

REGIONAL WEED MANAGEMENT PLAN

1.1	PLAN TITLE:
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1.2 PLAN PROPONENTS	
Regional Weeds Advisory Committee:	Northern Inland Weeds Advisory Committee (NIWAC)
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Signature: Chairman	Date: Submitted 30 Oct, 2004

1.3 NAME OF PLANT(S)	WONS	NO
Botanical name(s): <i>Bryophyllum spp</i>	Mother of Millions	

1.4 PLAN PERIOD (not to exceed five years)	
Starting date: 1 st July 2005	Completion date: 30 th June 2010

1.5 AREA OF OPERATION

The Northern Inland Weeds Advisory Committee (NIWAC) covers approximately 100 000 km² in north western NSW. This area extends from the Queensland border, south to the Liverpool Range and east to adjoining coastal catchments, as shown in the map on page 19. Most of the NIWAC area is covered by this plan.

1.6 AIM - NO LIVESTOCK POISONING FROM MOTHER OF MILLIONS ON PUBLIC AND PRIVATE LAND IN THE NAMOI, GWYDIR AND NEW ENGLAND.

- 1.7 OBJECTIVES**
1. Eradicate all *light and rare and isolated* infestations on TSRS and all public land by January 2010.
 2. Reduce the size and density of *core (H3, H2, H1, M3) infestations* (based on October 2004 levels) on TSRS and public land by January 2010.
 3. Reduce the number, size and density of existing *marginal/medium (M2, M1) infestations* on all LCA land (based on October 2004 levels) by January 2008 through effective management and control.
 4. Limit the number of *new infestations* on private and public land by January 2010 by preventing spread from infested areas.
 5. Increase *community awareness* about Mother of Millions - Desired outcome: 75% of the community aware of MoM, its impacts on animal health and effective management options by January 2010.

2. STAKEHOLDERS

2.1 Signatories - organisations committed to the objectives/performance indicators of this plan.

- Armidale RLPB (ARLPB);
- Glen Innes Severn Shire Council (GISSC);
- Gunnedah Shire Council (GSC);
- Gwydir Shire Council (GwSC);
- Inverell Shire Council (ISC);
- Moree Plains Shire Council (MPSC);
- Moree Rural Lands Protection Board (MRLPB);
- Narrabri Rural Lands Protection Board (NRLPB);
- Narrabri Shire Council (NSC);
- North West Weeds (operating on behalf of Inverell and Gwydir Shire Councils);
- New England Weeds Authority (NEWA);
- Tamworth Regional Council (TRC); and
- Tenterfield Shire Council (TSC).

2.2 Other stakeholders - interested parties consulted as part of this process involved in implementing the plan.

All LCAs and RLPBs in the NIWAC region were invited to contribute to this regional plan. Those organisations not included as stakeholders chose not to be involved because they either do not have African Boxthorn and/or do not consider it a potential problem in their area.

3. BACKGROUND & JUSTIFICATION

3.1 Plan justification - reason for this plan

Mother of Millions plants, especially the flowers, are poisonous to stock and can cause cattle deaths. Cattle under stress, or in unusual conditions, are more likely to eat strange plants. Shifting cattle to new paddocks, moving stock through infested rubbish dumps and a reduction of feed due to flood or drought can all contribute to poisoning.

The toxic properties of Mother of Millions are a driving factor behind this plan. In 1999, 125 head of cattle died at Moree and Narrabri - a loss estimated at \$100 000 - we are keen to minimise the chance of similar disasters in the future. The potential impact of Mother of Millions is also likely to increase in the short to medium term because of the ability of plants to withstand long periods of drought.

Although MoM has been targeted for many years, it is still considered intractable in several areas. Many landholders still need help to identify it in core areas and to manage it better.

This plan was originally submitted in November 2002 with subsequent changes submitted in May 2003 to address NSW Agriculture comments. This is the third version of this plan. Although

much of this plan is unchanged, this November 2004 version includes more stakeholders and addresses the situation on the tablelands, as well as the slopes and plains. As a result of the continuing planning process, LCAs on the tablelands will be seeking changes to the declaration of Mother of Millions in their areas. These changes are outlined in section 4.

