natural features are contained within a landscape modified by the development of agriculture, mining, urbanisation and transport corridors.

New plants have been introduced to Western Australia since the beginning of settlement for agricultural, horticultural, gardening, forestry, commercial and cultural reasons. Many of these deliberate or accidental introductions have become, or have the potential to become, weeds.

Weeds are a significant threat to primary production, biodiversity and conservation values of Western Australia. Weeds 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 landscapes.

The serious threat posed by weeds will only be effectively and efficiently managed by integrating existing knowledge and innovation with human effort and other resources.

The State Weed Plan provides a framework that encourages and supports people in Western Australia to work together to achieve more effective management of existing weeds and to limit the introduction and establishment of new weed species.

**Bioregion:** A territory defined by a combination of biological, social and geographic criteria rather than by geopolitical considerations; generally, a system of related, interconnected ecosystems.

### 1.1 What is a Weed?

The National Weeds Strategy defines a weed as “a plant which has, or has the potential to have, a detrimental effect on economic, social or conservation values” (ARMCANZ, ANZECC and Forestry Ministers, 1997).



Weeds can be plants from other countries, or species from other regions of Australia or the State. Not all weeds are equally important. Many introduced economic plants do not become weeds, while others do and are very invasive and potentially damaging to natural ecosystems. Some plants do not appear to change the composition, structure or function of the natural or production systems they invade. Others are capable of completely dominating and changing the plant communities they invade.

### 1.2 Weeds in Western Australia

There are some 1350 weeds in Western Australia, about half the number of recognised weeds in Australia. Many ecosystems are severely degraded by weeds. Competition from weeds is a major threatening process for rare flora and ecological communities.

In Western Australia’s agricultural systems, weed control costs have been estimated at 20 percent of production costs, representing

as much as \$60 per hectare for some grain crops.

Weed invasion is considered to be a significant threat to natural ecosystems and its cost is difficult to measure in monetary terms. No accurate figures are available on the substantial funds spent on the control of weeds by public and private land managers, nor on the time spent by volunteers in weed management.

### 1.3 National Weeds Strategy

The objective of the National Weeds Strategy, released in 1997, is to “exclude the introduction of new weeds and strengthen action against those that are already established”. The strategy focuses on weeds of national significance which have been defined from a larger group of serious weeds by applying criteria relating to invasiveness, current location in relation to potential spread, and the potential and current impacts on primary industry, environment and social values. The strategy encourages complementary State, regional and local weed plans.

Eight of the top 20 Weeds of National Significance (WONS) are present in Western Australia. Six are subject to regulation and coordinated control as Declared Plants under the *Agriculture and Related Resources Protection Act 1976*. Western Australia is participating in the national coordinated action against WONS.

## 2. PRINCIPLES OF WEED MANAGEMENT

Successful action against weeds will require coordinated action based on the following key principles of weed management.

## 2.1 Sustainable Natural Resource Management

The National Strategy for Ecologically Sustainable Development, adopted by the Commonwealth Government in 1992, has the following core objectives.

- Enhance individual and community welfare by following a path of economic development that safeguards the welfare of future generations.
- Provide for equity within and between generations.
- Protect biological diversity and maintain essential ecological processes and life support systems.

The sustainability of Western Australia's natural resource base is threatened through the impacts of weeds on biodiversity and primary production.

By their nature, agricultural and pastoral land uses result in some modification of the original ecosystem, as do land use changes for urban, mining and service/infrastructure development. The current and future challenge is to sustain productive land use whilst retaining ecosystem function to maintain viability and biodiversity. Environmentally responsible weed management is essential in order to improve productivity, reduce costs and retain functional ecosystems.

## 2.2 Prevention is easier than a cure

Prevention, early detection and rapid intervention are the best strategies, and in many cases the only effective strategies, that can be used to avoid long-term weed management costs and impacts. Western Australia is currently free from many damaging weeds whilst others are limited

in their spread. Vigilance is required at quarantine checkpoints, where seeds and plants are sold, where soil, animals, machinery and plant produce is moved, and wherever a new weed infestation is detected.

## 2.3 Risk and Hazard Assessment

Weed species present different levels of risk and hazard in different bioregions and production systems. Both risk and hazard are essential components in helping to define priorities for weed prevention and management.

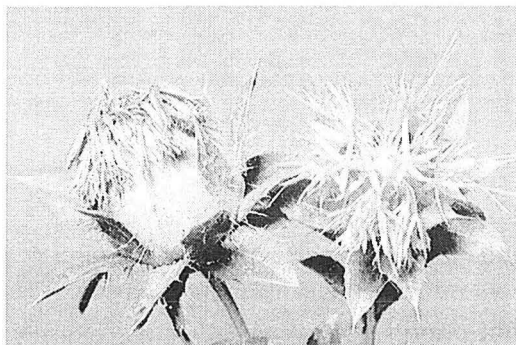
The term 'risk' refers to the probability that a deleterious event may occur. The risk of a weed establishing in a new location increases with proximity to an existing infestation and increasing effectiveness of dispersal mechanisms, such as seeds spread by wind, by bird and animal faeces or through transport of agricultural commodities.

The term 'hazard' refers to the potential impact of a species. Thus the hazard presented by a non-invasive species with slow growth, few viable seeds and narrow habitat requirements may be low. Conversely, a species presents a high hazard if it reproduces rapidly, and can rapidly dominate the landscape (see Figures 1 and 2).

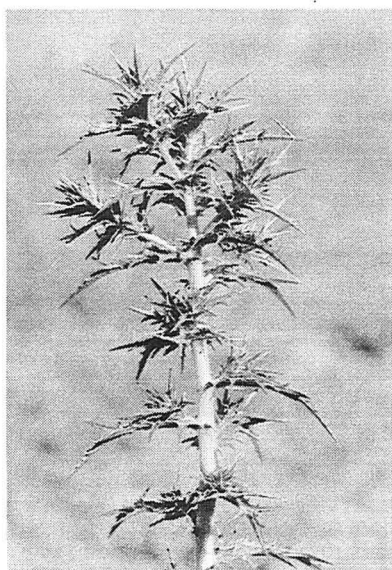
Weed risk assessment for import quarantine examines aspects of the known biology, particularly reproductive biology, ecology and behaviour. For species already present within Western Australia, local knowledge can be used, together with assessing the potential distribution by using climatic matching software.

Criteria for determining the potential hazard for weed species have been developed by a number of Australian and overseas agencies, usually as a way to set priorities for weed management. Measures

of invasiveness and potential distribution are common to all models, as are potential impacts on biodiversity and socio-economic impacts.



**Figure 1.** Low risk - despite being widely cultivated, safflower (*Carthamus tinctorius*) is found rarely as a roadside weed.



**Figure 2.** High risk - saffron thistle (*Carthamus lanatus*) is a widespread weed of crops, roadsides and remnant vegetation.

## 2.4 Setting priorities

A system of setting priorities for weed management is critical to ensure that resources are focussed to maximise the benefits of management. Priorities for weed management can be set in terms of weed species (weed-led control), or in terms of assets to be defended (site-led control). These assets may include, but are not limited to, natural systems, crops, or catchments.

Weed priorities will change over time as effective means of control are found for some species, and as other species reach their potential distribution limits. This may include 'sleeper' species, which initially appear to have limited distribution and impact, but may later be serious weeds.

There are a number of appropriate models for prioritising weeds. One model has been developed for the National Weeds Strategy to determine a short list of WONS.

The *Environmental Weed Strategy for Western Australia* (EWSWA) prioritised 1350 weed species using a model based on measures of invasiveness, distribution (present and potential) and environmental impacts.

An advanced model currently being examined for Western Australia is based on a ranking of weed risks which distinguishes between site-led (high value) and weed-led (threatening species) control programs. The criteria used for ranking species include invasiveness, impacts and present and potential distribution.

## 2.5 Coordination and responsibility of landholders

All land owners and managers have a responsibility to preserve and protect the land for future generations. This includes all land under their control, whether in active use or not. Land includes associated water resources which can be at considerable risk from aquatic weeds. A collective action is required where the weed management problem exceeds the capacity of individual landowners.

Therefore, in order to achieve effective weed management a coordinated approach involving individual landholders as well as all levels of government, industry and community is required.

Different land uses and people's different perceptions of the impact or benefit of the same plant can cause conflict (see Figures 3 and 4). It is desirable for land owners to adopt a 'Good Neighbour' policy for resolving such disputes to mutual benefit.

Government needs to ensure that an appropriate framework of legislation, awareness, coordination, research and education is in place to manage weeds. It is important for Government to provide leadership and coordination in weed management through its commitment to managing weeds on land under its control.

## 2.6 Plan of action

The State Weed Plan will only be effective if relevant stakeholders take up opportunities and assume responsibilities for implementing its recommendations. Immediate development and implementation of a State Weed Action Plan by the proposed State Weed Coordinating Council is recommended.

This Action Plan should identify roles and responsibilities, actions, proposed outcomes, resource requirements and timelines. It should also include performance criteria to assess the effectiveness of the strategies.

## 2.7 Revision and monitoring

Although the State Weed Plan will provide a sound basis for integrated and adaptable management of Western Australia's weeds, the priorities, control methodologies and community expectations will change over time. Therefore, it is important that the State Weed Plan is reviewed regularly to ensure its ongoing relevance.

A monitoring program will assist in assessing the effectiveness of the plan. The monitoring program will need to clearly

identify what will be monitored, how and by whom. For example, local and regional monitoring data could be collated and analysed and used to provide feedback in regard to specific initiatives and progress against high priority weeds.

