Submission

to the Inquiry into

Public Good Conservation - Impact of Environmental Measures Imposed on Landholders

by the Nature Conservation Council of NSW (Inc.)

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Introduction

The *Convention on Biological Diversity* (CBD) specifies three main objectives:

- conserving the biological diversity
- sustainable use of its components, and
- fair and equitable sharing of the benefits arising out of the utilization of genetic resources".

Because these aims are inextricably linked, biodiversity issues must be integrated into all sectors of society affecting the natural environment and human self-interest must be taken into account in all efforts to preserve biodiversity.

In line with Point 4 of the Malawi Principles (see Appendix 1), the Nature Conservation Council of NSW (NCC) believes that before impacts on landholders of public good conservation measures can be considered, there is a necessity to:

- consider the benefits of ecosystem services;
- assess whether there are existing market distortions that may disguise the extent of the impact.
- consider the benefits to landholders of their on-farm conservation measures
- establish the cost of public bad from agricultural activities

Benefits Provided by Ecosystem Services

The diversity of life benefits us in infinite ways:

- Our homes, air, livestock, vegetables, fruits, and grains all derive from the products of diverse and healthy ecosystems.
- More than half of all our medicines today can be traced to wild organisms.
- Diverse communities of plants, animals, and microorganisms provide indispensable ecological services: they recycle wastes, maintain the chemical composition of the atmosphere, and play a major role in determining the world's climate.
- Countless people enjoy the special pleasures of hiking in lush forests, visiting scenic mountains and seashores, and pursuing recreational activities that are dependent on biodiversity, such as hunting and fishing.

Others such as catchment protection, control of flooding, soil fertility maintenance, carbon storage by vegetation are more difficult to estimate as they represent indirect use values (CIFR & CIFOR 1999). However, some of these services and products provided by forest ecosystems and forest biodiversity components have direct use value and directly translate into substantial financial benefits. For example, a study in Victoria calculated the financial benefit of water supplied to Melbourne from forested water catchments at $250 million per year (Commonwealth DEST, 1993).

Establishing Costs

It is acknowledged that one of the most perplexing problems arising from the multiplicity of benefits from ecosystems is: how to place a value on them (CIFR & CIFOR 1999). Although it is relatively easy to determine market values for things like timber, collected wildflowers, etc. that are traded in the global marketplace, it is quite another matter when trying to place values on ecological services.

Many of these newly esteemed values cannot be delivered by market forces (due to market failure) but, according to environmental economists like Grey (1999), must be delivered by government designed and managed systems. Grey points out that failure to deliver these values leads to a loss of welfare, the permanent loss of valuable ecosystems, repression of new industries (and hence job and wealth creation) dependent on a free flow of non-market values and negative impacts on existing agricultural and other enterprises. This last category of impact on existing agricultural enterprises is caused by negative externalities released by on-going environmental degradation (CIFR & CIFOR 1999).

Clearing of remnant native vegetation by a particular landholder can produce negative externalities — that is, impose costs on other landholders (Miles et al 1998). The costs from this action are productivity losses suffered by downstream landholders arising from increased salinisation and lowered water quality.

Irreversibility and Value

According to Hampicke (1994) species and ecosystems can be thought of as economic resources possessing *special properties*:

- they can be irreversibly destroyed,
- their future usefulness is a matter of uncertainty
- their services are difficult to replace, and
- they exhibit properties of public goods

In practice, to establish the value of some ecological asset (or equivalently: the costs involved in no longer having it) in monetary terms may be a difficult task (Hampicke 1994). Unfortunately, the value of native vegetation, including socio-cultural and ecosystem services, are not currently fully reflected because their valuation is not rooted in ecosystem sustainability. This leads to clearing and deforestation due to the unrealized opportunity cost of maintaining/losing native vegetation resources (CIFR & CIFOR 1999). What is missing are the "markets" for many of these benefits and the appropriation of the benefits.

