1.0 COVER PAGE

NSW DEPARTMENT OF PRIMARY INDUSTRIES

REGIONAL WEED MANAGEMENT PLAN

1.1 PLAN TITLE: **Mimosa Bush Regional Management Plan**

1.2 PLAN PROPONENTS

Regional weed advisory committee: Macquarie Valley Weeds Advisory Committee
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Signature: Chairman: …….. Date: ……..

1.3 NAME OF PLANT(S) WONS n

Botanical name: *Vachellia farnesiana* Common name: Mimosa Bush
Sweet Acacia

1.4 PLAN PERIOD (not to exceed five years)

Starting date: 01/07/2008 Completion date: 30/06/2013

1.5 AREA OF OPERATION

All Local Control Authorities (LCA's) and Rural Lands Protection Boards (RLPB's) of the Macquarie Valley Weeds Advisory Committee.

1.6 AIM

To successfully manage Mimosa Bush in the Macquarie Valley.

1.7 OBJECTIVES

1.7.1 Considerably reduce impacts of existing weeds
1.7.2 Prevent new weed problems
1.7.3 Improve coordination and cooperation
1.7.4 Raise awareness of weeds issues within region

2.0 STAKEHOLDERS

2.1 SIGNATORIES

Participating Councils (LCA's):

- Bogan
- Bourke
- Brewarrina
- Cabonne
- Cobar
- Dubbo
- Mid Western
- Narromine
- Orange
- Parkes
- Wellington

Participating County Council:

- Castlereagh Macquarie County Council

Participating Rural Lands Protection Boards:

- Bourke
- Brewarrina
- Central Tablelands
- Cobar
- Coonabarabran
- Coonamble
- Dubbo
- Molong
- Mudgee/ Merriwa
- Nyngan
- Walgett

2.2 OTHER STAKEHOLDERS

- NSW Department of Primary Industries (DPI)
- State Forests
- NSW Department of Environment and Climate Change (DECC) – National Parks and Wildlife Service (NPWS)
- Department of Lands
- Catchment Management Authorities (CMA's)
- Regional Landcare Coordinators
- Aboriginal Lands Councils
- Service providers – Country Energy, Telstra, Australian Rail Track Corp (ARTC)

3.0 BACKGROUND AND JUSTIFICATION

3.1 PLAN JUSTIFICATION AND DESCRIPTION OF PROBLEM

Although this species is not declared noxious, we believe this species has the potential to become a significant problem for land managers.

- Mimosa Bush's ability to spread easily, grow quickly and dominate sites all contribute to this species weed potential.
- Its limited usefulness as a dietary supplement for livestock is outweighed by its invasiveness
- Infestations lead to reduced carrying capacity and productivity.
- This problem must be addressed now, while local control and eradication is still feasible.
- With the cattle industry becoming more popular, this species has tremendous potential for spread.

3.2 THE 'DO NOTHING' OPTION

If this species is not controlled and allowed to continue at its current rate of spread:

- It will cause significant problems for landholders as dense thickets form.
- These thickets usually infest watercourses, hindering access to watering points.
- Dense thickets also cause problems during mustering.
- Infestations are costly to control. These increased control costs will be yet another burden to landholders during the time of drought.

- Infestations reduce agricultural productivity.

3.3 DISTRIBUTION OF INFESTATIONS

Native to sub-tropical areas of the Americas, Mimosa Bush is naturalised and cultivated in America, Africa and Australia. It has also become an invasive species in a number of Pacific nations. It is now widespread throughout northern Australia, occurring in Western Australia, South Australia, Northern Territory, Queensland and New South Wales.
Mimosa Bush will grow in woodlands, scrublands, grasslands and low open forests, as well as open floodplains and near watercourses. It will grow in a variety of soils including alluvial clays, heavier soils, as well as loams and sandy soils where it acts as a binder. This species particularly invades disturbed sites such as trampled areas, and along watercourses.
Within the Macquarie Valley this species occurs in the areas of Bogan Shire, Bourke Shire, Brewarrina Shire, Castlereagh Macquarie County Council (some very heavy infestations) and Cobar Shire.