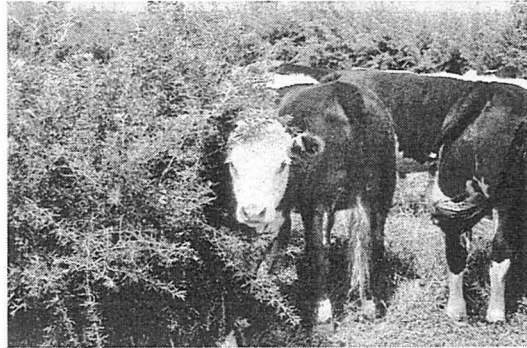


Figure 3. Tagasaste (*Chamaecytisus palmensis*) provides useful fodder but can invade remnant vegetation.

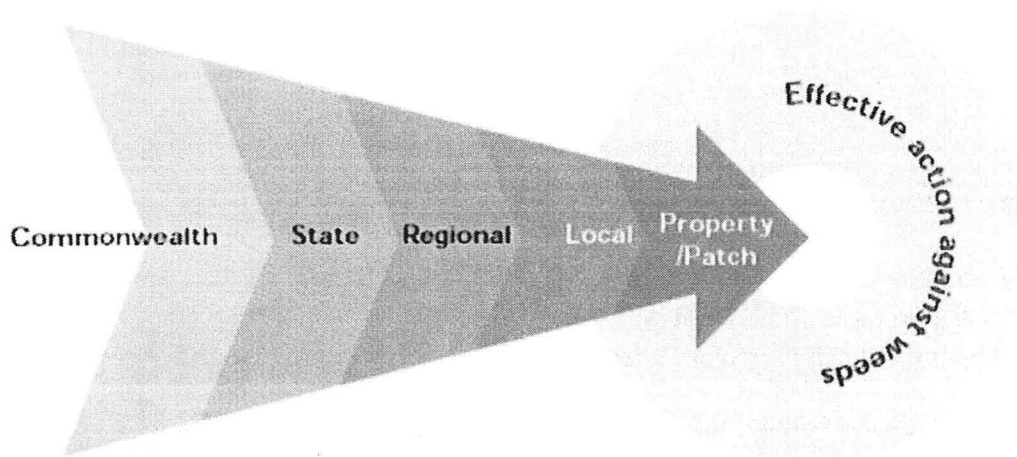


Figure 4. Introduced as a garden plant, Paterson's curse (*Echium plantagineum*) is used by beekeepers for honey yet is a serious weed of agriculture, roadsides and remnant vegetation.

### 3. COMPONENTS OF THE STATE WEED PLAN

The State Weed Plan is based on the following approaches:

- All people in Western Australia have a role to play in minimising the impact of weeds.
- Effective weed management can only be achieved through a coordinated approach involving all levels of government, industry, community and individual landholders.
- Effective weed management will require focus on small geographic areas (patch/property and local) with support and coordination provided at an appropriate level (regional, State and national). See Figure 5.



**Figure 5. Effective weed management requires appropriate action at all levels.**

The State Weed Plan establishes a framework for action based on the nine components and desired outcomes listed below.

**1. Coordination, Integration and Public Awareness**

Coordinated and effective participation of land and water managers and users, policy makers and other stakeholders in weed management.

**2. Roles and Responsibilities**

Stakeholders aware of and committed to their roles and responsibilities in weed management.

**3. Priorities and Planning**

Objective processes established for setting priorities and planning weed management programs at State, regional and local levels.

**4. Introduction and Spread**

Effective controls over the entry of potential weed species, and the early detection and response to new infestations.

Adoption of improved practices to minimise the spread of existing weeds.

**5. Integrated Weed Management**

An effective and adaptive integrated weed management process against all weeds.

**6. Policy Support and Regulation**

An appropriate policy and legal framework to support patch, local, regional and statewide management of weeds.

**7. Resources**

Objective allocation and efficient use of all government, industry and community resources available for weed management programs.

**8. Education, Training and Research**

Increased community and industry knowledge of and skills in weed management.

**9. Monitoring and Evaluation**

Ability to evaluate changes in the status of weeds and to maintain the relevance of the State Weed Plan.

The following section outlines the desired outcome for each component, and a series of strategic actions to achieve each outcome. Some of the actions are relatively simple and achievable within the existing management framework and resources. Others are more complex and challenging and will require the cooperation of government, industry, community groups and individual landowners in the efficient use of existing and new resources.



**COMPONENT 1: COORDINATION, INTEGRATION AND PUBLIC AWARENESS**

**Desired outcome:** Coordinated and effective participation of land and water managers and users, policy makers and other stakeholders in weed management

**Coordination and Integration**

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. Best outcomes are achieved when all levels of government, industry, community groups and individual landholders work together to efficiently and effectively use resources to manage weeds.

Coordination and integration are currently an informal part of weed management activities at various management levels throughout the State. Groups and individuals working at patch and property levels coordinate with local and State government authorities and industry. Likewise, regional groups are increasingly undertaking coordination efforts to achieve better weed management.

Developing further opportunities for better coordination and integration of weed management at the different management levels is an important part of the State Weed Plan. For example, at a local level, local governments, catchment groups, Land Conservation District Committees (under the *Soil and Land Conservation Act*) or other local community groups have the opportunity to help coordinate weed management activities at patch and property levels.

At a regional level there is an opportunity for existing groups such as the Regional Advisory Committees (under the *Agriculture and Related Resources Protection Act 1976*) or Regional Catchment Councils to help coordinate weed management over larger areas.

The proposed approach to achieving the required coordination and integration at the State is through the formation of a state-level policy and coordinating council to guide and monitor implementation of the State Weed Plan. The group should have a membership based on skills and expertise and be drawn from State and local government, private landholders, research institutions, industry and community groups.

A body such as the proposed State Weed Coordinating Council (SWCC) will have terms of reference enabling it to take a lead role in fostering efficient and effective weed management in Western Australia. SWCC should be appointed jointly by the Ministers for Primary Industry and Environment, and be supported by appropriate government agencies.

Effective coordination and integration will be facilitated through good communication. It requires the recognition and acknowledgment of the roles and contributions of all stakeholders to the weed management effort. The State and Commonwealth Governments will need to provide leadership and resources to ensure that effective coordination and integration is achieved in weed management.

## **Public Awareness**

Part of the solution to managing weeds in Western Australia is raising public awareness of the causes and appropriate responses to the problem. Often people are not aware of the impact weeds have on the natural environment and primary production or that they may be contributing to the problem through their own actions, for example, dumping weed infested garden refuse in bushland or by distributing weed seeds by vehicles, animals and produce.

An important role for the State Weed Plan will be to promote and guide industry and community information programs on weed management issues and strategies. Public awareness campaigns such as National Weedbuster Week need to be given a high priority by SWCC. The responsibility for implementing public awareness campaigns will need to be shared by the public and private sector, as well as community organisations.

Ethnic communities need to be involved because of long held cultural values associated with certain plant species that have the potential to become serious weeds.

Traditional land owners 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 the State Weed Plan.

All examples of weed management planning and implementation at local levels should be documented. This will increase the available fund of knowledge on weed management, and encourage action by community groups by both demonstrating what can be achieved and facilitating the activity.

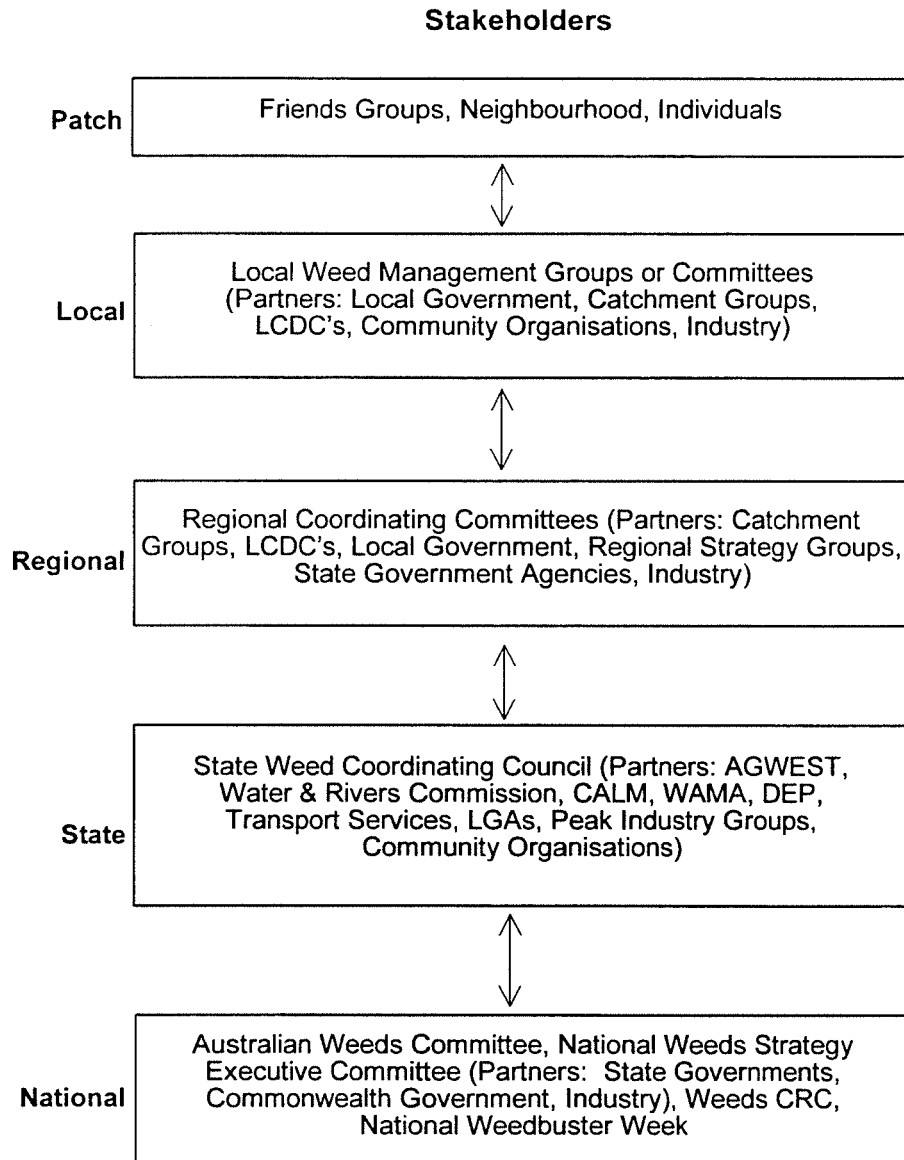
Commitment by all Western Australians will be improved and maintained by publicising the successful outcomes of the State Weed Plan.