3.1.1 Description of the problem - current and potential impact

Current impact

RLPBs in our region report that Mother of Millions has a huge impact on the available grazing land due to its toxicity to stock. It is a particular problem in waterways and timbered areas. In these areas, RLPBs have found it necessary to prohibit stock access. This action has effected one of the core functions of an RLPB, which is to provide free passage and grazing for travelling stock.

Potential impact

Mother of Millions has significant potential to impact on our region because it is very adaptable and invasive, with the ability to invade riparian areas. For example, based on the preferred soil types, temperatures and rainfall patterns, Mother of Millions has the potential to spread onto almost all TSRS on the northern slopes.

There is a major threat to the Moree Plains Shire, with infestations moving downstream from the adjoining Gwydir Shire (pers comm. Les Tanner, North West Weeds).

Why is it important that this weed is controlled?

A native of tropical Africa, Mother of Millions was introduced into Australia as a garden plant and has become naturalised as a weed of town and rural areas. The plant commonly grows abundantly on shallow, stony soil in open forest country or on loose sandy soil. One Mother of Millions plant can easily reproduce - the small foliage buds drop readily, develop roots and establish quickly to form a colony, hence the common name.

Infestations on the tablelands are still at a manageable level, hence the need to focus on control to prevent the problem from escalating. Existing infestations on the tablelands and slopes present a serious threat to grazing and have been held responsible for livestock poisoning.

As an urban weed, the community must understand the potential impacts of Mother of Millions on humans, livestock and the environment. If they do not, they will continue to dump plants in bushland and agricultural areas and make no effort to remove it from gardens and urban areas. This could facilitate further spread and potentially threaten biodiversity and agricultural production.

3.2 The do nothing scenario

If not controlled, existing Mother of Millions infestations could spread to new uninfested areas. Many existing infestations adjoin LCAs that are currently clean. More infestations obviously increase the potential for livestock poisoning and associated economic impacts.

Some RLPBs believe that, without mandatory control, some landholders who do not run stock would chose to ignore the spread. This would have the effect of providing a nursery to continually infect adjoining and downstream properties.

The potential impact of Mother of Millions is also likely to increase in the short to medium term because of the plant's ability to withstand long periods of drought. Given this justification, and the current extent and impact of Mother of Millions, it makes sense to control this problem while it still at a manageable level.

3.3 Distribution - where it occurs.

Plants generally establish well in leaf litter or other debris on shallow soils and often grow on roadsides, along fence lines and around old rubbish dumps. Anecdotal evidence suggests that Mother of Millions prefers lighter, sandier, soil.

In our region, Mother of Millions mainly occurs on the slopes and plains. However, more plants are now being found on the tablelands. The LCAs involved in this plan are still gathering accurate information on the extent and impact of Mother of Millions in their areas. Until then, existing information is summarised in the table below and on the **regional map** on page 17. Further information on infestations on RLPB land will be made available as soon as possible.

LCA area	Extent and location of infestations
Glen Innes Severn Shire	Not present - not even in town gardens
Gunnedah Shire	■
Moree Plains Shire	Infestations are moving into MPSC from the adjoining Gwydir and Inverell Shires.
Narrabri Shire Council	■
New England Weeds Authority	Minor problem, currently along the Macleay River, in the Lower Creek area. About 50 acres of RLPB land are also infested. 2004 was the first year that RLPB land was sprayed.
Northern Slopes RLPB (part of North West Weeds area)	The worst infestations are in the Croppa Creek/Tantaranna/Mungle Creek areas. Light infestations occur at Keetah Crossing on the Macintyre River and at Delungra.
North West Weeds	Not widespread but there are major infestations in this area. This is possibly one of the key LCAs for Mother of Millions. North of the Bruxner Highway nearly every creek has infestations and much of the land from North Star to the NSW/QLB border also has some levels of Mother of Millions.
Tenterfield Shire	Less than 1% of the total shire is infested with Mother of Millions, including an estimated 4 ha of private land and scattered plants along about 10 km of roads towards Ashford.

