

REGIONAL WEED MANAGEMENT PLAN

1.1 PLAN TITLE: South Coast Lantana Management Plan - 2001-2005

1.2 PLAN PROPONENTS

Regional Weeds Advisory Committee: Southern Tablelands and Sout Coast Noxious Plants Committee

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Signature: of General Manager: Date:

1.3 NAME OF PLANT(S) *Lantana camara* (pink-flowered)

WONS Y

Botanical name: *Lantana camara*

Common name: Lantana

1.4 PLAN PERIOD (not to exceed five years)

Starting date: 1 July 2001

Completion date: 30 June 2005

1.5 AREA OF OPERATION:

Illawarra Noxious Weeds Authority Bega Valley Council

Shoalhaven City Council

Eurobodalla Council

1.6 AIM: Prevent further Lantana infestations and related ecological impacts along the South Coast, enhancing agricultural activity and protecting biodiversity of locally indigenous flora and fauna species.

1.7 OBJECTIVES:

- Raise community awareness for the need to control lantana.
- Promote control of lantana where it is rare.
- Assist development of integrated control strategies, incorporating biological control methods for extensive infestations and areas of difficult terrain.
- Encourage conservation and landcare groups to become involved in management and active control of lantana.
- LCA's where lantana is declared noxious, target and reduce infestations on accessible public and private land.
- Majority of landholders within declared Zones will have developed a Control Plan by the end of this Plan.
- Establish a NSW containment line at the northern Eurobodalla Shire boundary by July 2003 in accordance with the Lantana National Strategy.
- Lantana is declared W2 from containment line to the Victorian border by 2003.

2.0 Stakeholder

2.1 Signatories

Local Control Authorities: Bega Valley Shire, Eurobodalla Shire, Shoalhaven City Council, Illawarra District Weeds Authority.

Government Agencies: Department of Land and Water Conservation southeast region.
National Parks and Wildlife Service south coast region
State Forests – southeast region.

Local Aboriginal Land Councils – see lists attached.

Other; Sydney Water, BHP, Rio Tinto, Department of Defence, RTA, SRA.

2.2 Other stakeholders

Bermagui Parks and Foreshores Committee
South East Catchment Management Board
Dignams Creek Community Group Inc.
South Coast Environment Network/groups
Coastcare
Environment Australia
Tilba & District Landcare

3.0 Background and general facts

3.1 Reason for plan

The purpose of this plan is to link and coordinate activities of local control authorities, researchers and public land managers with landholders, interested community groups and private land managers in implementing more effective control and containment throughout the Far South Coast. This plan will enable greater interaction by sharing knowledge and resources than currently occurs.

With adequate funding, the implementation of this plan will enable an effective sub- regional approach to begin.

Apart from Eurobodalla Shire, control is rarely implemented and only ad-hoc when it is. When this Plan is funded adequately, its implementation will enable an effective regional approach to begin.

Weed of National significance

Lantana camara has been recognised as a Weed of National Significance.

3.2 Description of the problem

Lantana camara is a common weed of pastures, forests, roadsides, gullies, and wastelands of the higher rainfall areas of the NSW and Queensland coast. It is considered one of the eight weed species posing most threat to native ecosystems along the East Coast of Australia.

It forms dense impenetrable thickets, tolerates shade and often becomes the dominant understorey in open forests and pastures by changing soil nutrients to favour Lantana and other weeds to the detriment of native plants. It has toxic properties to livestock, and provides harbour to vermin, including rabbits, foxes and feral cats. Lantana thickets impede access, alter fire regimes and reduce amenity and property values.

There is concern along the South Coast of NSW that Lantana is continuing to invade new habitat and what little control that is being done is often in isolation. Thus a regional plan will draw together available resources and maximise the results of regional co-operation.

Lantana is continuing to invade new habitat with the spread of existing infestations and establishment of new ones. Factors that contribute to lack of control include:-

- low awareness and knowledge of the plants impacts on both agricultural and conservation areas within the coastal environment
- lack of leadership or guidance on how best to utilise and coordinate existing resources.

Concern is increasing that as Bitou Bush is removed along the South Coast, Lantana will fill the void. This will create a worse situation, as Lantana will be more difficult to control in the dunal systems.

