

Queensland



Regulatory Impact Statement for SL 1999 No. 94

Rural Lands Protection Act 1985

RURAL LANDS PROTECTION AMENDMENT REGULATION (No. 1) 1999

Title

Rural Lands Protection Amendment Regulation (No. 1) 1999.

Background

This regulation amends schedule 4 (Classes of plants declared generally) of the *Rural Lands Protection Regulation 1989*. This is the list of plants declared in accordance with section 69 of the *Rural Lands Protection Act 1985*.

Declaration of a plant under the Act places a legal responsibility on all landholders (private, municipal or State) to control the plant, and on local governments to enforce the control of the plant on private land as necessary.

There have been many requests for declaration of the weed, mother of millions (*Bryophyllum* spp.), from the grazing community and local governments over the past decade or longer. Mother of millions is highly toxic to stock, which eat the plant when they are hungry or not familiar with it. This plant, a succulent being capable of reproduction from seed and vegetative fragments, is widely distributed in Queensland, is drought tolerant and tends to spread along watercourses and areas where there is a lack of competition from other plant species. Mother of millions actually consists of the species *Bryophyllum tubiflorum* and the hybrid *Bryophyllum daigremontianum* x *tubiflorum*.

Recently a workshop on mother of millions was held at Chinchilla involving a significant number of local governments, landholders and representatives of the Department of Natural Resources. The outcome of this workshop was to recommend to the Rural Lands Protection Board that the plant be declared under the *Rural Lands Protection Act 1985*. This recommendation was endorsed at a subsequent meeting of the board.

There are two principal costs of declaration—

1. The cost of controlling the weed

Declared pests must be controlled by all landholders including private landholders, local governments (eg. roads, reserves, stock routes), and State government agencies (eg. National Parks, State Forests).

The best way of controlling significant infestations of mother of millions is by the combined action of fire and herbicide spraying. There are no data on the amount of land infested by mother of millions in Queensland, but the plant is extremely widespread.

Some data are available on chemical control costs as a result of a recent control operation undertaken by the department in Nudley State Forest in Chinchilla Shire. The cost of the initial treatment was calculated to be around \$170 per hectare, which is high due to the work taking place in a heavily timbered area. Chinchilla Shire Council have spent an average of \$27,000 per year for the last 5 years on control of mother of millions (valued in 1998 dollars). This equates to about \$180 per hectare comprising initial control and subsequent follow up control. Landholders should be able to control mother of millions for significantly less than these estimates, especially in open (non-timbered) areas.

2. The cost of monitoring and enforcement by local governments

While declaration places a legal responsibility on all landholders to control a pest, in many cases control would not take place without the monitoring and enforcement activities of local governments which are required under the Act to ensure that all steps are taken to control declared pests within their areas.

Local government officers are required to inspect private land for the presence of declared pests, and bring any infestations to the attention

of the landholder. Where a private landholder is not cooperating in the control of the pest, the local government has the power to issue a notice on the landholder requiring that specified action be taken by a certain date.

Whenever an established pest is declared, additional resources may be required by the local governments affected to enable the above actions to be undertaken.

It is felt therefore, that declaration of mother of millions would involve appreciable costs to the community, that is, in excess of \$500,000 per year. Accordingly, there is a requirement to prepare a RIS in accordance with the *Statutory Instruments Act 1992*.

Under the *Rural Lands Protection Act 1985*, a plant may be declared in—

- Category P1—plants whose introduction into the State is prohibited
- Category P2—plants to be destroyed wherever they occur
- Category P3—plants to be reduced in numbers and distribution
- Category P4—plants to be prevented from spreading from the places in which they currently occur
- Category P5—plants for which action is to be taken only on State or municipal land.

As far as the control of mother of millions is concerned, Category P1 is clearly inappropriate as mother of millions is well established in the State. Category P5 is inappropriate because it involves no responsibility on the part of private landowners. This leaves Categories P2, P3 and P4 as possible alternatives.

Authorising law

The *Rural Lands Protection Regulation 1989* is amended by declaration of mother of millions under the provisions of the *Rural Lands Protection Act 1985*—

- (a) section 69—Classes of plants and animals may be declared;
- (b) section 70—Categories of declared plants and animals.

Policy objectives

To contain the spread and minimise/limit future impacts of mother of millions on primary production, environmental, social and cultural values.

Mother of millions is an exotic plant which has been introduced to this country for its ornamental value as it has attractive bright reddish flowers in winter. However, as with all exotic plants which have become weeds in Australia, the plant's introduction was not accompanied by the predators, parasites and diseases which keep the plant's population in check in its native range. As the plant forms viable seed and can also propagate vegetatively, it has spread throughout suitable habitats and climatic zones of Queensland.

As mentioned previously, mother of millions is highly toxic to stock which eat the plant when they are hungry or not familiar with it. The continued spread of this plant increases the risk of death and morbidity in susceptible stock.