What has to be considered is that land containing native vegetation may have agricultural production values (when cleared), but the clearing or vegetation diminishes and perhaps destroys *irreversibly* the ecological values. The *ecological and aesthetic values are not renewable* and there are no substitutes for them. If, either there is no substitution or, ecological values are irreversibly lost as a result of clearing, then the only way to enable future generations to have at least an equivalent set of opportunities is *to preserve this vegetation*.

Even from a purely anthropocentric view it is logically impossible to assess the full monetary value of an irreversibly destructible ecological asset because for this purpose we would need to know the valuations of all future human beings. Despite numerous methodological problems, the costs of conservation can in most cases be assessed at least approximately. In principle, they amount to the maximum monetary benefit foregone if profitable but nature-adverse activities are displaced by conservation (Hampicke 1994).

Accounting for Private Conservation

There are currently no mechanisms for accounting for and quantifying the contribution of the non-government sector in achieving nature conservation objectives (Binning 1999). This lack of institutional recognition means that the contribution of private initiatives cannot be readily quantified. As Binning points out, the role of private conservation is often neglected in the development of government policy at National, State, regional and local scales. As well, the poor public profile of private conservation impedes its future growth.

Duty of Care and Cost Sharing

Binning and Young (1997) and Binning (1999) emphasise the importance of distinguishing between property rights and associated entitlements and obligations tied to land ownership. They distinguish between:

- The *Duty of Care* for sustainable land management faced by a landholder; and
- The provision of non-marketabe "*Public Conservation Service*" by landholders managing vegetation to meet conservation objectives.

They suggest a dividing line be drawn between those management practices required to achieve land use objectives at a landscape or regional scale and any additional practices required to sustain sites of high conservation value.

Duty of care can change over time due to increased scientific knowledge and community expectations. As an example, the provision of incentives for vegetation clearance, maintained into the 1970's in Australia, provides such an example of the evolution of sustainable land management and knowledge.

Binning (1997) provides the following policy guidelines for cost sharing arrangements:

- Financial assistance should generally not be paid to landholders to meet their duty of care for sustainable land management;
- Where community expectations resulting in legislative or policy changes cause duty of care to be shifted significantly over a short period of time, financial assistance may be provided to speed the transition to the new arrangements and maintain community support. Such payments should be "once off payments" in recognition of the need to adjust to a new regime, and
- There are cases where the community may seek landholders to manage areas of remnant vegetation at a standard that is in excess of that required through regional planning processes. In these cases ongoing payments can be justified on the grounds of equity because a conservation service is being provided by the landholder.

Compensation Versus Stewardship Payments

In general, incentive payments are viewed more favourably than compensation, and where ongoing management is required, agreements tying payments to management, called stewardship payments, are preferred (PLUC 1996).

The question arises as to whether someone should be compensated for not doing something which is seen by some sectors of society as a harmful activity, such as clearing native vegetation. Binning (1997) recommends a Policy Guideline:

> *Do not provide ongoing subsidies for sustainable land management.*

Consistency with national competition and trade policies requires that costs associated with meeting a landholders "duty of care" are incorporated into and seen as normal costs of production. In the course of achieving consistency and redefining obligations, transitional arrangements can be justified.

Any concept of private property which gives landholders the right to use their property as they see fit can no longer be sustained, given some of the serious environmental impacts occurring as a consequence of vegetation clearance.

Farrier (1995) expressed the following views on compensation:

- paying compensation allows landholders to externalise the problem and deny that they have any responsibility for the conservation of biodiversity;
- compensation is backward looking and has nothing to say about the future management of the land;
- landholders are able to wash their hands of the issue of biodiversity conservation rather than being given some
- degree of 'ownership' of the issue and a stake in addressing it; and
- the making of a one-off compensation payment for placing a restriction on land use does nothing for the ongoing management of the land in the interests of conservation.