3.3 Distribution of infestations

Currently known infestations within the Bega Valley Shire are relatively minor. However recently several small infestations have been detected around the foreshores of Wallaga Lake mainly on public land. Single plants have been found in the towns of Tathra, Pambula and Eden.

Wallaga Lake forms part of the Shire boundary with Eurobodalla Shire. A comprehensive survey of the lake foreshores was conducted during Autumn 2000 involving personnel from Bega and Eurobodalla Shire Councils, National Parks and Wildlife Services and Merrimans Aboriginal Land Council. Infestations seen were relatively small and will be controllable if work proceeds soon. This will be subject to funding.

Eurobodalla Shire infestations occur mainly in the southern area between Narooma and the shire boundary with Bega. Infestations occur on private property and land under control of Council, State Forest and NPWS.

Infestations within Shoalhaven City Council and Illawarra Weeds District are more widespread with extensive areas along the escarpment and foot hills, and are evenly distributed over private and public lands. As these infestations are in the northern section of the South Coast a real possibility exists to prevent further spread and establishment over some 200 plus kilometres of NSW coastline from the Eurobodalla boundary with Shoalhaven, south to the Victorian border.

3.4 Weed biology/ecology

Lantana camara is a native plant of North, Central and South America. It was introduced into Australia as an ornamental, being grown by Macarthur at Camden Park in 1843. It has spread rapidly along the east coast, currently infesting about 4 million hectares. The plant tolerates a wide range of environmental conditions, thriving in both dry and humid climates. Mainly found on richer soils, it occurs on lowlands, mountain slopes and in valleys at altitudes between sea level and 2000 metres. Lantana forms dense impenetrable thickets of branching prickly canes scrambling up to fifteen metres with support of other vegetation.

Reproduction is from seed and suckers. Flowering occurs during the second growth season and continues through summer until April. New canes are produced from the crown during spring. Seeds may germinate anytime of the year provided moisture is present with most germinating during summer.

It is spread over larger distances by birds eating the fruit and voiding seeds. Human disturbances also encourage the spread of Lantana. Species of birds and distance of spread may require more careful study to obtain more accurate information.

Apart from its serious effects on the native ecology, some plant types are poisonous to stock. The thickets provide shelter for animal and bird pests and Lantana also acts as an alternative host for pathogens and pest insects.

3.5 Method and rate of spread

Information appears to be limited on methods and rate of spread of Lantana other than the suggestion it is spread by birds and contaminated soil. Frost is a limiting factor in its spread. The nursery trade may well have been a major contributor in its early spread and current practices suggest non-weedy species are still being sold. However this needs to be verified.

3.6 Roles and responsibilities of land managers.

The following land managers will have an important role in the implementation of this plan on land under their control: LCAs, National Parks and Wildlife Service, State Forests, Department of Land and Water Conservation, Aboriginal Land Councils, Department of Defence, Australian National parks, Sydney Water, BHP, and Rio Tinto. a.

Other support groups include Landcare, Catchment Management Boards and other Farmer/Land owner groups identified in LCA areas.

4 Legislative and regulatory situation

4.1 Current declaration

Lantana is currently declared noxious in Eurobodalla Shire as Category W2.

4.2 Declaration changes

Bega Valley Shire Council seeks to have *Lantana camara* (pink flowered) declared as W2 weed within its boundaries. This is essential to enforce control.

4.3 Enforcement strategy

Where the weed is rare, and infestations are small or isolated the expectation is for all land managers to fully and continuously control. If control cannot be achieved by promotion, then enforcement will be pursued. A declaration as W2 within both Bega Valley Shire and Eurobodalla Shire is essential for the success of the plan.

Where the weed is widespread the aim is to promote control to prevent in-filling and contain infestations by enforcement if necessary within Bega Valley and Eurobodalla Shires. In core areas, the aim is to promote integrated strategies including biological control. This will be necessary in relatively small areas of Eurobodalla Shire Council.