The diagram for component 1 illustrates the stakeholders who can make a valuable contribution to implementation of the State Weed Plan by participation at appropriate levels.

**National Weedbuster Week, 8-15 October 2000**

**[www.weedbusterweek.info.au](http://www.weedbusterweek.info.au)**

**Component 1. Coordination, integration and awareness levels**



**Recommended strategic actions**

<b>Action No.</b>	<b>Recommended strategic action</b>	<b>Potential partners</b>
1.1	Establish a broad, skills-based State Weed Coordinating Council (SWCC) with terms of reference to lead implementation of the State Weed Plan.	Ministers for Primary Industry and Environment
1.2	Develop a coordinated work program (State Weed Action Plan) for the State Weed Plan.	SWCC
1.3	Foster the involvement of all relevant government, industry and community organisations in coordinated weed management at all levels.	SWCC
1.4	Foster coordinated weed management planning, implementation and monitoring across all land tenures in conjunction with appropriate groups.	SWCC
1.5	Facilitate regional weed management planning through linkages with appropriate government agencies.	SWCC, LGAs, AGWEST, CALM,
1.6	Develop public awareness programs for the community, and link into existing programs such as National Weebuster Week.	SWCC, WAMA, DEP, WRC, AGWEST, CALM
1.7	Encourage production of weed awareness literature and events.	SWCC, LGAs, DEP, WRC, AGWEST, CALM
1.8	Seek suitable opportunities, such as field days and garden shows, to promote weed awareness.	SWCC, AGWEST
1.9	Support and reward those individuals and groups adopting responsible mechanisms for weed management.	SWCC, EWAN

**COMPONENT 2: ROLES AND RESPONSIBILITIES**

**Desired outcome:** Stakeholders aware of and committed to their roles and responsibilities in weed management

All users and managers of the State's natural resources share a responsibility to ensure their sustainable management. All land managers, including government agencies involved in natural resource management, need to adopt the principles of the State Weed Plan if implementation is to be successful. Communicating the roles and responsibilities of Government agencies, industry and private landowners and coordinating their response is important to the success of the State Weed Plan.

At a local level it is recognised that members of catchment, bush regeneration and other community groups play the main role, though this responsibility should not fall solely upon volunteers and individuals. Support of this local effort is essential for successful action against many types of weeds.

Developing and gaining acceptance of 'Good Neighbour' principles and 'Codes of Practice' as they apply to weeds will help define the responsibility for weed management of individual land owners and managers including farmers and local and State government agencies.

Examples of roles through which all people in Western Australia can contribute to weed management are shown below.

**Individuals**

- Know the important weeds and take responsibility for those on their land.
- Improve their weed knowledge and skills to make their efforts more effective and sustainable.
- Plan and cooperate with neighbours.

**Communities**

- Coordinate group action and links to plans at a regional level.
- Raise awareness and improve education on weeds issues.

**Community and industry organisations**

- Provide information on weed issues to members.
- Develop industry codes of practice.

**Local Government**

- Provide information, coordination and support for community groups.
- Manage weeds on their own lands.

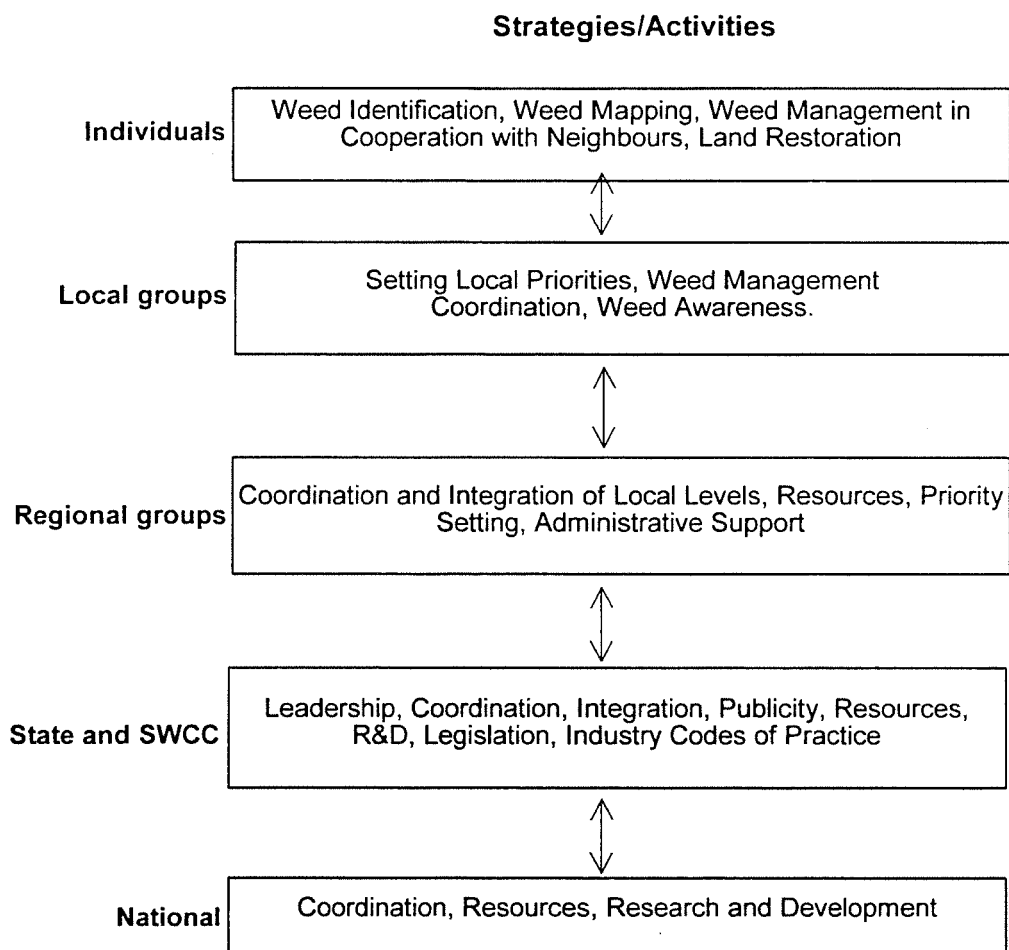
### **State Weed Coordinating Council**

- Implement the State Weed Plan and evaluate its effectiveness over time.
- Foster the involvement of all relevant government, industry and community organisations in coordinated weed management at regional and local levels.
- Develop risk assessment and priority setting methods.
- Manage public awareness and promotion campaigns.
- Facilitate the development of training in weed identification and management.
- Coordinate the development of information systems (databases) on distribution, weed ecology and management options.

### **State Government**

- Ensure maintenance of appropriate regulation and policies.
- Provide leadership in research, risk assessment, education, advisory services and public awareness.
- Assist improved weed management at all levels by providing appropriate support for weed management from government agencies.
- Manage weed problems on State land in cooperation with neighbours.

**Component 2. Roles and responsibility levels**



**Recommended strategic actions**

Action No.	Recommended strategic action	Potential partners
2.1	Encourage all public and private land managers to act as 'Good Neighbours'.	SWCC
2.2	Encourage joint and cooperative local and regional programs based on a clear understanding of responsibilities.	SWCC
2.3	Promote acceptance at all levels of the significance of weeds and the responsibilities of individuals, groups and agencies for weed management.	SWCC, WAMA, Community groups, State agencies

**COMPONENT 3: PRIORITIES AND PLANNING**

**Desired outcome:** Objective processes established for setting priorities and planning weed management programs at State, regional and local levels

Western Australia has a diverse set of bioregions as well as various administrative boundaries. Planning for weed management needs to occur within appropriate management units. Suitable options are the use of local government boundaries for administration and regulation to provide close links to the community and a single local administrative framework; and the use of Interim Biogeographical Regionalisation for Australia (IBRA) regions to provide a logical environmental basis for weed risk and priority assessments.

Resources will never be sufficient to attempt eradication of all weeds in Western Australia. The diversion of resources from other activities to weed management would need strong support from community and industry. Available resources should be efficiently applied to the highest priority weeds, and a sound case made for investment of additional resources.