3.4 Biology

Mother of Millions are erect, smooth, fleshy succulents growing to one metre or more high. (QLD NRM, 2000). All species form tall flower spikes in winter with clusters of bell shaped flowers. Each species has a distinctive leaf shape, but all produce small plantlets along the edges of leaves. *Bryophyllum tubiflorum* (common mother of Millions, mission bells and Christmas bells) have grey- brown, tubular like leaves with up to seven projections at the tip of each leaf. Flowers are orange red and occur in clusters at the top of the single stem. Seed can germinate for many years.

3.5 Method and rate of spread

Method of spread

Plantlets (which grow on the leaf margins and fall to the ground producing new plants) drop readily, develop roots and establish quickly to form new colony. These daughter plants aid in the rapid, vegetative dispersal of parent plants. Roadside infestations can be spread by machinery such as slashers and other vehicles. Dispersal by birds and animals appears to be minimal but can occur. Seeds or plantlets are not spread by wind, because of their weight, but can be carried long distances by water.

Rate of spread

The Northern Slopes RLPB reports that the spread of Mother of Millions on TSRs in their area is minimal because of dry seasons and the extensive control being undertaken. However, history has shown that the rate of spread from know heavy infestations, on adjoining private property, is considerable immediately following flooding.

In the NEWA area, infestations are spreading slowly along the Macleay River but hardly at all along roadsides.

3.6 Species management

Unlike some noxious weeds, control of Mother of Millions is reasonably cheap and there are numerous effective control measures. Some of these measures are outlined below.

Physical - plants and plantlets can be removed and destroyed in a hot fire.

Chemical - chemical options include: Triclopyr + picloram (various trade names), 2, 4- D Amine 500g/L (various trade names), 2, 4 - D acid 300g/L (AF 300®) and Fluroxypyr (Starane 200 ®). *For further information on chemical control refer to Noxious and Environmental Weed Control Handbook 2004-2005.*

Non chemical options - Maintaining a strong, active pasture or competitive crop, in conjunction with appropriate herbicide treatment, is seen as the best non chemical option.

Grazing - not an option because the plant is poisonous.

Plants should be inspected and treated any time they appear, but especially during spring and early summer. The table below summarises the management options for varying levels of infestation.

	LEVEL OF INFESTATION (LOI)					COMMENTS
	Core	Marginal			Rare Isolated	
		H	M	L		
Chemical		✓	✓	✓	✓	Chemical control is effective in preventing seed production.
Physical removal		✓	✓			Mechanical measures eg use of bulldozers and ripping are effective to clear the vegetation burden and provide a buffer.
Pasture improvement		✓	✓	✓	✓	Good, dense pastures will limit seedling establishment and in the long-term, can also reap financial benefits.
<i>Restricted stock movement</i>	NOT APPLICABLE					May need to consider retiring some TSRs and diverting stock to MOM free areas.
Cultivation	✓	✓	✓	✓	✓	Can be used prior to other control methods - but must be part of an integrated program.

Management options for Mother of Millions based on the level of infestation

3.7 Key land managers

The resources required to implement this plan are identified in the Action Plan (Pages 6-10), as are the responsibility of various stakeholders. All affected LCAs and relevant RLPBs will use this plan to guide local management of Mother of Millions. The type and level of implementation will vary depending on the extent and degree of infestations. Specific responsibilities of various stakeholders are outlined below.

Local Control Authorities - LCAs will:

- Commit their own dollars, time and staff to implementing this plan;
- Control MOM on areas of public land;
- Conduct extension activities; and
- Enforce legislation on private properties.

Rural Land Protection Boards - Because of its impacts on stock health and the potential for stock deaths, Mother of Millions poses a major problem for Travelling Stock Routes. Consequently, RLPBs, and landholders using RLPB land, have the most to gain from a regional approach to Mother of Millions. Their role is similar to LCAs, with the exception on enforcing legislation on private properties.