Farrier (1995) proposes that the solution to problems associated with purely voluntary and regulatory programs is to use an element of *regulation combined with stewardship payments* or ongoing payments to the landholder to ensure management for conservation. He believes such payments are equitable, as they are based on work performed and not on chance factors related to development of the land. Also this will encourage landholders to see elements of biodiversity, such as endangered species, as *assets* rather than liabilities (Farrier 1995).

Stewardship payments thus address claims of economic hardship and emphasise the role of private property in respecting the individual's sense of dignity as well as developing a sense of personal responsibility to the community (Farrier 1995).

Fees paid should be sufficient to attract the allegiance and commitment of landholders to the enterprise of biodiversity conservation, rather than generate grudging acceptance of restrictions on their land use. Even where landholders do not accept the payments and the land remains unmanaged, the availability of such payments may assist in the resolution of inappropriate development proposals (PLUC).

Framework for Conservation

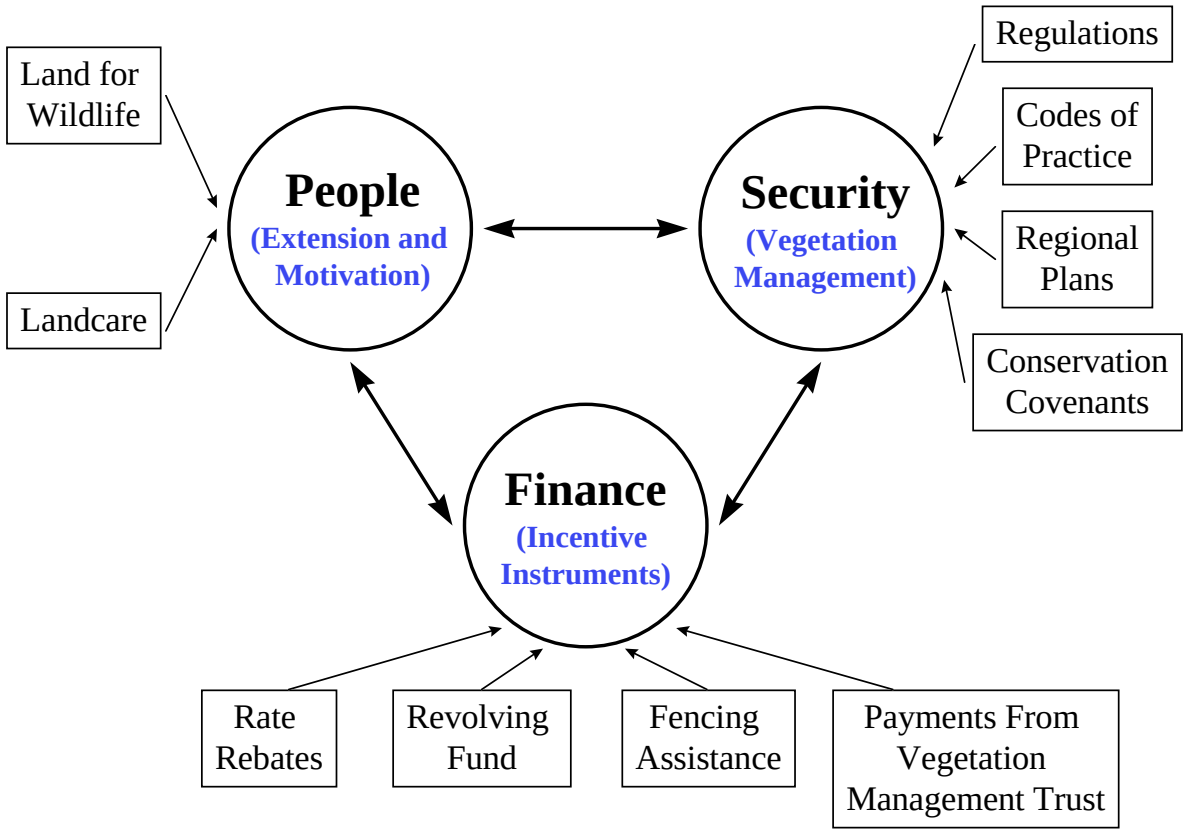
It is broadly recognised that many of our most vulnerable ecosystems are found on land that is managed by private landholders (Binning 1999). Examples include the temperate woodlands and grasslands of the wheat-sheep belt, and parts of the rangelands. Also it is recognised that traditional approaches to public conservation through National Parks will not work in these situations. Instead, an approach that fosters conservation stewardship by individual landholders is required (Binning & Young 1997).