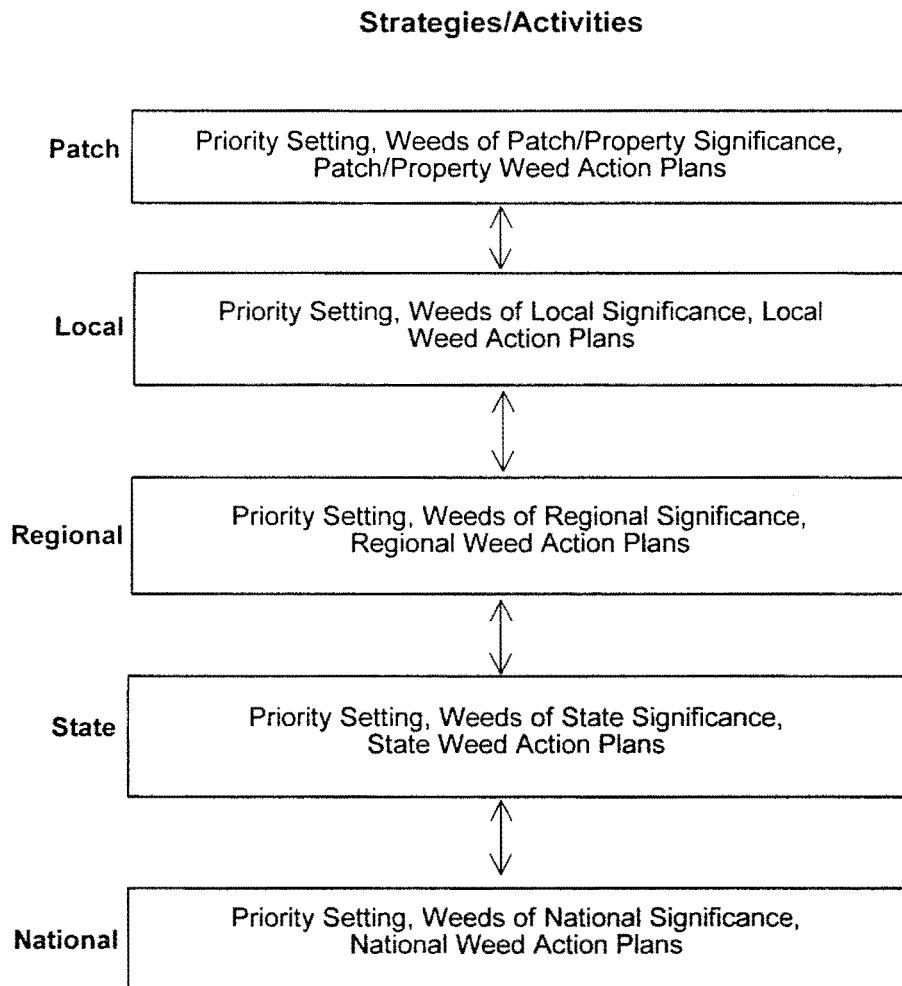
The priority setting process needs to be applicable to all weed management levels (patch/property, local, regional and State).

Developing a coordinated approach to weed management will require application of methodology to objectively determine the risk posed by individual weeds in specific situations. Priorities need to be applicable to existing and potential weeds. The methodology will need to build upon those used in international and interstate risk assessment, the existing statutory basis for assessing agricultural weeds, those recommended in the Environmental Weed Strategy for Western Australia and the National Weeds Strategy. This is essential to ensure a consistent approach to weed prioritisation in Western Australia.

More information on IBRA regions and biodiversity can be found on the Environment Australia website at [www.environment.gov.au](http://www.environment.gov.au)



**Component 3. Priorities and planning levels**



**Recommended strategic actions**

<b>Action No.</b>	<b>Recommended strategic action</b>	<b>Potential partners</b>
3.1	Establish a priority setting process suitable for use at all levels of planning and priority setting.	SWCC, AGWEST, CALM
3.2	Maintain and communicate lists of priority weeds when developed, including Weeds of State Significance (WOSS)	SWCC, AGWEST, CALM
3.3	Develop a risk assessment methodology for determining weed management priorities.	AGWEST, CALM, LGAs, Community groups
3.4	Define and promote appropriate regions for the management of weeds (eg bioregions, catchments).	SWCC
3.5	Promote the inclusion of cost-benefit principles in regional and local priority setting.	SWCC
3.6	Promote integrated regional, local and patch priority setting and planning for effective weed management.	SWCC, LGAs, CALM, AGWEST, WRC, Community
3.7	Encourage the inclusion of weed management planning in all land use changes.	SWCC, AGWEST, Ministry of Planning
3.8	Encourage all agencies and communities to allocate resources based on consistent priority setting processes.	SWCC
3.9	Participate in working groups developing national strategies for WONS.	AGWEST, CALM

**COMPONENT 4: INTRODUCTION AND SPREAD**

**Desired outcome:** Effective controls over the entry of potential weed species, and the early detection and response to new infestations. Adoption of improved practices to minimise the spread of existing weeds

The introduction of a new plant species (potential weed species) at national, State, regional, local or patch level has the potential for impacts on ecosystem function and primary production. Once detected it is important that protocols for containment and management of a new weed are effectively and efficiently observed. Good border quarantine control is important in minimising the entry of potential new weeds.

Quarantine restrictions are in place at national and State borders under the *Commonwealth Quarantine Act 1908*, *Plant Diseases Act* and *Agriculture and Related Resources Protection Act 1976*. These provide a strong legal basis for protection against accidental and deliberate plant introductions but only cover quarantinable weeds and declared plants. For more details, see Component 6.

However, many potential weed species are not regulated and are being brought into the State or moved within the State. Restraining the movement of these non-regulated weeds which pose significant risk to agriculture and the environment provides a challenge for local groups and industries.

The nursery and seed merchant industries could make a significant contribution to reducing the introduction and spread of potentially weedy species through the voluntary adoption of codes of practice which should include labelling systems which identify potential weeds.

The increasing popularity of mail order seed and plant sales, and the potential for ordering of material from other countries via the internet, needs to be addressed both through the public awareness program and maintenance of rigorous mail checking systems. Possibilities for cooperative awareness programs with authorities in other countries should be explored.

A number of initiatives can be undertaken at a regional, local and patch levels to prevent the introduction and spread of weed species. These include:

- Good biosecurity practices – for example, ensure vehicles, machinery, stock, footwear and clothing are properly cleaned of weed seed before moving from site to site.
- Attention to weed control on road and rail reserves.

**Biosecurity:** Effective management of risks posed by pests, weeds and diseases by a system of coordinated pre-border, border, management and sector responses aimed at preventing the establishment and spread of organisms that may have adverse effects on the economy, environment and people's health.

Put more simply, this means managing the risks posed by organisms to the economy, environment and people's health through risk mitigation at national State, regional, local and property levels.

- Census of weed flora – knowledge of the weed flora in a patch, local or regional area will enable identification of new introductions. The preparation of regional, local and patch herbaria should be actively promoted.
- Containment – rapid identification, isolation and action is required to ensure the containment of new weed species.
- Timely response to events such as floods, fires or land development which are likely to provide opportunities for weed spread.

### **Rapid response**

Early detection of new localised weed populations enables their eradication or containment. A concerted effort early in the invasion process can save considerable effort or loss of ability to control the weed in the long term.

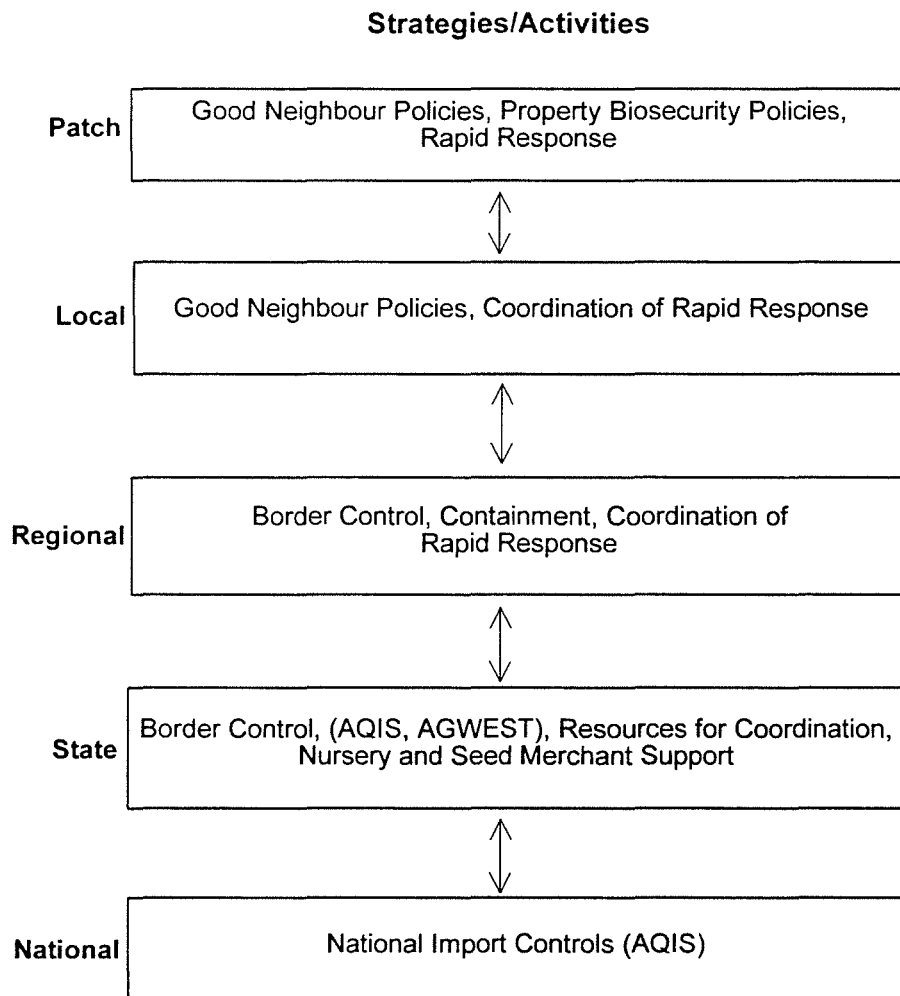
Eradication campaigns usually succeed only if the following criteria are met.