Other public land managers:

- Commit their own dollars, time and staff to implementing this plan;
- Incorporate aspects of the regional plan into their operations; and
- Work together in cooperative partnerships with the community and other stakeholders; and
- Control MoM on areas of public land to prevent further spread.

Private land managers - Under Noxious Weeds Act, 1993, private land managers must control Mother of Millions on their property and, hence wear the costs of control. Because of the huge area of private land, control costs in these areas generally outweigh those on public land. Although private land managers haven't been involved in developing this plan, many extension activities will target them.

Producer groups - Producer groups and existing networks, such as Landcare and NSW Farmers, will also be targeted. They will be used for extension, education and awareness programs.

4 REGULATORY SITUATION

4.1 Current classification

The current declaration varies across the region. Central Northern County Council, Gunnedah and Narrabri have a W3 declaration and Tenterfield a W2. Moree Plains Shire Council applied in 1999 for Mother of Millions to be declared as a W3 weed but this resulted in a W4c declaration, which is not considered suitable.

4.2 Declaration changes

The NIWAC believes that effective control of Mother of Millions will only be achieved through a uniform declaration across all LCAs in the NIWAC region.

LCAs on the tablelands, notably Glen Innes Severn Shire Council, New England Weeds Authority and Tenterfield Shire Council, believe that Mother of Millions should be a W2 weed in their area. This would mean that the weed would need to be fully and continuously suppressed. Moree Plains Shire has also indicated that they will apply for the declaration for their area to be changed. Submissions for these changes will be submitted individually by the respective LCAs.

5. CONSIDERATIONS & OPPORTUNITIES.

5.1 Financial support to carry out the plan

All stakeholders listed in this plan will contribute a significant proportion of their own funds towards implementing this regional plan. Department of Primary Industries noxious grant funding will also be accessed. However, given the limited nature of these funds, it is expected that this will only account for a small percentage of total expenditure to implement this plan.

The Action Plan section of this plan indicates the funding source for specific actions.

5.2 Links to other strategies

This plan is linked to the NIWAC Regional Strategy which addresses generic issues of coordination, cooperation and communication.

It is also linked to the State Weed Strategy in that it aims to reduce the negative impact of an existing weed, by reducing its distribution and by developing strategies to minimise the impact.

Specific strategies addressed through this plan include the following:

- Promote control options that will lead to a reduction in use of herbicides;
- Provide information on best-practice weed management through media, publications, public and private consultants;
- Implementation of effective weed control programs on public, State-owned and Crown land;
- Develop best-management guidelines for roadside weed control programs;
- Promote collaboration and resource-sharing between RLPBs and LCAs;
- Ongoing planning/monitoring of weed control programs to ensure that objectives are achieved in an efficient and cost-effective manner;
- Provide detailed action-plans for individual weeds and links to other strategies through NSW Agriculture's WWW site; and
- Undertake publicity program to explain Noxious Weeds Act and other legislation relevant to weed control programs, including publication of guidelines.

5.3 Barriers to adoption

Barriers restrict what can be done and how. Identifying these barriers is the first step to overcoming them. Some of the barriers to controlling and managing Mother of Millions are listed below:

- B1. *Cost of control for RLPBs with larger infestations*** - for this reason the aim is to reduce the size and density of these infestations rather than totally control.
- B2. *Lack of consistent classification across region*** i.e. different land managers have different requirements to control.
- B3. *Poor understanding of what MoM looks like*** - some people still can't identify the plant, unless it's flowering. This is a relatively minor barrier.
- B4.** Restrictions on \$ available for control on Crown Land.
- B5. *Complacency*** - this is a common barrier that applies to most weed control.
- B6. *Potential use as a garden plant*** - Mother of Millions has attractive flowers at times of the year when many other plants aren't flowering. This could make it attractive to home gardeners, encouraging people to plant it and/or not remove it if they have it.