It is clear that it is the action of private land managers that will determine how effectively many of Australia’s most threatened ecosystems, are conserved. Binning and Young (1997) find that a mix of policy instruments are most likely to effectively conserve biodiversity by seeking to:

- address multiple land use objectives
- retain landholder support, and
- manage for uncertainty and the prevention of irreversible loss

A framework that integrates the various mechanisms available for off-reserve conservation is provided by Binning and Young (1997) below:

Figure 1. Components of an effective policy mix for off-reserve conservation. Source: Binning & Young 1997.



Binning (1999) argues that private markets for conservation are needed to successfully conserve native vegetation. He proposes that a suite of techniques are needed to for coordinating conservation across land uses and tenures. As well, he outlines the need for creating a philanthropic market, to encourage direct investment conservation by concerned city dwellers.

For more in-depth discussion of strategies for engaging landholders through a mix of financial, educative and regulatory instruments see Binning (1999), and Binning and Young (1997).

Incentives

Young et al (1996) provide the following points regarding financial mechanisms for conservation:

- the Australian community as a whole should take financial responsibility for protecting biodiversity when the costs of doing so cannot be recovered by the use of market mechanisms;
- the cost of controlling and preventing threatening processes should be borne primarily by those who cause these processes;
- all those who benefit from the non market dimensions of biodiversity conservation, either directly or indirectly, should contribute to the cost of its maintenance;
- in using the elements of biodiversity, provision must be made for ongoing management to control the threats that will arise from that use;
- landholders who draw attention to the presence of an endangered species or other important elements of biodiversity not previously identified on their land should be eligible for compensation for commercial opportunities foregone;

- as most property ownership embodies a speculative dimension, compensation for the loss of a private land development option should be used only as a transitional measure when absolutely necessary to obtain community acceptance of a change in property rights; and
- when compensation is paid it should be associated with a clear change in property rights guaranteeing the protection of biodiversity values in perpetuity through a conservation covenant or similar mechanism.

Stewardship Payment Scheme

Purpose of a Stewardship Payments Scheme

The main purpose of a *Stewardship Payments Scheme* would be to provide a vehicle for conserving biodiversity. It is generally considered that the present conservation reserve system has a predominance of land with low value for other uses (i.e. steep, dry and infertile country). Given that private land conservation measures (such as property agreement and voluntary conservation agreement schemes) are voluntary in nature, they are also likely to attract land with little development value. This has resulted in vegetation communities on land of high value being under-represented in both the public and private reserve system.

Increasing funds for reserve acquisition is one solution to this imbalance. A *Stewardship Payments Scheme* could also address this imbalance by providing an additional incentive payment which encouraged landholders to voluntarily enter agreements for these vegetation types and manage them to ensure their on-going viability.

Vegetation communities to be targeted

Stewardship payments should be available for vegetation types which are of high conservation value because they are threatened by development and other degrading influences, and are poorly represented in the conservation reserve system.

Basis for Payment and landholder eligibility

Payments would be made on the basis of a recognition of landholders managing all or part of their land for conservation purposes in the wider public interest. There would not be any time limit on when the payment would be made, although it is essential that there be *no link between clearing applications and eligibility* for stewardship payments.

Access to stewardship payments would be to any landholder who owns or leases property of high conservation value native vegetation, which has been nominated by the landholder. It could also be initiated by active targeting using a suitable standard of assessment. This would allow an active seeking-out of appropriate native vegetation on the basis of priority types.

