

**Productivity Commission Inquiry on:
Impacts of native vegetation and biodiversity regulations**

A WWF Australia Submission

July 2003

Introduction

WWF welcomes the opportunity to participate in the Productivity Commission (PC) inquiry into the impacts of native vegetation and biodiversity (NV and B) regulations. It must be stated at the outset that WWF has significant concerns regarding the scope of the study. WWF is firmly of the view that for NV and B regulations to be effective, they must meet particular criteria, in that they must be economically and ecologically sound, socially acceptable, and desirably should be part of a suite of mechanisms designed to implement the objectives of ESD.

This study is only one small part of what is needed to determine the success or otherwise of NV and B regulations. The PC argues that there is minimal information on the impacts of the regulations and therefore a study like this is required. However, WWF asserts there is minimal information on all the aspects of the regulations, especially the benefits and how they are distributed. What is needed is an overall program related to all aspects of the regulations. A study such as this would therefore need to be seen in this context. Alternatively, this context must be adequately provided in the study itself. Results are otherwise liable to misinterpretation.

This submission is presented in two parts. The first provides general comments on the scope of the inquiry. The second addresses specific issues within the Terms of References of the Inquiry.

Part One: General Comments

Recommendation 1

The Scope of Inquiry should be broadened to include assessment of the benefits provided by biodiversity or retaining native vegetation

The scope of the inquiry is narrowly focused on determining the economic impact of the specified regulatory regimes on landholders. It is stated that “...*the commission has not been asked to assess the benefits of native vegetation and/or biodiversity conservation as such...*”. WWF considers this to be a serious omission, given that retaining native vegetation and reducing biodiversity loss have been shown to yield both direct economic benefits to landholders and to the broader community, enabling continued long-term sustainable use of the land.

Retaining native vegetation can provide substantial benefits (Gillespie 2000, Miles et al. 1998). Native vegetation can provide direct benefits to landholders by providing

shelter and shade for stock, grazing and firewood. Long term sustainability of land for agricultural use can also be improved by preventing erosion and salinity. This can benefit both landholders and the broader community. The value of the direct benefits to landholders has been estimated by Miles et al. (1998) as being \$36 /ha in the Victorian sample and \$630/ha in NSW. The community's Willingness to Pay for retention of native vegetation, which approximates its value to the community, has been estimated by various authors. For example, Lockwood & Carberry (1998) estimated the community value of native vegetation at \$760/ha. Hill (2002), in her review of consultant's reports on the NSW Regional Vegetation Management Plans (RVMP) identified "*The lack of recognition or quantification of specific environmental and economic impacts of maintaining native vegetation*" as a key issue.

WWF considers that the Commission should broaden the scope of the inquiry to include an assessment of the benefits of retaining native vegetation and improved biodiversity. The regulations provide direct benefits to landholders and indirectly to the community. These will contribute to reducing salinity and land degradation, contributing to achievement of long-term sustainability of commercial enterprises.

By putting the benefits aside, the PC raises a question of what the appropriate costs are to consider in a study focussed solely on costs. There are at least two aspects of benefits that impact on an interpretation of cost calculation. Firstly, the private benefits of biodiversity and native vegetation would lead to a lower net cost faced by an individual farmer. Secondly, the costs imposed by agricultural practice (recognising the regular problem of sunk costs and differentiating past from current costs) would need to be identified, and ideally should be linked to those landholders generating external costs. Again, this would lead to a lower net cost faced by the individual farmer. If the PC study took a comprehensive approach to benefits and costs, all these factors would be considered and the problem of determining "what cost" in isolation would disappear. In the absence of such a complete study, WWF asserts that it is the net costs to farmers that should be reported.

Recommendation 2

The Commission should recommend that guidelines be established for preparing Social and Economic Assessments of the impacts of Biodiversity and Native Vegetation regulatory regimes

Many of the socio-economic studies on the impacts of retaining native vegetation reviewed by WWF have focused on determining landholder costs, ignoring benefits. In addition, the basis for estimating future opportunity costs were based on flawed assumptions, in general, overstating the impact on landholders. Hill (2002), observed that the terms of reference provided to consultants preparing socio-economic studies on the impacts on the NSW Vegetation Management Plans were inconsistent and in general, did not request that the benefits of retaining native vegetation be quantified.