- The population of the target species must be highly localised and the boundaries of the population known.
- An effective control method is available.
- The area is not continuously reinfested from seed reserves in the soil, from surrounding areas, or from nearby cultivated specimens.

Waterways are of special concern because of the rapid downstream spread of aquatic weeds. Containment and control in waterways is sometimes more difficult than in terrestrial systems.

An early warning and rapid response system must be maintained to minimise the spread of an introduced weed.

**Component 4. Introduction, spread and response levels**



**Recommended strategic actions**

<b>Action No.</b>	<b>Recommended strategic action</b>	<b>Potential partners</b>
4.1	Maintain effective quarantine strategies to minimise weed introductions to Western Australia, and detect exotic weed outbreaks.	AGWEST, AQIS
4.2	Support the implementation of rigorous weed risk assessment processes for all plant material imported into Western Australia.	SWCC, AGWEST, AQIS, R&D agencies
4.3	Establish and promote an efficient process for the identification and appropriate reporting of new weed infestations.	AGWEST, CALM, WRC, SWCC, MRWA, LGAs
4.4	Encourage the development of a rapid response process and its use for weed infestations at all levels.	AGWEST
4.5	Facilitate the development of appropriate training in weed identification to enable early detection of new incursions.	SWCC, CALM, AGWEST, WRC, LGAs, Community groups
4.6	Encourage the development and adoption by industry of codes of practice and company protocols, and other provisions to minimise the introduction and spread of weeds.	SWCC
4.7	Encourage the inclusion of weed spread prevention measures in weed action plans.	SWCC
4.8	Encourage a timely response where natural events (eg fires, floods) cause invasion of weeds.	SWCC, all landholders
4.9	Encourage appropriate attention to road verges, waterways and other avenues of spread.	SWCC, WRC, LGAs, MRWA, Westrail
4.10	Recognise herbicide resistant weeds as a special form of "new" weeds by ensuring appropriate recording of locations and monitoring.	SWCC, all landholders, AGWEST
4.11	Encourage public land managers to implement a Good Neighbour Program to minimise weed invasion.	SWCC

**COMPONENT 5: INTEGRATED WEED MANAGEMENT**

**Desired outcome:** An effective and adaptive integrated weed management process against all weeds

The use of a single, isolated weed control method generally will not succeed. Persistent use of herbicides has, for example, resulted in herbicide resistance development in some weed species.

Integrated weed management involves the planned use of a number of control methods to achieve effective weed management. It should include the restoration and rehabilitation of land as weeds are removed.

Primary producers and other land users should integrate a range of methods including cultivation, biological control, chemical control and optimum pasture, cropping and grazing management to achieve sustainable weed control.

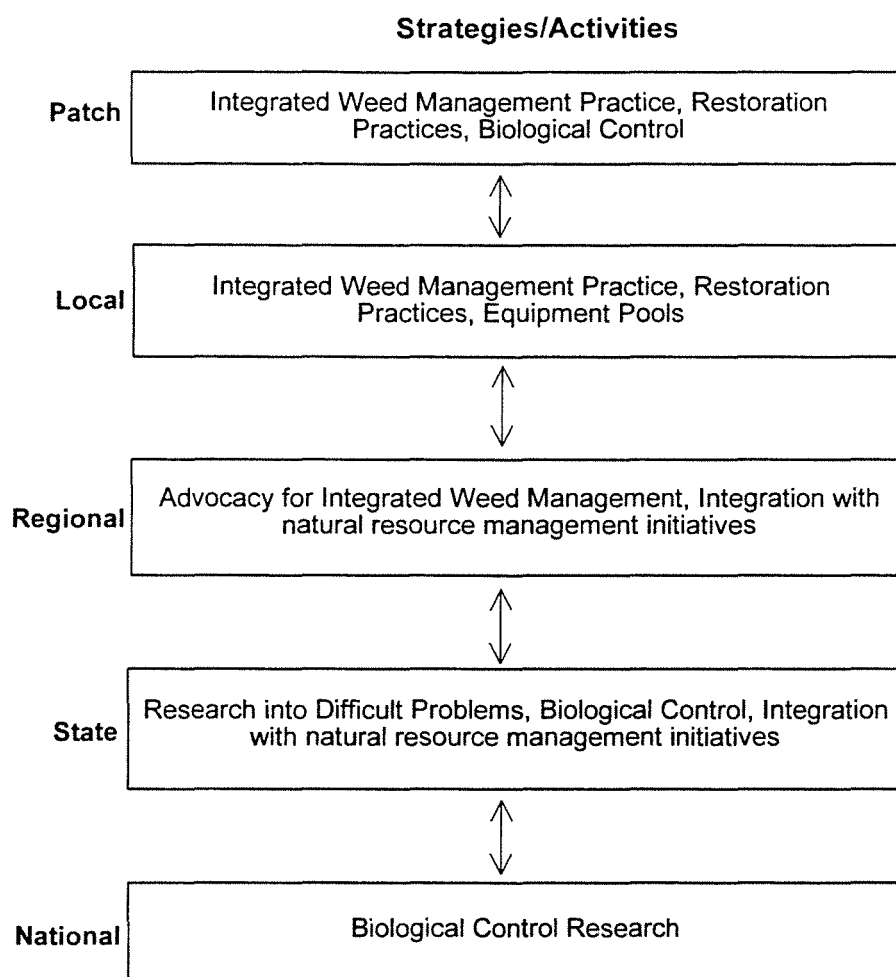
Integrated weed management in natural and semi-natural ecosystems involves using

mechanical methods, biological control, chemical control, weed suppression devices (such as fibre matting, mulch), cultivation and ecosystem management (such as fire, revegetation and disturbance management). Integrated weed management in natural areas needs to be part of the process of ecological restoration in order to develop long-term sustainable ecosystems.

The scale of some weed infestations makes biological control the only feasible option.

The adoption of integrated weed management approaches at all levels and its promotion through training and extension programs is an important part of implementation of the State Weed Plan.

**Component 5. Integrated weed management levels**



**Recommended strategic actions**

<b>Action No.</b>	<b>Recommended strategic action</b>	<b>Potential partners</b>
5.1	Promote appropriate best practice for integrated weed management on all land.	SWCC, AGWEST, CALM, WRC, LGAs, Community and Catchment groups.
5.2	Encourage the inclusion of integrated weed management in natural resource management plans at all levels.	CALM, AGWEST, WRC, LGAs, Transport Authorities, all land managers.
5.3	Advocate the inclusion of specific weed management methods in land management and rehabilitation plans.	SWCC, CALM, WRC, LGAs
5.4	Produce information resources and guidelines for developing integrated weed management programs at all levels to ensure effective use of resources.	SWCC, AGWEST, CALM, LGAs, WRC
5.5	Promote the application of biological control agents where appropriate.	SWCC, CSIRO, Weeds CRC
5.6	Development of integrated weed management plan for specific weed problems where appropriate.	SWCC, AGWEST, CALM, WRC, LGAs



**COMPONENT 6: POLICY SUPPORT AND REGULATION**

**Desired outcome:** An appropriate legal and policy framework to support patch, local, regional and statewide management of weeds

Legislation supports the national and State plant quarantine systems, the management of many serious agricultural weeds (as Declared Plants) within the State and gives local government power to prescribe Pest Plants for the purposes of local management.

The legislation can only work successfully where there is a high level of public awareness and broad cooperation on weed management issues. It is important that local action plans and policies gain the voluntary support of the community, rather than relying heavily on enforcement to achieve objectives.

The importation into Australia of plants, including potential weeds, is controlled under the *Commonwealth Quarantine Act 1908* and the *Wildlife Protection (Regulation of Exports and Imports) Act 1982* and is managed by the Australian Quarantine and Inspection Service (AQIS).

The *Plant Diseases Act*, and to a lesser extent the *Agriculture and Related Resources Protection Act 1976*, control the movement of plants and seeds into Western Australia. This system needs to be maintained against pressures for commercial introduction of plants with known weed potential and freer movement of potentially contaminated produce.

Only plant species on the 'Permitted List' under the *Plant Diseases Regulations 1989*, or those approved under specific conditions, can be imported into Western Australia. The Permitted List is based on an assessment of the weed risks posed by the

plant. Plant species which have not been previously assessed are subject to a formal weed risk assessment.

Plants declared under the *Agriculture and Related Resources Protection Act 1976* are excluded from entry to the area of the State detailed in the declaration. This legislation also prescribes actions that landholders must undertake when Declared Plants are present on their land, and includes various levels of control and prevention of the movement or spread of the weeds. Implementing the Declared Plant requirements is the responsibility of the Agriculture Protection Board (APB), which is constituted under the *Agriculture Protection Board Act 1950*.