3.4 WEED BIOLOGY

This thorny deciduous bush grows to 2-5m in height, and is often mistaken for Mesquite or Prickly Acacia.
Mimosa Bush is a multi-stemmed spreading shrub with smooth grey-brown bark and zigzagged branchlets. Pinnate leaflets are light green with 3-10cm long thorns at the base of the petiole. Seedpods can be up to 8cm long, dark brown to black and straightish in shape. Mimosa Bush will flower, and subsequently bare fruit, irregularly throughout the year. However, mostly flowering occurs June-September with fruit mostly in November-May. In some parts of the world this bush is cultivated for perfume production as flowers have a pleasant, sweet aroma. Seeds sprout readily and grow quickly producing a short-lived plant. They have an open habit but easily form dense thickets, especially along watercourses. If prevented from forming these thickets, this can be a useful plant providing shade and a dietary supplement to stock during the dry season. It is drought tolerant, readily eaten by stock as the foliage and green pods are palatable to cattle and sheep, and has good regrowth after grazing. However, over-grazing can lead to thicket formation.
While it often infests watercourses, Mimosa Bush grows well in dry sites, on loamy and sandy soils. It will grow in any acid or alkaline soils.
Believed to be introduced to Australia before European settlement, Mimosa Bush is native to Central America. It is thought that it entered Australia via the Philippines. Because of this interesting introduction, Mimosa Bush is classified by the Department of Environment and Conservation (NPWS) as a "native" plant as it was present before European settlement. It is therefore subject to section 17 of the Native Vegetation Regulation 2005 as a 'feral native'.

3.5 METHOD AND RATE OF SPREAD

Seedpods are highly nutritious and sought after by grazing animals. Cattle readily eat the protein rich pods, scattering the seeds randomly around the paddock. The seeds pass through cattle's digestive system, remaining viable. Mimosa Bush will then form impenetrable thickets causing problems for mustering and limiting access to watering points.
Other grazing animals such as sheep and goats will also eat leaves and seedpods of the Mimosa Bush, but seeds do not survive.

3.6 SPECIES MANAGEMENT

As with most species, Mimosa Bush requires integrated weed management to achieve successful control.

- Grazing pressure will achieve a certain level of control over isolated plants; however over-grazing can lead to thicket formation.
- Mechanical chaining and chemicals will control and even eradicate larger stands. They must be used together as only grubbing or grading will increase infestation size.

- Basal bark spray to 30cm in height is recommended for stems up to 15cm diameter. Larger stems must be sprayed to 100cm in height
- Cut stump – stump must be painted with a herbicide mixture immediately after the stump has been cut, leaving no time for vascular capillaries to close.
- Bore drains – water must not be used for domestic use or for watering desirable plants for 7-14 days after treatment.

Mimosa Bush can also be included in other species management plans due to similarities in growth, reproduction and spread characteristics. Similar species include Prickly Acacia, Mesquite and Parkinsonia.

3.7 KEY LAND MANAGERS

- LCA's
- RLPB's
- Landholders
- National Parks
- State Forests
- Department of Lands
- Service providers – Country Energy, ARTC
- RTA

4.0 LEGISLATIVE AND REGULATORY SITUATION

4.1 CURRENT DECLARATION

This species is not currently listed as a noxious weed in NSW and unfortunately the unknown origins of this species will hamper any efforts for declaration changes. However, control is possible through section 17 of the Native Vegetation Regulation 2005. Through this exemption in the Native Vegetation Act 2003, it will be legal to clear Mimosa Bush stands if this species is listed by relevant catchment management authorities as a 'feral native'.

4.2 DECLARATION CHANGES

Macquarie Valley Weeds Advisory Committee is currently seeking a Class 3 declaration of Mimosa Bush (*Vachellia farnesiana*) in the following LCA's:

- Bogan Shire Council
- Bourke Shire Council
- Brewarrina Shire Council
- Castlereagh Macquarie County Council
- Cobar Shire Council
- Narromine Shire Council
- Parkes Shire Council
- Unincorporated Area of Western Division

5.0 CONSIDERATIONS AND OPPORTUNITIES

5.1 FINANCIAL SUPPORT TO CARRY OUT THE PLAN

The majority of the financial support for this plan will be provided as part of LCA/RLPB weed control programs. Any other funding source deemed relevant by MVWAC will also be explored.