WWF considers that the Commission should recommend that guidelines be provided to establish a common and accepted basis for assessing the socio-economic impacts of the native vegetation and biodiversity regulations.

These guidelines should:

- Include assessment of economic, social and *environmental* impacts.
- Clearly indicate that the assessment results in a determination of opportunity costs not actual losses.
- Provide guidelines to methodology to be used
- Provide an indication of issues to be considered and reasonable assumptions for the assessment.

Part Two: Comments on Specific Issues

The Commission has identified major issues for the Inquiry. WWF has commented on those issues considered most relevant from an environmental perspective. The issues commented on are:

- 2.1 Impacts on landholders and Regional Communities
- 2.2 Efficiency and effectiveness of regulatory regimes in reducing *costs* of resource degradation.
- 2.3 Adequacy of assessments of economic and social impacts
- 2.6 Options to reduce adverse impacts of environmental regimes

2.1 Impacts on landholders and Regional Communities

WWF Comments:

Has current legislation resulted in significant costs to landholders?

The Commission proposes to review the impact the EPBC Act and Regulations on native vegetation have had or is likely to have on landholders. Given the Act only came into force on 16 July 2000, WWF considers that this limited period (about 3 years) is insufficient to rigorously determine neither the costs nor the benefits of the Act.

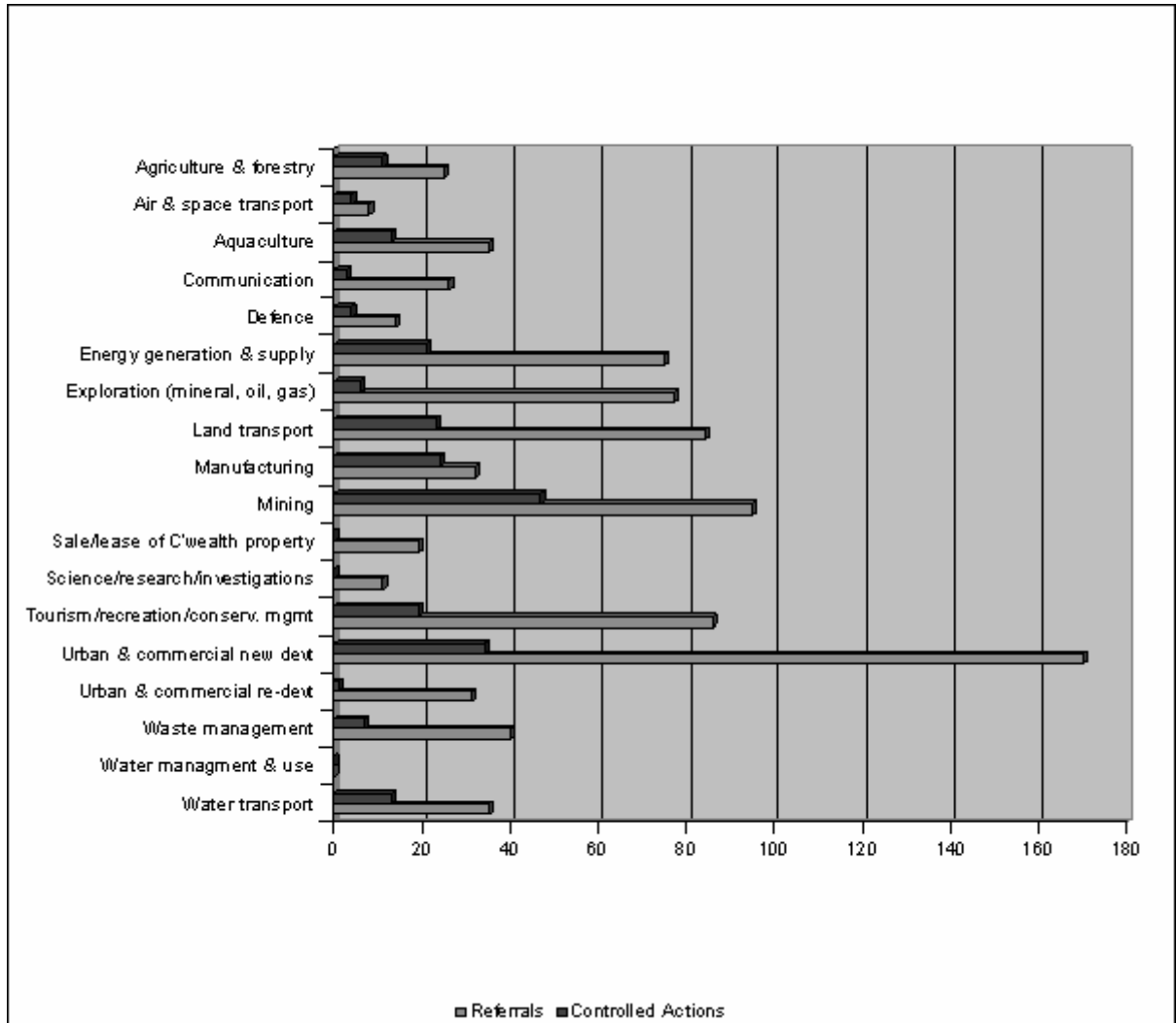
However, the evidence indicates that the EPBC Act has had little or no impact on landholder decisions in relation to clearing native vegetation, and consequently are likely to have had minimal economic effect on landholders despite claims to the contrary:

- To date, the evidence strongly suggests that the EPBC Act has had no or very little impact on rural landholders, with **only seven referrals** having been submitted on land clearing proposals since inception of the Act. In 2001-2, a mere 9 of a total of 309 referrals related to the agricultural and forestry sector (see graph below)

Similarly, recently state legislation has been unable to prevent high levels of land clearing. For example, in New South Wales over 4000 Sq. km. of remnant native vegetation has been cleared since introduction of the Native Vegetation Act in 1998 (DLWC 2002). Queensland is the glaring example of the very limited impact of state legislation, where despite native vegetation laws being in place, the Statewide

Landcover and Trees Study (SLATS) calculated that the average annual clearing rate for the average land clearing rate over the two year period (1999-2001) was 577,000 ha/year.

Referrals Received and Controlled Actions By Category



Rights, responsibilities and mitigation of impacts.

WWF agrees that it is essential to define the rights and responsibilities of resource users. There should be a clear definition of landholder obligations, which should include a recognition of “catchment care”, which would not attract compensation. That is, any mitigation of the economic impact of these regulations should take into consideration the responsibilities of landholders to sustainably manage resources entrusted to them. WWF considers that any government mitigation of the impacts of the regulation regime should be undertaken only impacts clearly exceeding landholders defined obligations and responsibilities to the environment.

WWF strongly objects to the establishment of rights and responsibilities by “grandfathering” on the basis of current unsustainable practice. Mitigation measures should be of a temporary nature aimed at facilitating structural adjustment supporting

the transition to a sustainable management regime for native vegetation and biodiversity.

The notion of catchment care is defined and further discussed in the “sharing costs of achieving environmental goals” section below.

Consideration of impacts on landholders

The impacts on landholders of concern to the Commission would normally be included in a socio-economic assessment. WWF considers that many assessments of the impacts of the regulatory regimes have been inadequate and incomplete. Specific issues such as potential loss in income, reduced property values and changes in productivity as a result of the regulatory regime, will be discussed in WWF’s comments on the adequacy of socio-economic assessments.

2.2 Efficiency and effectiveness of regulatory regimes in reducing costs of resource degradation.

WWF Comments:

Can cost effectiveness be considered without assessing environmental benefits?

The Commission intends to assess the cost-effectiveness of the current regulatory regime. Without assessing the benefits of retaining native vegetation and biodiversity, it is difficult to understand how this will be accomplished. The Commission itself states, “*To assess the effectiveness of the regimes under review, these cost must be compared with the environmental benefits.*” This once again emphasises the importance of including the assessment of environmental benefits in the scope of the inquiry.