While the assessments of potential Declared Plants made by the APB are comprehensive, usually plants are only declared if they pose a threat to agriculture. Many freshwater aquatic weeds have the potential to impact upon irrigation resources and the Declared Plant list includes those of concern known to be present in Western Australia or posing a risk of entry from other States. All serious aquatic weeds are Declared Plants and outbreaks in Western Australia are currently subject to eradication programs. Weeds such as bridal creeper, caltrop and pampas grass, which are primarily environmental weeds, are not Declared Plants.

Under the *Agriculture and Related Resources Protection Act 1976* and the *Local Government Act*, local government can make local laws requiring landholder

attention to Pest Plants occurring in the shire area. Pest Plants cannot also be Declared Plants in the same area. Pest Plant provisions are proving an effective local means of raising awareness and achieving increased weed control on public and private land.

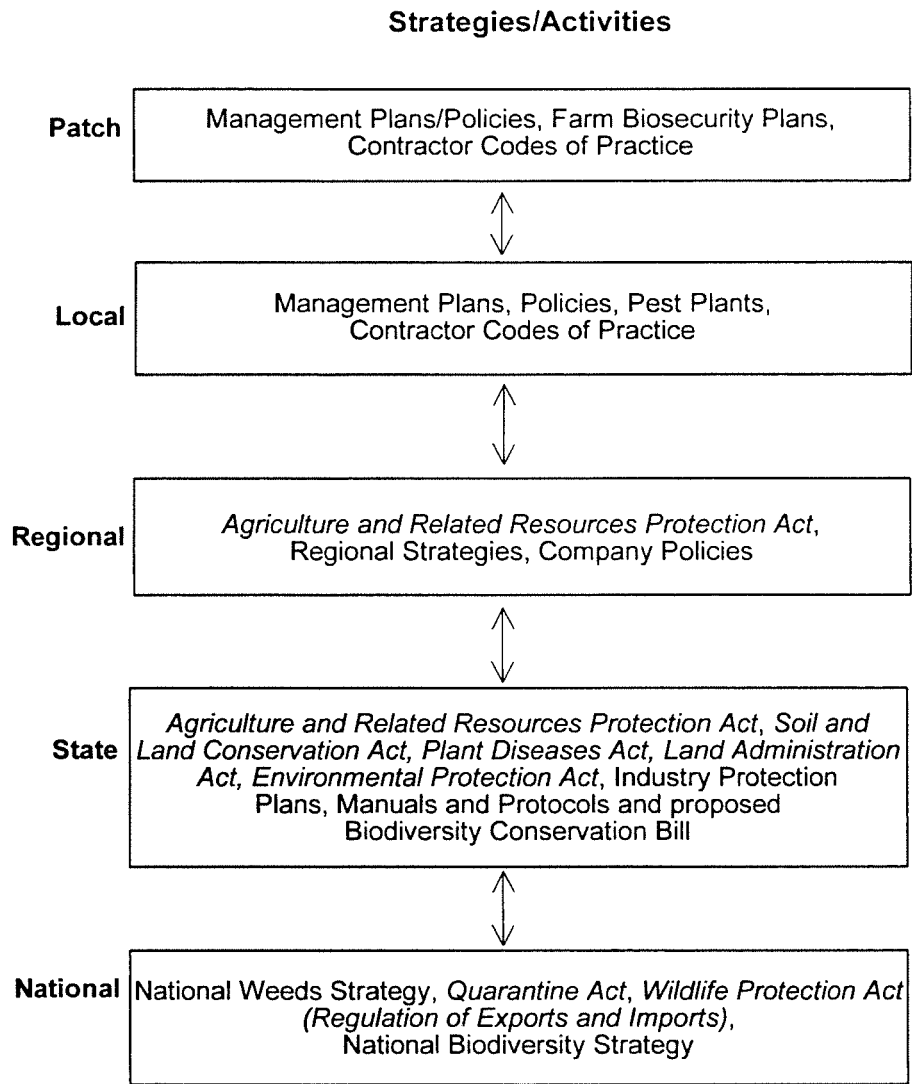
Under the *Land Administration Act*, pastoralists are limited in the introduction of exotic species for grazing improvement and are also required to manage Declared Plants.

The Environmental Weed Strategy for Western Australia recommended the introduction of legislation to support the management and classification of environmental weeds, and relevant legislation (Biological Conservation Bill) is currently under consideration.

The Seed Industry Association of Australia's Code of Practice is an appropriate example of policies to minimise the movement of weeds into Western Australia, and should be considered by other industry groups involved in the movement of potential weeds, or potentially contaminated produce.

Successful implementation of the State Weed Plan will require strong voluntary contribution at all levels, backed by consistent implementation of regulation where action from landholders falls below community standards.

**Component 6. Policy support and regulation levels**



**Recommended strategic actions**

<b>Action No.</b>	<b>Recommended strategic action</b>	<b>Potential partners</b>
6.1	Promote sound weed management through appropriate policies and codes of practice.	SWCC
6.2	Investigate an appropriate legal framework to support community action against serious weeds at a local level.	SWCC, AGWEST, CALM
6.3	Encourage the linkage of weed management initiatives with other State and national policies such as the National Weeds Strategy and the National Resource Management Initiative.	SWCC, CALM, AGWEST, WRC, LGAs
6.4	Promote the development of property level biosecurity and a quality assurance program for weed management.	AGWEST, CALM, WRC
6.5	Promote the current Pest Plant provisions as a means of achieving the regulation of locally important weeds.	SWCC, APB
6.6	Promote effective and timely compliance and enforcement programs for regulated weeds.	APB, CALM, SWCC, LGAs

**COMPONENT 7: RESOURCES**

**Desired outcome:** Objective allocation and efficient use of all government, industry and community resources available for weed management programs

To successfully implement the State Weed Plan requires the efficient application of a range of financial, physical, technical and administrative resources. The resources currently applied to the weed management effort in the State need to be identified and documented to facilitate the improved coordination and efficiency of resource use. This will help identify resource deficiencies and provide a basis for value adding through the targeted application of more resources. Groups and agencies should identify their resource commitments as a contribution towards national and State weed management objectives.

**People**

Committed people are the key to the management of weeds in the State. Through awareness programs individuals can create the impetus within their community to take action. Individual roles may differ but with adequate training, resources and recognition, each person can contribute to more effective weed management.

Involving all stakeholders in the development of weed management programs will maximise the ownership of the program and optimise implementation. Existing skills and knowledge of community participants in weed management need to be identified and recognised so that this knowledge base can be fully utilised to the benefit of all local weed management programs. Training is required to broaden the numbers of individuals involved and increase the skill

levels of new recruits and volunteers generally.

Community groups and individuals need effective support from relevant government authorities. This includes administrative support and coordination, training (or assistance with meeting training costs), technical advice and insurance. Experience in other areas of natural resource management has shown that to effectively harness the resources available within the community, the involvement of a number of extension officers around the State will be needed to facilitate coordinated weed management at local and regional levels.

**Information**

Currently, good levels of information are available for some weed species and very little for others. The demand for information on weeds, their impacts and management is expanding rapidly.

Further development of WeedBase (a CD-ROM of the biological characteristics, distribution and control of Western Australian weeds), and its availability via the internet, will enable existing information to be distributed quickly and effectively. It will also provide a conduit through which the range of information on all weed species and their distribution can be improved.

Programs to improve weed knowledge management and generation must be developed and the extension of this new knowledge promulgated. Coordinated

information management and accessibility across the State is required to ensure that the greatest benefit is derived by stakeholders. The SWCC should consider establishment of a “one-stop-shop” to provide information and referrals relating to activities consistent with the State Weed Plan.

### **Funding**

To sustain effective weed management in all high priority areas, sufficient support is required to ensure long-term community and industry commitment to coordinated weed management programs.

Where possible the resources associated with any weed management program should reflect the relative importance of each weed problem and should be borne by both the contributors to the problem and the beneficiaries of effective weed management. However this is often difficult to determine when the

benefits of weed control are often not immediately identifiable or attributable to any one group in society.