5.4 Contingencies - Opportunities to be exploited.

When this plan was first considered in 2000, the NSW Department of Land & Water Conservation and the Queensland Department of Natural Resources were jointly working to establish a NSW release site for a potential biological control of Mother-of-Millions.

Plants from Mungle Creek (the release site) were propagated at the Alan Fletcher Research Station (near Brisbane), ready for the introduction of the leaf and stem-boring insects from Madagascar. The first bio-agents were brought into Australia in late 2000. A quarantine period of 12 months was required while further host -specific trials were conducted in Australia.

A release has been made at the Mungle Creek Crown Reserve, located 20 kilometres east of North Star in north western NSW. This project provides opportunities for LCAs to be involved and many are eagerly awaiting the results of this trial in the hope that bio agents may be available to use as part of an integrated approach.

7. MONITORING & REVIEW PROCESSES

Each stakeholder will be required to report against performance indicators at least annually. Stakeholders will also be required to provide regular updates on the infestations in their area, using a format agreed to by NIWAC. These reports include details of spraying activity and results from inspections including the number of properties inspected, number of infested, the hectares infested and the type of infestations.

Individual reports will be collated into an annual regional infestation report. This regional report will be used to monitor outcomes and to assess if the weed problem has improved or worsened. An example of the annual infestation report is included on page 18.

Stakeholders will also be encouraged to use NIWAC meetings to report on any regionally significant issues.

8 BENEFITS

This plan aims to achieve a higher level of control of MoM, through publicity and extension, to ensure that land managers know what MoM looks like and how and why it should be controlled. The key benefits of this plan is a reduction in the number of Mother of Millions plants which, in turn, means less animal deaths from poisoning.

A more uniform approach will mean a high level of control on roadsides. In the medium term this will:

- a) Mean less reliance on grant funds;
- b) Increase community confidence in public land managers; and
- c) Prevent duplication and the potential for overlap.

9. RESOURCES

Amidy, L (2002) Namoi, Gwydir, New England Noxious Weed Control Handbook - A guide to integrated noxious weed management and integrated pest management.

Ensby, R (2004) Noxious and Environmental Weed Control Handbook 2004-2005 - A guide to control in non crop, aquatic and bushland situations, NSW Agriculture

NSW Agriculture - Guidelines for Writing Regional Weed Management Plans - 2002/2003.

Queensland Department of Natural Resources and Mines (Qld NRM). March 2000. NRM Pest Facts PP33 Mother of Millions Bryophyllum species, Queensland Department of Natural Resources and Mines - Land Protection, Brisbane.

ACTION PLAN

FURTHER EXPLANATION OF OBJECTIVES AND HOW THEY MEET THE SMART CRITERIA

OBJECTIVE 1 Eradicate all light and rare and isolated infestations of Mother of Millions on TSRS and all public land by January 2006.

- This objective is *specific* - it relates to marginal and rare/isolated infestations on TSRs and public land. This plan is based on the principle that the greatest public benefit, and value for money, is achieved by focussing on rare/isolated infestations - rather than heavy areas where control is not economically feasible.
- Is it *achievable and realistic*? It is difficult to know if this is achievable until we have accurate information on the number of infestations, their size and the ability to treat. However, local knowledge suggests that this objective is achievable and realistic within the life of the plan.

OBJECTIVE 2 Reduce the density of heavy/core (H3, H2, H1, M3) infestations on TSRs and public land by January 2006.

- This objective is *specific* - Although the priority is to tackle new and smaller infestations, heavy infestations still need to be managed to prevent further spread. These infestations are specified according to the attached matrix for classifying infestations and generally relate to those properties/sites where more than 20% of the site is infested with Mother of Millions. This objective highlights TSRs because of the potential for stock poisoning from Mother of Millions in these areas.
- The objective *is achievable and realistic* - this is considered to be the best possible outcome given limited time and resources of public land managers.