Precautionary Principal is the foundation of biodiversity protection

Any assessment of the effectiveness of legislation aimed at protection of biodiversity must understand the need for a precautionary approach to this issue. WWF considers it essential that regulations aimed at conservation of biodiversity embody a precautionary principle, which prevents actions that may lead to extinction of species, given that in many cases impacts on biodiversity are irreversible and the establishing safe minimum standards has a high degree of uncertainty.

Biodiversity has a number of characteristics, which distinguish it from more conventional natural resources, making its management more complex (Young et al. 1996):

- In many circumstances biodiversity loss is irreversible
- Many species have yet to be discovered
- Ecosystem diversity exhibits threshold effects
- Information on responses of species to biodiversity loss is limited
- Many biodiversity problems require ongoing management
- Much biodiversity has no immediate economic value

Perverse environmental outcomes

There is evidence that the potential introduction of legislation to regulate native vegetation has caused an increase in the level of land clearing, particularly in Queensland, which has recently introduced measures to stop “panic clearing”. It is likely that this perverse behaviour will result whenever governments consider introducing *but have not yet introduced* regulations to restrict resource use to produce positive environmental outcomes. NSW legislation also provides a perverse incentive to re-clear regrowth to maintain its unprotected status.

WWF supports investigation of perverse environmental outcomes and consideration of the positive economic effect these activities have on landholders. It is also worth noting that to the extent these perverse outcomes occur, the potential negative economic impacts of the legislation on landholders is reduced.

2.3 Adequacy of assessments of economic and social impacts

WWF Comment:

Many assessments of social and economic impact are inadequate and incomplete

WWF considers that the socio-economic analysis on the impact of regulation of native vegetation and biodiversity for the most part has been inadequate and incomplete. For example, WWF reviewed a report on the impact of the Native Vegetation Conservation Act on the Moree Shire, NSW (Moss 2002). This report only estimated the direct economic impact on farmers, which was significantly over-stated, with no benefits of retaining native vegetation considered. Methodology used to assess impacts of regulation have been inconsistent, with Hill (2002) noting that socio-economic studies supporting the NSW Remnant Vegetation Management Plans used a variety of approaches to value benefits and costs of the Plans.

It is essential that the value of retaining native vegetation be included in all assessments of social and economic impacts. It has been well established that the cost of resource degradation, due to loss of native vegetation, is significant. Salinity and erosion have major impacts on agricultural productivity. The cost of salinity to farmers over the next 20 years has been estimated at in excess of \$500m (Hajkowicz & Young 2002).

Recent studies (Gillespie 2000, Miles, et al 1998) concluded that retention of native vegetation provided significant direct and indirect use values. Some of the key benefits identified were:

- *Private benefits*-grazing, wood supply, reduced salinity, prevent land degradation, long-term sustainability
- *Public benefits*-biodiversity, reduced salinity, prevent land degradation

The Commission has assumed there is very little information about the costs to landholders. In WWF’s view, this is not the case. There are many studies seeking to identify this cost. What is missing is the benefit side. Especially as there are diffuse

impacts, which are hard to address, this makes it even more difficult to assess the impacts of the legislation. WWF considers further work should be undertaken to fill those gaps, and to provide a context for costs.

Issues in estimating impacts on landholders

It must be made clear that the economic impact due to *opportunity costs* to landholders do not consist of actual costs but are estimates of a potential loss of future income. This estimate is based on a range of assumptions of uncertain future events, which must be clearly stated. Some assessments reviewed by WWF include questionable assumptions, such as:

- Not providing a clear definition of land that capable of economically being cleared in the absence of the regulatory regime. Hassall and Associates in its socio-economic assessments of the Draft Native Vegetation Plans in NSW concluded that clearing was not an economic option for farmers for a large proportion of remaining native vegetation. For example in the Western Riverina 74% on the native vegetation was judged to have no opportunity cost (Hassall and Gillespie 2002).
- Assuming that productivity and margins of newly cleared land would be equivalent to those of land currently in production. Landholders acting in an economically rational manner would clear the most productive land first.
- Not considering of limitations, such as availability of water.
- Assuming that large scale clearing will not require additional fixed costs and capital. The recently completed Land and Water Resource Audit shows that 66% of agricultural land made a loss when all costs are included (NLWRA 2002).
- Including both the potential loss of income and reduced property value as a cost to landholders. This double counts the cost, since the property value is derived primarily by its ability to produce income.
- Assuming that changes in property values can be attributed only to the impact of current regulations, without considering the myriad of other factors influencing property prices.
- Not considering the economic value of existing native vegetation. For example, as feed for grazing domestic animals.
- Not considering that all restrictions on clearing cannot be attributed to the current regulation regime, since in many case previous legislation also placed some restrictions on clearing, for example SEPP 46 under the Soil Conservation Act in NSW.

2.6 Options to reduce adverse impacts of environmental regimes

WWF Comments:

Framework/system issues:

Until we have a framework that is likely to be able to address the difficult nature of the diffuse style problems of biodiversity loss and land clearing, looking only at the cost impacts of regulations will be unhelpful. We still do not know what in the system needs to change and what doesn't. We also know that in some cases change is just expected and costs are to be borne by some, and in other cases there seems to be an

expectation of assistance. Costs by themselves don't mean anything. What is needed as a top priority, is a system that might actually work in leading to sustainable practice.

Sharing costs of achieving environmental goals

Many of the economic costs of the regulatory regimes fall on the resource users. However the beneficiaries of past resource use and of achieving sustainable use of resources are also the resource users. WWF considers that the cost of resource management should be shared equitably between landholders and the general community but that landholders' responsibility for the sustainable use of the resource needs to be taken into consideration.

WWF accepts the argument put forward by the Wentworth Group in its recent "A New Model for Landscape Conservation in New South Wales" in relation to the concept of catchment care. WWF considers this to be an improvement on the duty of care principle, which we have argued on previous occasions. The Wentworth Group states "The catchment care principle is that landholders have a responsibility not to clear native vegetation where, on the best available science, this is contrary to the long-term interests of rural industries. The catchment care principle focuses on maintaining fully functioning and productive landscapes". Further, they state that public funding "will be needed to implement the catchment care principle and to assist farmers required to protect 'above average' amounts of native vegetation" (Wentworth Group, 2003, p7).

Should the impact on specific landholders of resource management clearly exceed their catchment care obligations then mitigation measures can be considered. WWF suggests that funding of these measures could be achieved through introduction of an environmental levy to ensure that public benefit is purchased.

Consideration of additional approaches to achieving environmental goals

WWF considers that native vegetation of conservation value must be retained and biodiversity protected. In order to judge the effectiveness and efficiency of alternative methods of retaining native vegetation and biodiversity versus current regulatory regimes it would be necessary to consider not only the costs but also benefits provided. Approaches that differed from the current regulatory regime could be considered as long as the conservation benefits were retained. Economic instruments can be used to achieve positive environmental outcomes and have the advantage of being decentralised and flexible. However, regulation is essential and perfectly compatible with the use of market based instruments.

WWF supports an approach that uses mix of instruments (regulatory, market, voluntary and institutional) tailored to address specific environmental issues. These instruments should not be considered as alternatives but rather as complementary approaches to achieving environmental goals. Young et al. (1996) consider that concentrating on a single instrument to address complex environmental issues such as the conservation of biodiversity is a misguided approach, lacking flexibility and resilience.

The Wentworth Group (2003) has proposed a model for landscape conservation in NSW, which can be considered as a basis for protection of native vegetation. In addition to the catchment care principle discussed above, we emphasise our support for its main components, as follows:

- Strengthening and simplifying native vegetation regulations to end broadscale clearing of remnant vegetation and protect regrowth.
- Set environmental standards and clarify responsibilities for native vegetation management.
- Use management plans to provide investment security, flexibility for farmers.
- Provide funding to farmers to meet new environmental standards and support conservation.
- Restructure institutions by improving scientific input, information systems and regionalising administration.

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