5 Considerations of opportunities

5.1 Opportunities to be exploited

This plan will provide opportunities for Landcare and other community groups to become involved with on-ground activities. The Regional Weed Action Program for Bitou Bush control along the South Coast also provides for consideration of Lantana management in the development of a Bitou Bush National Strategy. It is important that good linkages be created between both weed management programs. Such linkages may also lead to other sources of funding such as NHT, Coastcare or other land management agency sources. Being a Weed of National Significance, Federal assistance through the National Weeds program may provide opportunities.

5.2 Industry sectors

Environmental protection agencies may form closer links to address lobby groups' concerns. Better liaison in Lantana management may lead to dealing with larger issues of land development or management.

5.3 Ecological

Eurobodalla Shire Council and Illawarra District (Weeds) Authority have been actively involved with biological control programs through the NSW Lantana Biological Control Taskforce. Biological control has been unsuccessful to date, due to climatic factors.

5.4 Species management

A range of methods involving chemical, mechanical and cultural may be used on agricultural land and on smaller infestations. The range of control options of extensive infestations in bushland on difficult terrain will be much more limited. Knowledge may exist within communities and research establishments. This plan will provide an opportunity to collate this knowledge and develop a range of methods for use in specific situations.

5.5 Community

Community ownership and awareness of Lantana is perceived as low; thus extensive, well targeted awareness campaigns will be necessary.

Eurobodalla Shire Council has been involved in awareness raising and on ground activities for several years. This has been done in isolation and no regional approach has been attempted before. A regional approach with shared resources is likely to be cost effective and produce better results for the region.

5.6 Extension of education

Extension and education programs, a vital part of this plan, will need to be structured to share the workload between adjoining LCAs. Coordination of extension activities would be likely to achieve the better results. The frequency and quality of presentations is expected to improve. There is potential for sharing printed promotional material as well as sharing media material. Under a Regional program the timing of extension activities would be scheduled across the region to achieve the optimum results. Also the frequency and quality of presentations is expected to be better than what LCA'S can achieve in isolation.

5.7 Links to other strategies

This plan will have strong links with the South Coast Bitou Bush Management Project which has received funding under the Regional Weeds Action Program. Lantana has already been recognised in the Bitou Bush Management Plan as a successor/invaser of native plant communities when Bitou Bush has been removed.

The New South Wales Weeds Strategy supports task forces for 'Weeds of National Significance' such as Lantana. Thus stronger linkages will develop with the NSW Lantana Biological Control Task Force and the National Weeds Program, addressing the goals, objectives and actions of the National Strategy for Lantana Management.

Linkages will also be developed with National Parks and Wildlife Service through association with NPWS Bitou Bush Project funded under the NSW Biodiversity Strategy.

Other linkages include;

State Biodiversity and Natural Resource Management Strategies

Catchment Management Strategies

5.8 Contingencies

Barriers that currently inhibit implementation of this plan are:

- Insufficient resources – both human and financial,
- Poor community recognition and ownership of Lantana as a community weed problem.
- Prolonged dry periods making herbicide control less effective as this plant is easily stressed, especially in summer. Private property owners will not be subject to enforcement during such periods.
- Implementation of the plan will be dependent upon sufficient funds being available.
- Enforcement of control will be deferred if seasonal conditions are not suitable. However, the awareness and educational component of the plan will be continued and modified as necessary to increase community commitment to control Lantana in a carefully planned program.

When declared noxious, enforcement of control will be deferred if seasonal conditions are not suitable. However the awareness and educational component of the plan will be continued and modified as necessary to arouse community awareness and need to control Lantana in a carefully planned and staged program.

This Plan recognises that;

In some site specific situations LCA's and Authorities will request Lantana be retained for immediate soil stabilisation purposes along creek banks and the like.

Bush regenerators may leave perimeters of work with lantana infestations to discourage entry into rehabilitated areas until successful native establishment of natives.