Over a 36 year period some 230 stock deaths have been attributed to mother of millions poisoning. A significant number have been non-fatally affected also, and this has had a detrimental effect on productivity in each case. Although the above figure is regarded as relatively low, it only documents the official cases of mother of millions poisoning where a veterinarian was used to perform a post-mortem. It is thought that the actual extent of stock deaths is probably many times the official number. Many stock deaths, for whatever cause, go unreported due to the costs of veterinarians performing post-mortems (travelling costs are normally prohibitive).

While it may be in the economic interest of graziers to control this weed, it must be noted that—

- (a) not all land is grazing land, and the weed can spread from a property where it is not perceived to be a problem to a grazing property;
- (b) even within the grazing community, there is a difference in attitude to the control of weeds generally, as well as weeds that may be toxic to stock in certain situations. That is, not every grazier would be inclined to control a poisonous weed, even though there may be some risk to their stock.

However, the grazing industry as a whole sees mother of millions as a threat and seeks government intervention with a view to achieving coordinated control of the weed by the entire community. Only State legislation has the power to force coordinated control of a weed by the whole community, such being the *Rural Lands Protection Act 1985*.

If government does not intervene through declaration under the Act, then the continued spread of mother of millions may cause an increasing number of stock deaths or instances of ill health and have a corresponding detrimental impact on the grazing industry. Also, the amount of control costs would be much greater if mother of millions is required to be controlled in the future.

Mother of millions occurs in Queensland and parts of New South Wales. In the latter State it is a declared noxious weed in 7 local government areas.

Legislative intent

Of the 5 declaration alternatives, Category P4 is shown to be the preferred option based on the regulatory alternatives and the cost-benefit assessment sections. Declaration of mother of millions in Category P4 will assist in minimising the further spread of this weed by placing a legal responsibility on all landholders to prevent spread to adjoining land. This is a far less costly option than requiring reduction or total destruction (which is considered impracticable) and is discussed later in the regulatory alternatives section.

Education of landholders and peer pressure to “do the right thing” has limited application in this situation as it has not worked to date. Local governments will be required to enforce the above level of control where necessary.

Consistency with the authorising law

Section 69 of the *Rural Lands Protection Act 1985* refers to the declaration of plants and animals by the making of a regulation. Section 70 of the Act refers to the assigning of a declared plant or animal to one or more categories according to measures to be taken to protect primary industries and the resources related to primary industries.

Declaration of mother of millions clearly satisfies such policy objectives.

Consistency with other legislation

There is no inconsistency with any other legislation. Declaration would mean that it would be illegal to market and sell mother of millions plants in Queensland as an ornamental. This practice is not believed to be widespread. If it were, there may be some conflict with mutual recognition legislation if this plant was sold in other States. However, mother of millions is not the problem in other States that it is in Queensland.

Alternatives

1. Do nothing

As stated above, lack of government intervention may give rise to further detrimental impact on the grazing industry. The continued spread of mother of millions would inevitably cause an increase in stock deaths which would in turn place increasing pressure on the State government to do something about the problem. Environmental, social and cultural impacts could also become an increasing issues.

2. Public education

As alluded to earlier, public education, while being an essential component of attempts to achieve coordinated control of pests, can never achieve total success on its own. This is because of the refusal of a small proportion of the community to cooperate. It is hoped that education can be used for the majority while enforcement is necessary for the minority.

The fact that sections of the community have called for declaration of mother of millions is an indicator that education is not currently adequate for the control of this weed.

3. Biological control research

The State government has already made a commitment to the funding of research on biological control of mother of millions. However, such research is of a long-term nature and, even if successful, the resulting biological control agents would only form part of an integrated control package. Biological control alone is seldom a panacea in weed control.

4. Regulatory alternatives

It should be noted that under the Act, there is more than one policy alternative due to the existence of the category system of declaration. The different declared plant categories have been listed above. The inappropriateness of Categories P1 and P5 have already been established.

Category P2 should only apply if it is feasible to eradicate the weed from the entire State. Given the widespread establishment of mother of millions in Queensland and the current state of resources and technology available, eradication is regarded as impossible to achieve.

Category P3 should apply if it is feasible to significantly reduce the numbers and distribution of the weed, and Category P4 should apply if it is feasible to prevent (or minimise) the further spread of the weed. The cost-benefit assessment therefore concentrates on declaration under Categories P3 and P4.

Cost-benefit assessment

The Business Environment Unit's (BEU) cost-benefit model was used to undertake a qualitative assessment. The quantitative component of the analysis was not undertaken on the grounds that the resources and time to undertake further study are prohibitive and would not be commensurate with the limited amount of added data gained by this further analysis.

Declaration of mother of millions as a Category P3 and P4 plant were assessed. Results of the Category P4 assessment, the preferred option, are presented here. A major objective of a Category P4 declaration of mother of millions would be to contain the spread of the weed pending a successful introduction of a biological control agent that could aid control (DNR is currently negotiating with the governments of Madagascar and South Africa endeavouring to pursue the identification and collection of biocontrol agents for mother of millions).

Containment of spread (Category P4) translates to, at the individual property level, landholders preventing spread, primarily to adjoining land parcels. This is obviously a cheaper alternative to sustained reduction of weed numbers (Category P3), or to the destruction of all plants present (Category P2).