OBJECTIVE 3 Reduce the number, size and severity of existing marginal/medium (M2, M1) infestations on all LCA land by January 2008 through effective management and control.

- This objective is *specific* - it relates to the number, size AND severity of EXISTING medium infestations. These infestations are specified according to the attached matrix for classifying infestations and generally relate to those properties/sites where between 5 and 20% of the site is infested with Mother of Millions.
- Effective management and control strategies are not specified because they will vary according to local conditions.

OBJECTIVE 4 Limit the number of new infestations on both private and public land by January 2008 by preventing spread from infested areas.

- This objective is realistic - the previous regional plan had no new infestations as an objective but review of this objective came to the conclusion that it was not realistic. The most realistic outcome is to limit or minimise any new infestations.

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Objectives 1 - 4 can all be measured by comparing the number of infestations at the start and end of the plan period. All LCAs in the NIWAC region have a standard approach for recording infestations on private property. This involves recording the number of hectares infested and the infestation category. The infestation category is based on the severity/degree of infestation, expressed as either 1 (scattered individual plants) 2 (scattered patches with isolated plants) or 3 (large, dense infestations) and the extent/% of property infested, expressed as either High (over 20% of the property infested) Medium (5 - 20% of the property infested), Low (1-5% of the property infested), Rare/Isolated (less than 1% of the property infested) or Not Found. The attached table explains these categories and shows the relevance of this approach for monitoring outcomes.

OBJECTIVE 5 Increase community awareness about Mother of Millions - Desired outcome: 75% of the community aware of Mother of Millions, its impacts on animal health and effective management options in all areas by January 2007.

It's difficult to specify the amount of change in community awareness and these types of goals are difficult to measure. However, given the potential impacts of Mother of Millions, and the current extension activities within the region, we believe that this goal is achievable and realistic within the nominated time frame (next 4 years).

SURVEILLANCE AND MONITORING STRATEGY AND ACTIONS

Surveillance is important to gain a better understanding of the extent and impact of the problem and to monitor any changes in the situation. Without this information it is impossible to know if the situation is improving or getting worse and to decide how to best direct resources to meet the plan aims and objectives.

While not included in the DPI format for regional plans, these columns are included so every stakeholder can look at the plan and know exactly what they are expected to do and when by.								
NO	WHAT	PERFORMANCE TARGET	BY WHOM	WHERE	WHEN	PRIORITY	L/R	\$ SOURCE
1.	Identify and map current infestations, their size and chance of successful treatment.	All infestations mapped and classified	TSRs in conjunction with LCA	All public land incl roadsides and TSRs	ASAP	ESSENTIAL	Local & Regional	Council funds
2.	Prioritise current infestations to be treated, based on the likelihood of successful control.	All infestations prioritised.	TSRs in conjunction with LCA	All public land incl roadsides and TSRs	ASAP	ESSENTIAL	Local & Regional	Individual LCA and RLPB funds.
3.	Ensure that local inspections include urban areas.	All local inspection programs to specifically include urban areas.	All LCAs	Private land	On going as part of programmed inspection	DESIRABLE	Local	Inspectorial grants, existing LCA funds

CONTROL AND MANAGEMENT STRATEGIES - GENERAL

While not included in the DPI format for regional plans, these columns are included so every stakeholder can look at the plan and know exactly what they are expected to do and when by.								
NO	WHAT	PERFORMANCE INDICATOR	BY WHOM	WHERE	WHEN	PRIORITY	L/R	\$ SOURCE
4.	Control MoM on identified TSRs.	MoM eradicated on all marginal infestations by 2008.	RLPBs in conjunction with relevant LCAs.	Marginal infestations as identified	Ongoing based on outcomes of Action 1.	ESSENTIAL	Local	DPI grant funds
5.	Control MoM on identified roadsides.	Roadsides sprayed annually.	Relevant LCAs	Marginal and rare/isolated	Annually	ESSENTIAL	Local	DPI grant funds
6.	Encourage landholders to control Mother of Millions prior to flowering.	80% of landholders controlling before flowering.	Private land managers targeted through LCAs	Private land	On going	ESSENTIAL	Local & Region	DPI grant funds
7.	Encourage landholders to maintain strong active pastures or competitive crops in conjunction with a broadleaf herbicide application.		LCAs, Agronomists	Private land	On going	DESIRABLE	L & R	DPI grant funds
8.	Strictly enforce the current classification on private property and ensure that infestations are controlled.	All infestations controlled according to the declaration.	LCAs Weed Officers	Marginal infestations - private land	On going	ESSENTIAL		