Site specific situations may arise during bitou bush control along the coastline that requires lantana to be managed differently to the thrust of this Plan

6 Performance indicators and actions

Objective	Performance indicator	Action	By whom
1 Raise community awareness of spread and need for prompt control of Lantana.	Leaflets produced year 1 for distribution throughout region. Media articles-press and radio produced and presented-year 1 TV 30 second grab produced year 1.	Engage media professional to assist prepare material through linkages with RWAP Bitou Bush project.	South Coast LCA Weed Officers and consultants of the South Coast bitou bush/lantana project.
2 Promote the control of lantana where it is rare.	<ul style="list-style-type: none"> ▪1:25 000 maps produced year 1 indicating infestation as rare, widespread or core. Year 1 - commence inspections of land where declared noxious. Complete by end of year three. 	<ul style="list-style-type: none"> ▪Survey and record infestations ▪Visit and discuss control options with land managers. 	<ul style="list-style-type: none"> ▪South Coast LCA Weed Officers. ▪South Coast LCA Weed Officers.
3 Assist development of integrated strategies.	<ul style="list-style-type: none"> ▪Draft 'best bet' management strategies developed by end of year 2 ▪Final produced by year 5. 	<ul style="list-style-type: none"> ▪Create a body of knowledge through linkages with personnel working on similar projects 	<ul style="list-style-type: none"> ▪South Coast LCAs & Weed Officers
4 Encourage environmental and community minded people or groups to instigate local actions.	Groups established to control lantana by end of year 3 in each LCA area.	<ul style="list-style-type: none"> ▪Through awareness campaigns and direct approaches discuss partnership possibilities with many community groups. land managers. 	South Coast LCAs & Weed Officers.
5 Ensure that land managers meet their obligations imposed by the Noxious Weeds Act.	Majority of land managers where weed is declared noxious have implemented approved control measures by end of year 5.	Enforce Noxious Weeds Act.	South Coast LCAs & Weed Officers.
6 Establishment of containment line	Bega Valley Shire Council obtain declaration of Lantana as a W2 noxious weed.	Advertise declaration if application successful.	Bega Valley Shire Council Media Officer.
7 Include containment line in National Lantana Strategy	Containment line identified and included in National Lantana Strategy.	Seek inclusion of containment line.	South Coast LCA's & Weed Officers.
8 LCA's where lantana is declared noxious, target and reduce infestations on accessible public land by 50% by the end of this plan	Mapping records indicate a 50% reduction has been achieved	Annual control on accessible public land	South Coast LCA's and Weed Officers and public land managers.

7 Monitor and review process

- Review Lantana Control Plan annually and make required changes.
- Liaise with stakeholders over the plan period
- Stakeholders throughout the region to submit an Annual Report for their area of responsibility.
- Compile Regional Report.

Provide information, detailing resources directed towards the awareness and education campaign and control activities undertaken.

8 Benefits

Benefits to agricultural production systems will be the protection of existing enterprises estimated to be worth \$140. M (ABS 96/97 season) throughout the Far South Coast Region.

There would be huge environmental benefits would flow especially to native flora and fauna, enhancing the South Coast's natural attributes. Dollar values are difficult to estimate in regard to protection and retention of native ecosystems and their unique species. A fledging eco-tourism industry is anticipated to expand rapidly along the South Coast and may well be worth several million dollars annually within 5 to 8 years. This plan would aid in the protection of these assets and the relatively small cost to Government now would be recouped in increased private and public income generated from agricultural and eco-tourism enterprises.

9 Resources

9.1 Tangible human and financial.

This plan requires guaranteed commitment to provide human and financial resources during its implementation period of 5 years. Currently these resources are not fully available. However all LCAs have the support facilities needed for implementation. Successful implementation of this plan requires a major contribution of funds from Government.

9.2 Non-Tangible Knowledge

Links will be formed with others working on Lantana and other similar weeds control, both researchers and on the ground personnel. These links will be the basis for developing a broad knowledge and information base.

9.3 Other Stakeholders

Private and public land stakeholders together with communities will provide resources during the implementation of the plan. The extent and value of these contributions are unknown, but they will be considerable. This will be an essential component of the success of the management of Lantana.

Future Requirements

Future requirements are unknown. Ongoing management will be essential to add value to this plan. During year 5, a new plan will be developed which may incorporate many funding sources and involve a higher level of community participation. The second plan will capitalise on the linkages developed by this initial plan but not require the same degree of government funds to kick-start.

10 Summary

This plan provides a sound basis for governments to invest relatively minor funding in the protection of an extensive area of unique South Coast bushland and agricultural land, which in turn will enhance development of sustainable and varied enterprises throughout the Region.