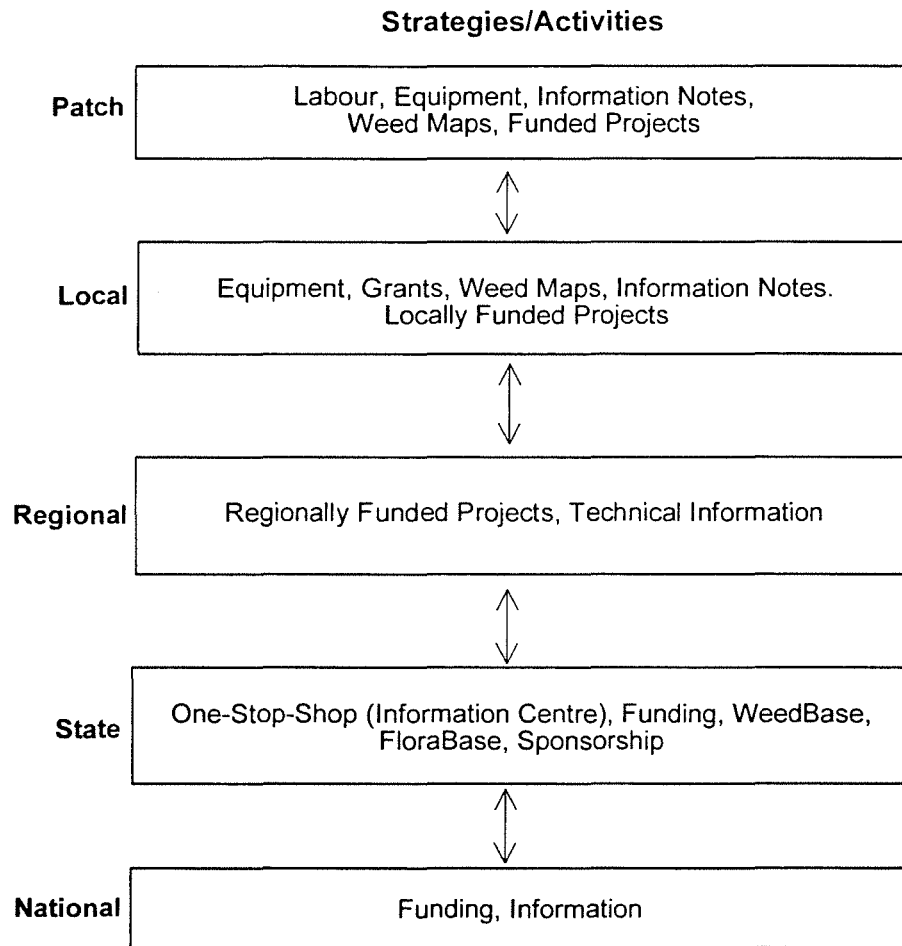
Government should consider support for weed management where broad economic, environmental and community benefits are demonstrated and technically sound solutions are available or warrant development. Research and regulation services are also core considerations for State and Commonwealth governments.

Local government will have improved opportunities for contribution under the State Weed Plan, including support for local community actions.

Local, regional and statewide coordination of weed management, through implementation and monitoring weed management plans, will assist in ensuring that both recurrent funding and grants are used effectively and that the benefits of these programs are delivered to the widest possible spectrum of stakeholders.

A one-stop-shop would provide a single contact point for all enquiries on weeds. Callers will be provided with information, or directed to the appropriate source of information.

**Component 7. Resource levels**



FloraBase can be accessed on the CALM internet site [www.calm.wa.gov.au](http://www.calm.wa.gov.au)

**Recommended strategic actions**

<b>Action No.</b>	<b>Recommended strategic action</b>	<b>Potential partners</b>
7.1	Continue to develop accessible databases on known and potential weeds, their distribution and abundance, characteristics, options for control and key contact personnel, such as WeedBase.	CALM, AGWEST
7.2	Obtain funds to implement the State Weed Plan (three to five years).	SWCC, CALM, AGWEST, and other State agencies.
7.3	Facilitate projects and submissions for resources involving partnerships between government agencies, community groups and industry.	SWCC
7.4	Provide technical support for local government and community groups.	SWCC, CALM, AGWEST, WRC
7.5	Identify specialist extension officers to support community groups in the development of participatory management programs.	CALM, AGWEST, WRC, MRWA, Community groups
7.6	Identify and promote government, industry and community resources and skills available for weed management.	SWCC
7.7	Identify and promote sources of funding for the coordinated management of weeds.	SWCC
7.8	Encourage all participants in weed management programs to work cooperatively to gain maximum use of all resources.	SWCC, LGAs
7.9	Facilitate the establishment of a one-stop-shop for providing information.	SWCC





**Figure 6. Every summer volunteers, paid employees and prisoners spend thousands of hours searching for skeleton weed.**



**Figure 7. Skeleton weed is a menace to grain crops.**

### **Skeleton weed**

Skeleton weed (*Chondrilla juncea*) provides a good example of the challenges faced by resource managers when dealing with weeds.

Native to the Mediterranean region, skeleton weed was first found in WA relatively recently, 1963. Though it has never been cultivated as a garden plant or deliberately spread, skeleton weed is now found in 33 grainbelt Shires. Search, eradication and research costs to graingrowers and government in Western Australia total \$2.6 m annually. This scheme of research, search and eradication funded through the Agriculture Protection Board, jointly by the threatened grain industries and government, is a good example of the cooperation needed to address a serious weed challenge.

**COMPONENT 8: EDUCATION, TRAINING AND RESEARCH**

**Desired outcome:** Increased community and industry knowledge of, and skills in, weed management

**Education and training**

Education and training in weed management needs to be addressed at an integrated and coordinated level throughout the State. Programs need to be broadened at tertiary levels to include all natural sciences and other disciplines associated with land development. Accredited training and education for community groups, land managers and local government employees also needs to be developed at non-tertiary levels to include courses such as bush regeneration, herbicide use, research and monitoring.

The further development of digital information tools such as WeedBase has the potential to provide an effective aid to community involvement in weed identification, reporting and management.

**Research**

Research into, and training in, weed management in Western Australia is carried out by a number of government and non-government agencies including:

- Government and other agencies addressing weed biology, impacts on primary production, weed distribution, weed control, biological control or plant taxonomy
  - AGWEST
  - CSIRO
  - Botanic Gardens and Parks Authority
  - Universities
  - CRC for Weed Management Systems
  - CALM

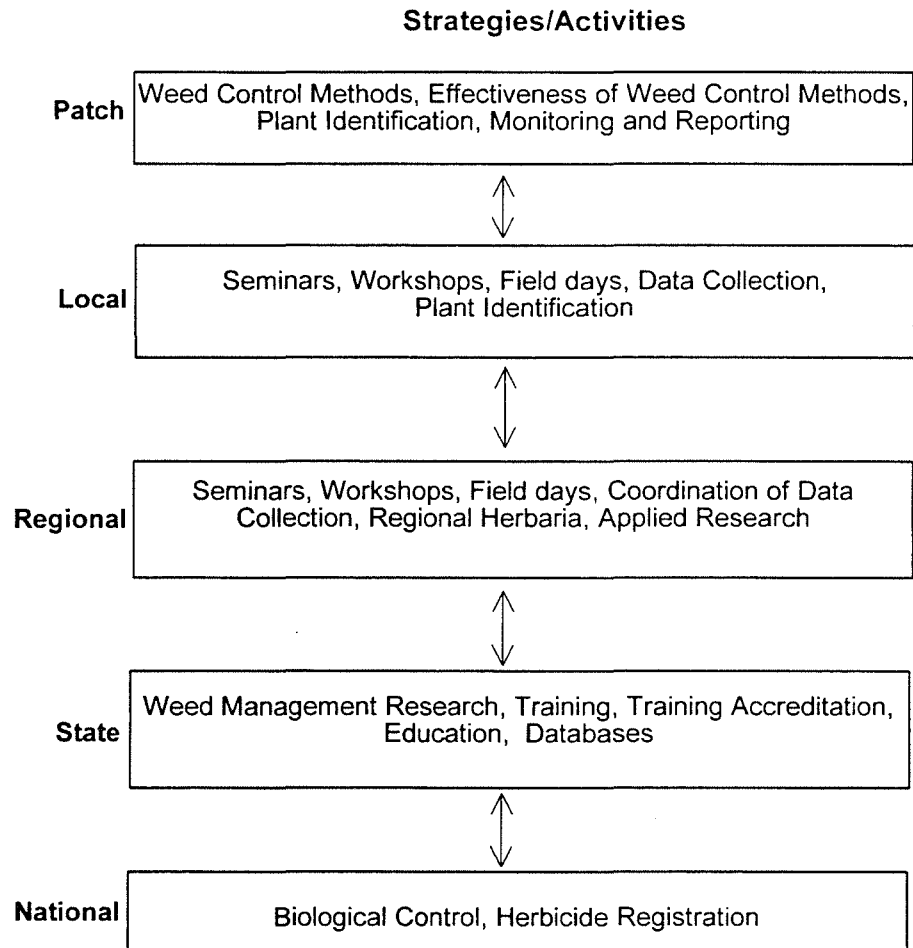
- Research and Development Corporations (including the GRDC-supported WA Herbicide Resistance Initiative)
- Industry: weed control, herbicide development, weed biology
- Community and Landcare groups: weed control, weed distribution, ecosystem regeneration

Much of the research is aimed at overcoming specific problems, particularly with respect to agricultural production. Little research is aimed at developing integrated solutions at a landscape level to achieve robust production systems and ecosystem resilience. Increased research by chemical companies is needed into herbicides suitable for use in protecting native ecosystems.

Research needs to be better integrated and well resourced in order to tackle weed management across the State. Links between State research programs and Commonwealth programs need to be identified and consolidated to ensure successful outcomes and avoid duplication of effort.

A strong commitment is required to ensure that 'action-learning' and 'adaptive management' approaches are successfully applied. The experiential results of all weed managers need to be captured to ensure that practical knowledge is made available to all participants.

**Component 8. Education, training and research levels**



**Recommended strategic actions**

<b>Action No.</b>	<b>Recommended strategic action</b>	<b>Potential partners</b>
8.1	Identify, document and promote current research activities conducted by State and national agencies and groups.	SWCC
8.2	Identify and prioritise research programs to support integrated weed management.	SWCC
8.3	Develop and implement more effective training and education programs for all parties involved in weed management.	SWCC, LGAs, AGWEST, CALM, Weeds CRC
8.4	Incorporate weed management education into existing curricula at all levels.	Universities, TAFE, Schools
8.5	Coordinate development and distribution of endorsed information on weed management.	SWCC, State agencies, Weeds CRC
8.6	Encourage greater communication and liaison between groups involved in weed management.	SWCC, AGWEST, Community groups
8.7	Promote uptake of training in weed identification and integrated weed management, and the development of new training opportunities where gaps exist.	SWCC, AGWEST, CALM, WRC, Weeds CRC

**COMPONENT 9: MONITORING AND EVALUATION**

**Desired outcome:** Ability to evaluate changes in the status of weeds and to maintain the relevance of the State Weed Plan

Monitoring and evaluation need to be undertaken to measure the success of the strategies implemented under the State Weed Plan and to make appropriate changes.