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CONTROL AND MANAGEMENT STRATEGY AND ACTIONS - CORE INFESTATIONS

Related objectives:

Heavy infestations require a different management approach to ensure that they do not increase in size and, ideally, that the plant density is reduced.

				While not included in the DPI format for regional plans, these columns are included so every stakeholder can look at the plan and know exactly what they are expected to do and when by.				
NO	WHAT	PERFORMANCE INDICATOR	BY WHOM	WHERE	WHEN	PRIORITY	L/R	\$ SOURCE
9.	Identify, map and list sites where treatment is not currently feasible and the reasons why.	Sites identified and detailed in written report by September 2003.	RLPBs in conjunction with LCA	All public land including roadsides and TSR.		DESIRABLE	Local& regional	Individual LCA and RLPB funds.
10.	Ensure that heavily infested sites are locked up during risk times to minimise stock poisoning.	No stock allowed on heavily infested sites during risk times.	RLPBs	Core areas where treatment is not viable.	During drought and flood	ESSENTIAL	Local	Existing RLPB operating funds
11.	Advise landholders that access to some TSRs may be restricted during risk times to avoid stock poisoning.	Development of a policy addressing actions 4 and 5.	RLPBs in affected areas.	Core sites in all RLPB areas	As needed	DESIRABLE	Local	Existing RLPB operating funds
12.	Fence off heavy infestations and patrol the edges to minimise further spread of plant propagules until economically viable control options are available.	All heavy infestations fenced and appropriately managed.						

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13.	Initiate an insect rearing and release project.		Coordinated through NIWAC. Involve Landcare/producer groups	Core areas	To be decided.	DESIRABLE	R	External Research organisations
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REGIONAL WEED MANAGEMENT PLAN - MOTHER OF MILLIONS (MAY 2003)
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CONTROL AND MANAGEMENT STRATEGY AND ACTIONS - LIGHT AND RARE/ISOLATED INFESTATIONS

Related objective: Eradicate all light and rare and isolated infestations of Mother of Millions on TSRS and all public land by January 2006.

				While not included in the DPI format for regional plans, these columns are included so every stakeholder can look at the plan and know exactly what they are expected to do and when by.				
NO	WHAT	PERFORMANCE INDICATOR	BY WHOM	WHERE	WHEN	PRIORITY	L/R	\$ SOURCE
14.	Focus control on roadsides, private and public properties where clean areas adjoin existing infestations.	All new infestations controlled within 12 months of identification.	All LCAs	Private and public land	Anytime plants appear, esp. during Spring /early summer.	ESSENTIAL	Local	Group project application
15.	Control Mother of Millions prior to flowering to prevent further spread.	100% of plants controlled prior to flowering.	LCAs, RLPBs and public land managers	Light infestations/ marginal areas.	Anytime plants appear - especially during Spring and early summer	ESSENTIAL	L	Individual landholders NSW Agriculture grant funds

EDUCATION, EXTENSION AND COMMUNICATION STRATEGY AND ACTIONS

Desired outcome: 75% OF THE COMMUNITY AWARE OF MoM, ITS IMPACTS ON ANIMAL HEALTH AND EFFECTIVE MANAGEMENT OPTIONS BY JANUARY 2007.

Awareness and extension activities are critical to achieving the objectives in this plan. Mother of Millions will only be controlled if people know what it is, understand its impacts and know how to control it. Because of the number of urban infestations, the urban community need to be specifically targeted as part of this strategy.