5.2 LINKS TO OTHER STRATEGIES

- Australian Weed Strategy
- NSW Invasive Species Plan (currently in draft form)
- MVWAC Regional Weed Strategy
- Catchment Action Plans

5.3 BARRIERS AND CONTINGENCIES

Barriers:

- Landholders fail to control Mimosa Bush because of the lack of suitable (nil) enforcement rules.
- Lack of knowledge of the potential damage done by the lack of control of Mimosa Bush by landholders and government agencies.

Contingencies:

- Variable seasonal conditions
- Resource shortfalls occurring when enforcement is not compulsory.

6.0 ACTION PLAN

Objective	Action	Performance indicator	By whom
1.7.1 Considerably reduce impacts of existing weeds	All public lands to be inspected annually	100% of all roadsides, reserves and Travelling Stock Routes (TSR's) inspected.	LCA weed officers & RLPB rangers
	Control methods to be carried out on all infestations on LCA & RLPB lands as seasonal conditions allow	Existing infestations on LCA/RLPB lands controlled	LCA weed officers & RLPB rangers
	All private properties identified as having infestations are to be inspected annually and regulatory action taken as required	100% of identified properties inspected Existing core infestations on private lands reduced by 50% Existing rare and isolated infestations on private lands reduced by 80%	Landholders, LCA weed officers & RLPB rangers
1.7.2 Prevent new weed problems	Inspect for Mimosa Bush as part of routine property inspection program	Mimosa Bush is included in the inspection routine	LCA weed officers & RLPB rangers
	Aspects of the rapid response program to be implemented when a new infestation is discovered	100% of located new infestations recorded and mapped 100% of new infestations treated 100% of new infestations to be monitored and follow-up treatment programs implemented	Landholders, LCA weed officers & RLPB rangers
	All infestations to be contained to prevent new weed problems	Buffer zones established around sites known to be infested	Landholders, LCA weed officers & RLPB rangers
1.7.3 Improve coordination and cooperation	All infestations to be recorded and mapped	Maps produced and updated regularly Data recording standards adhered to	LCA weed officers & RLPB rangers
	Plan implementation to be monitored and reviewed	Review process (as outlined in section 7.0) carried out	RPO, LCA weed officers & RLPB rangers
	Actively seek partnerships with other weed management agencies	Partnerships developed where necessary	RPO, LCA weed officers & RLPB rangers
	Develop on-ground management plans with	Plans of management entered into and partnerships developed	LCA weed officers &

	neighbouring landholders, LCA's and RLPB's	with neighbouring landholders, LCA's and RLPB's	RLPB rangers
1.7.4 Raise awareness of weeds issues within region	Mimosa Bush to be part of a regional weeds awareness program	Advertisements on television Field days held Displays at local shows attended by Weed Officers Weed pamphlets distributed to landholders during property inspections Weed Calendars distributed by LCA's and RLPB's	DPI, RPO, LCA weed officers & RLPB rangers

7.0 MONITOR AND REVIEW

There will be an annual review of the Mimosa Bush Regional Management Plan to ensure the performance indicators are realistic and are being met. Member LCA/RLPB's weed officers and rangers will participate in the review process. This would include discussions on increases or decreases of range, new incursions, successful management strategies, expectations and results.

8.0 BENEFITS

This Plan will benefit the Macquarie Valley Region by

- Maintaining Agricultural production.
- Increasing access to watering points.
- Decreasing potential future costs.
- Controlling a weed before it becomes a problem too great to control.

9.0 RESOURCES

- North West Weeds website
- PlantNET – FloraOnline
- Agnote No. 584 - Northern Territory Department of Primary Industry, Fisheries and Mines.
- Noxious Weeds of Australia, W.T. Parsons and E.G. Cuthbertson pp433
- Plants of Western New South Wales, G.M. Cunningham, W.E. Mulham, P.L. Milthorpe, J.H. Leigh pp361
- Woody Weed Control Guide, Dow Agrosciences Printed July 2006 pp18
- NSW Agriculture, Keep New South Wales Mesquite Free, Job 3201 pp3 & 4
- NRM facts, Queensland Government Pest Series, Identification of prickly bushes, PP40