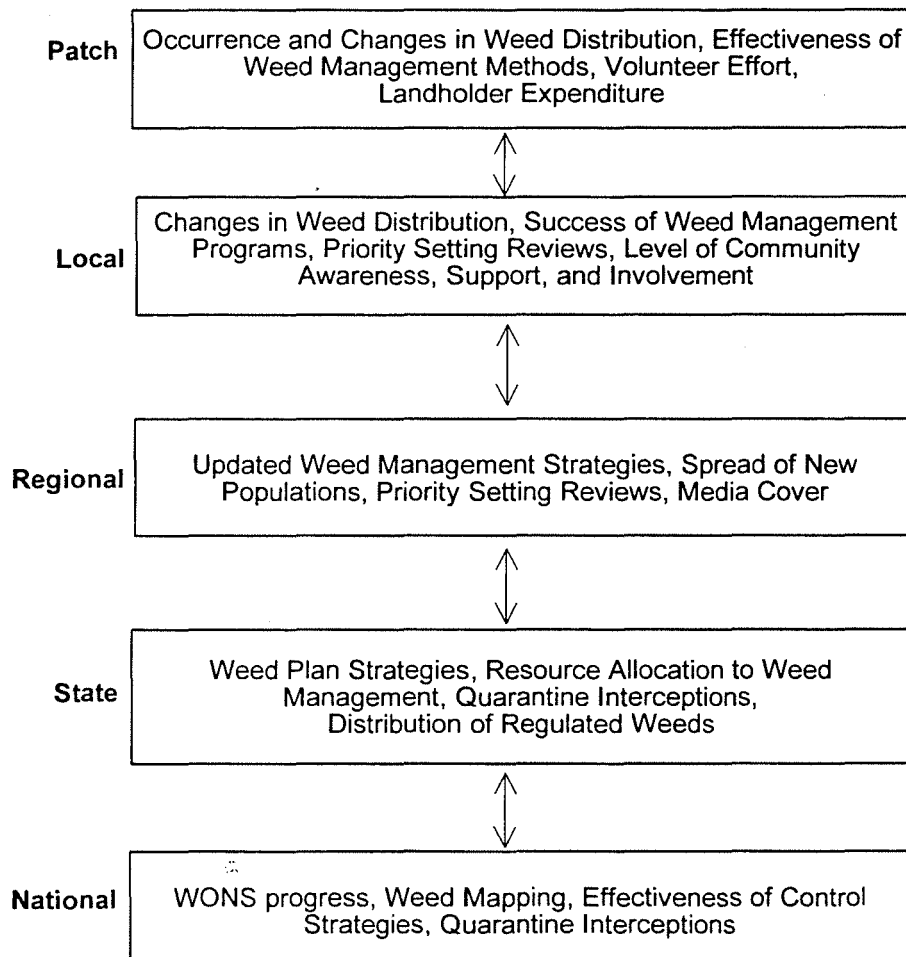
Performance indicators will need to be developed in order to objectively assess the success of activities associated with the Plan. This will contribute to its accountability where public funds are involved and provide a mechanism for

modifying strategies where desired outcomes are not being adequately achieved.

Both short- and long-term monitoring programs will need to be part of the overall monitoring strategy. Progress in implementing State Weed Plan strategies should be reported annually. The State Weed Plan's impact and overall progress in weed management should be reviewed every five years.

**Component 9. Monitoring and Evaluation Levels**

**Strategies/Activities**



**Recommended strategic actions**

<b>Action No.</b>	<b>Recommended strategic action</b>	<b>Potential partners</b>
9.1	Establish criteria to evaluate the implementation and effectiveness of all actions under the State Weed Plan.	SWCC
9.2	Undertake regular surveys of land managers, industry groups and the wider community to gauge the level of awareness of weed issues and participation in weed management and to identify opportunities and impediments to the achievement of State Weed Plan objectives.	SWCC
9.3	Establish regular reporting to stakeholders on progress of the State Weed Action Plan.	SWCC
9.4	Recommend changes to State Weed Action Plan and negotiate changes with stakeholders as required.	SWCC
9.5	Develop a program to ensure that the State Weed Plan is reviewed every five years.	SWCC
9.6	Promote a consistent system for monitoring weed status.	SWCC
9.7	Conduct regular regional forums to review stakeholder participation and support.	SWCC

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- Virtue, J. and Cooke, D. (1997) *National Weeds Strategy: "National Significance" Criteria Survey*. Animal and Plant Control Commission, South Australia.

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**Members of the State Weed Plan Steering Group**

<b>Name</b>	<b>Title/Organisation</b>
Mr Rob Delane (Chairman)	Executive Director, Agriculture Protection Agriculture Western Australia
Mr Roger Armstrong	Senior Environmental Protection Officer CALM
Dr Ken Atkins	Chairman Roadside Conservation Committee
Mr Frank Batini	Manager, Environmental Protection Branch CALM
Ms Lillias Bovell	Policy Manager Western Australian Municipal Association
Mr David Bright	President Australian Association of Bush Regenerators (WA)
Mr Ben Carr	Environmental Officer Department of Environmental Protection
Mr Damian Collopy	Manager, Plant Pests and Diseases Agriculture Western Australia
Mr Rex Edmondson	Chairman Soil and Land Conservation Council
Mrs Keryl Enright	Chairman Agriculture Protection Board
Mrs Judy Fisher	Committee Member Environmental Weeds Action Network
Mr Rowland Gwynne	Manager, Plant Industry Protection Agriculture Western Australia
Ms Verity Klemm	Waterways WA Program Coordinator Water and Rivers Commission
Ms Sandy Lloyd	Executive Officer, State Weed Plan Agriculture Western Australia
Mrs Diane Matthews	Conservation Council of Western Australia (Inc.) and Environmental Weeds Action Network
Ms Margo O'Byrne	Community Involvement Coordinator (Ecoplan) Department of Environmental Protection
Mr Sandy Pate	Development Officer Nursery Industry Association (WA)
Prof. Stephen Powles	Director, WA Herbicide Resistance Initiative University of Western Australia and Weeds CRC
Mrs Joanna Seabrook	Chairperson Environmental Weeds Action Network
Ms Rachel Siewert	Coordinator Conservation Council of Western Australia (Inc.)
Ms Clare Walsh/ Ms Linda Raynor	Environmental Policy Officer Western Australian Municipal Association



### **State Weed Plan Steering Group**

The Steering Group to develop the State Weed Plan was formed in March 1999, with a broad representation of the skills, experience and issues relevant to stakeholders. The Steering Group has encouraged wide participation, and several additional members have brought with them additional skills and new perspectives.

### **Stakeholder contributions**

In addition to the broad input to development of the State Weed Plan achieved via the diverse membership of the Steering Group, the following methods have been used to ensure maximum capture of ideas and definition of priorities.

- State Weed Plan Reference Group – A broad stakeholder group has contributed via two workshops and input through the Steering Group members. The Reference Group has 67 members, and includes representatives of 53 government, industry and community organisations.
- Public meetings – Presentations by the Steering Group Chairman and consultants, and public discussions of issues, ideas and priorities were held at:

Busselton	39 attendees from community and industry groups, LGAs and government agencies
Katanning	20 attendees from community and industry groups, LGAs and government agencies
Moora	12 attendees from community and industry groups, LGAs and government agencies
South Perth	27 attendees from the Environmental Weeds Action Network, Urban Bushland Council and other community groups
Bentley	11 attendees from local and State government
- Consultations – the consultants to the Steering Group met individually with a number of key stakeholders.
- Public submissions – 12 written submissions from members of the public were received by the Executive Officer.

<b>GUIDELINES FOR SUBMISSIONS</b>
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**Public Submissions for the State Weed Plan**

The purpose of releasing the draft State Weed Plan is to seek public comment on the ideas expressed and recommendations made in the document. This will allow your ideas and views to contribute to the final plan and the State Weed Action Plan.

Successful implementation of the State Weed Plan will need a joint effort by industry, the wider community and all levels of government.

All groups and persons making submissions will be included on the distribution list for the final State Weed Plan.

Submissions may either be supportive or critical. However, as far as possible please try to be objective and identify specific sections in the draft that need improvement. Your submission can be as short or as long as you consider appropriate, but if your submission is long it would be appreciated if you could summarise your major points.

An effective submission should:

- Where possible, include the section, recommendation and page number of the report to which your comments refer.
- Clearly state your opinion on the information and/or recommendations in the plan.
- State the reasons for your opinion.
- List any references to data that could be used to support your opinion.
- If possible, state how your concerns could be solved or outline any suggestions for amendments to the draft plan.

**All submissions are confidential**

A public submission cover sheet is included on the back of this page, for your convenience (please photocopy and distribute the sheet as you wish). If you prefer to make a submission in a different format, please remember to include relevant details as outlined on the cover sheet.

**Submissions must be received no later than:  
4:00 p.m. Friday, 29 September 2000.**

Please send submissions to:

Sandy Lloyd  
Agriculture Western Australia  
Locked Bag 4  
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Fax: (08) 9474 3814  
E-mail: slloyd@agric.wa.gov.au

We look forward to receiving your contribution.