As with many weeds, conventional control of mother of millions would generally entail a short term cost in the form of chemical control and/or fire (and sufficient follow up) in return for a longer term gain or benefit, such as maintained pasture production etc.. It should be noted that many landholders who are currently encountering problems with mother of millions have been taking steps to control it regardless of its declaration status. Effective control methods are available in the form of a combination of chemical and fire.

Similarly, at the local government level, some councils have declared mother of millions under their local laws. However, a statewide declaration would achieve greater coordination, and bind State landholders to control the weed as well as private landholders.

Impact on government

The benefits for the government sector are mainly in the form of saved future control costs. If mother of millions can be prevented from spreading now, it will save having to undertake a greater level of control in the future. There are also potentially substantial ecological benefits to be gained from preventing the spread of mother of millions into environmentally sensitive areas. These benefits can include maintaining biodiversity and conserving the ecological integrity of threatened habitats (for example, Ooline habitat near Taroom).

If government, acting as landholder, controls mother of millions in State controlled areas thereby preventing it from spreading onto neighbouring private land, this can be construed as pursuing a “good neighbour policy” (for example, Nudley State Forest in Chinchilla Shire).

Costs to government include the costs of undertaking control operations both at the State and local levels in order to prevent the weeds spread. The qualitative analysis resulted in there being a relatively small net cost to State and local government.

Impact on industry

In this case industry are mainly landholders and they will have similar benefits to government in that preventing mother of millions now will save on required control costs in the future. Landholders have the added

benefits from control of reducing the number of stock deaths attributable to mother of millions, and an improvement in the number of stock getting sick from it. Landholders also say that the weed can displace useful pasture and thereby reduce production. Objective data on these costs of mother of millions is lacking and observations are based on anecdotal evidence.

The costs of mother of millions to landholders are that they have to control it and prevent it from spreading. Once again it is a case of a cost now in anticipation of a future benefit. It is an additional business cost that many landholders could do without at the present time (but one which they may be grateful for in the future if they were to allow mother of millions to get much worse).

Other business, such as stock and station agents and the like, may benefit from control of mother of millions through the sale of additional chemicals and spraying equipment etc.. The qualitative analysis resulted in there being a relatively small net gain to industry, being mainly landholders.

Impact on community

Community benefits are in the form of knowledge that the weed is being prevented from causing additional environmental damage and that harm to animals is being minimised. Preventing it from spreading may help protect environmentally sensitive areas and certain sites of indigenous cultural significance.

Mother of millions is not perceived as such a problem in urban areas but the community may incur costs in preventing it from spreading should it be declared. They may also suffer from reduced privacy and freedom of choice if they are made to control the weed.

Community impacts will be minimal compared to industry and government. The qualitative analysis resulted in there being a relatively small net gain to the community from the control of mother of millions.

Assessment

The BEU cost-benefit assessment of declaration of mother of millions at a Category P4 level indicated that the benefits of the regulation would

outweigh the costs to a small degree. The costs imposed on government, business and the community would not be prohibitive and the net benefits flowing to business (mainly landholders), government and the community would be slightly larger. This is mainly because costs are incurred in the short term and benefits are of a longer term nature, otherwise the difference may have been greater.

While many landholders will be adversely affected by a Category P4 declaration, it should be noted that the peak producer bodies such as the United Graziers Association and the Cattleman's Union support this declaration (through their representation on the Rural Lands Protection Board). Indeed, the board initially proposed and recommended the declaration.

A qualitative assessment was also undertaken of declaration of mother of millions as a Category P3. The costs involved in a Category P3 declaration (reduce numbers and distribution) were found to be prohibitive and the benefits were not sufficient to justify the significant costs involved.

Consistency with fundamental legislative principles

The declaration of mother of millions is in itself not inconsistent with fundamental legislative principles. Powers and responsibilities under the *Rural Lands Protection Act 1985* would be extended to the control of mother of millions.

National Competition Policy

The declaration of mother of millions will prohibit the sale of the plant. However, given that trade in the plant is virtually non-existent and given the economic and environmental grounds for declaring this weed, the declaration is not considered to raise concerns from a National Competition Policy perspective.

Queensland is the most affected State in Australia by mother of millions, both in terms of distribution and density and the economic and environmental impacts of the weed.

Risk assessment

The main risk associated with weeds is their potential for spread, in both their density and distribution, if nothing is done about their control. It is accepted that mother of millions has been gradually spreading for some period of time and will continue spreading if there is no concerted attempt to prevent it. As mentioned above, the continued spread of mother of millions will have an increasingly detrimental impact on the grazing industry. If concerted action is not taken soon, the cost of such action by government and the community may be cost-prohibitive.

There is no guarantee that a highly successful biological control agent will be found for mother of millions. However, it is more possible that at least partially successful agents may be introduced and established.

There are some risks involved with the use of chemical to control weeds but if the chemicals are applied according to recommendations and with due regard to safety precautions, the risks associated are minimal.

ENDNOTES

1. Laid before the Legislative Assembly on . . .
2. The administering agency is the Department of Natural Resources.