While not included in the DPI format for regional plans, these columns are included so every stakeholder can look at the plan and know exactly what they are expected to do and when by.

NO	WHAT	PERFORMANCE TARGET	BY WHOM	WHERE	WHEN	PRIORITY	L/R	\$ SOURCE
16.	Ensure that land managers have access to accurate information on the features and control of MoM.	All landholders in risk areas aware of information.	LCAs, RLPBs	All areas	Ongoing	ESSENTIAL	Local and Regional	LCA operational funds
17.	Target the urban community and encourage them to not dump garden rubbish in bushland areas.	Urban residents in key areas targeted at least once annually.	LCAs, coordinated by NIWAC.	All urban centres	Spring, early summer when plants likely to appear		Local and regional	Group project application
18.	Report stock losses in the media and highlight the risk of stock poisoning during risk times eg drought and or flood.	All stock losses reported in regional media within 2 weeks of poisoning.	Coordinated through NIWAC.	All areas.	As needed.	ESSENTIAL	Regional	LCA operational funds

REGIONAL WEED MANAGEMENT PLAN - MOTHER OF MILLIONS (NOV 2004
ATTACHMENTS

	Number of properties with infestations and hectares infested by infestation category																								PUBLIC LAND - Roadsides	
	HIGH (H)						MEDIUM (M)						LOW (L)						Less than 1% of property infested		TOTALS High + medium + low + rare/isolated					
	more than 20% of property infested						Between 5 and 20% of property infested						Between 1 and 5% of property infested													
	H1		H2		H3		M1		M2		M3		L1		L2		L3		L		R/I					
	No	Ha	No	Ha	No	Ha	No	Ha	No	Ha	No	Ha	No	Ha	No	Ha	No	Ha	No	Ha	No	Ha	No	Ha		
CNCC											1	6	1	1			1	1			1	1	4	9		
GSC									40	5000									52	2000	100	3000	192	10000		1
MPSC	3	65			4	85							35	20	27	120	15	75					84	365		
NSC			41						11						20						15		87	0	144	144
NEWA																							0	0		
NWWCC					3	4000			25	3000	10	2600			20	8000	70	25000			50	50	178	42650	60	180
SSC																							0	0		
TSC																							0	0		
ARLPB											1	20											1	20		
MRLPB	3	600	3	360	1	3	3	600	3	360	1	3								3	910		17	2836		
NRLPB						100										400							0	500		
TOTALS	6	665	44	360	8	4188	3	600	79	8360	13	2629	36	21	67	8520	86	25076	55	2910	166	3051	563	56380	204	325

This table shows the number of infestations and their infestation category for each LCA and RLPB participating in this plan. The attached matrix explains the categories.

These figures are based on information provided by each organisation. LCA figures are gathered during property inspections. These figures can be used to monitor changes in:

- The number of properties infested (in total, by infestation category and by organisation/area) ;and
- The number of hectares infested (total, by infestation category and by organisation).

* Figures for Tamworth Regional Council are not available at this stage. Figures for CNCC provide an indication of the extent and impact of Green Cestrum for the area covered by the new Tamworth Regional Council and Liverpool Plains Shire Council.

**NIWAC INFESTATION MATRIX
USED TO CLASSIFY WEED INFESTATIONS**

			EXTENT				
			Estimated % of total property area (hectares) infested.				
			HIGH	MEDIUM	LOW	RARE/ISOLATED	NOT FOUND
			Over 20 % of the property infested with either one or all of the degrees of infestation	Between 5% and 20% of the property infested with either one or all degrees of infestation	Between 1 and 5% of the property infested with either one or all degrees of infestation	Less than 1% of the area of the property infested with Class 1 or Class 2, or a mixture of the two.	Not found
SEVERITY OR DEGREE	Scattered individual plants	1	H1	M1	L1	R1	NF
	Scattered patches with isolated plants interspersed	2	H2	M2	L2	R2	
	Large, dense infestations	3	H3	M3	L3		