Stewardship payments should be available to *any freehold or leasehold landholder*, whether an individual or group of individuals, who is not being funded from another source to manage land for its conservation value. Some classes of Crown Land where there is a demonstrated community commitment to its management for conservation should be eligible for funding.

Determining the value of the payment

The value of a Stewardship Payment should reflect the overall conservation outcome to be achieved. The dollar value would be based on the conservation value of the land, the management cost, the market value of the land, the term of the agreement and whether it is registered on title. The value of payments in each region would need to be determined by cost analysis when the scheme was introduced.

Innovative mechanisms for locating agreement partners, such as tendering or auctions, would maximise conservation outcomes from the limited funds available. A bonus payment for exceptional conservation outcomes could form part of a tender arrangement.

Form of agreement
Existing mechanisms such as voluntary conservation agreements or property agreements are likely to be appropriate vehicles for the agreement. Importantly, they should be registered agreements in perpetuity or a fixed term. Native Title issues would need to be considered when drawing up agreements.

Payment mechanism
For administrative efficiency the payment should be made periodically following an inspection to ensure adherence to the agreement. Many landholders have indicated a preference for an annual payment cycle.

Who administers the scheme?
In NSW options include existing agencies like the Department of Land and Water Conservation, National Parks and Wildlife Service and, an existing Non-Government organisation or a Conservation Trust (presently being developed in NSW).

Landholder obligations
The agreement should require specified conservation outcomes to be achieved. This may involve retaining vegetation, active management and/or monitoring and reporting obligations.

Administrator's obligations
The administrator of the scheme should support participating landholders by:
- facilitating communication between landholders,
- negotiating and facilitating management plans,
- providing on-going advice,
- rewarding good managers and penalising poor managers.

Sources of funding
Funding should be primarily based on a multi-year bid to Treasury (say 10 years). A dedicated stream of income should be identified to support the scheme in the long-term. Possible mechanisms to be investigated include:
- A State-wide environment levy.
- A proportion of land tax.
- Landholder contributions.
- Charitable contributions from the community or corporations.
- Natural Heritage Trust.
- Carbon and/or salinity credits.

Scheme implementation
The scheme should be piloted, either in a bioregion (e.g. Western Riverina, Darling Riverine Plains), a regional vegetation planning region (e.g. Mid Lachlan, Walgett) or in an ecological community (e.g. subtropical rainforest, plains grass grassland).

Advantages of this Scheme
- Provides another incentive mechanism to address inequity.

- Does not set a precedent involving compensation.
- Does not require 'duty of care' to be clearly defined, yet is consistent with the framework proposed by Binning and Young (1997).

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Appendix 1

1. **The Malawi principles for the ecosystem approach**:

1. Management objectives are a matter of societal choice.

2. Management should be decentralized to the lowest appropriate level.

3. Ecosystem managers should consider the effects of their activities on adjacent and other ecosystems.

4. Recognizing potential gains from management there is a need to understand the ecosystem in an economic context, considering e.g., mitigating market distortions, aligning incentives to promote sustainable use, and internalizing costs and benefits.

5. A key feature of the ecosystem approach includes conservation of ecosystem structure and functioning.

6. Ecosystems must be managed within the limits to their functioning.

7. The ecosystem approach should be undertaken at the appropriate scale.

8. Recognizing the varying temporal scales and lag effects which characterize ecosystem processes, objectives for ecosystem management should be set for the long term.

9. Management must recognize that change is inevitable.

10. The ecosystem approach should seek the appropriate balance between conservation and use of biodiversity.

11. The ecosystem approach should consider all forms of relevant information, including scientific and indigenous and local knowledge, innovations and practices.

12. The ecosystem approach should involve all relevant sectors of society and scientific disciplines.

In a workshop organized in Malawi in January 1998 in association with the Fourth Conference of the Parties of the CBD (UNEP/CBD/COP/4/Inf.9), twelve principles or characteristics of the ecosystem approach to biodiversity management were identified. These have been termed the ‘Malawi Principles’.