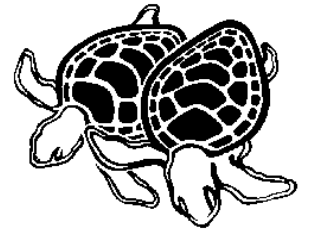


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## **Productivity Commission Inquiry**

### **Into**

## **Impacts of Native Vegetation and Biodiversity Regulations**

**Submission by**

**Environment Centre Northern Territory**

**July 2003**

## **INTRODUCTION**

The Environment Centre Northern Territory (ECNT) appreciates the opportunity to participate in the Productivity Commission inquiry into the impacts of native vegetation and biodiversity regulations.

ECNT was established in 1983 and has since played a crucial role in achieving environmental protection and management throughout the Territory. As such, we are concerned about the way native vegetation and biodiversity regulations have been implemented within the Territory.

The conservation of biodiversity and native vegetation needs to be considered as an integral part of an overall management strategy for natural resource management that considers all of the elements of the landscape and regional ecosystems and its interactions with human management and use. However, stakeholders in this issue include not only land holders or resource users of an area, but also includes all sections of government, industry, Traditional Owners, and the wider community.

In regards to native vegetation management the Northern Territory is in a unique position nationally. Vegetation cover remains consistent across the savannah landscapes and rates of clearing have been below levels in other Australian jurisdictions. However, rates of vegetation clearing are becoming key threats to Biodiversity in areas where clearing pressure is increasing. In addition the NT Government has identified some significant new large scale agricultural expansion with potential significant impacts on biodiversity and vegetation – particularly in the Daly Basin.

Current vegetation management regimes and natural resource management planning fall far short of national benchmarks. Impact assessment at both Territory and National level fail to take into account vegetation clearing or more diffuse biodiversity loss through landscape wide resource degradation. Currently, only discreet or major infrastructure projects are triggered by either the EPBC Act or NT environmental impact assessment legislation.

The ECNT believes that government regulation has not exceeded what is necessary to protect native vegetation and biodiversity. On the contrary, we believe that the government needs to implement stronger regulations than is currently implemented, especially in the Northern Territory.

# ISSUES

## Impacts on landholders and regional communities

### Negative impacts on landholders

Agriculture and pastoralism occupy approximately 60% of Australia, yet account for only 3% of Australia's GDP<sup>1</sup>. Within the Northern Territory this national trend is maintained, with pastoralism and agricultural industries contributing around \$274 million to the total income of approximately \$9.1 billion in 2000-2001<sup>2</sup>. Therefore, even if there was a perceived "impact" from the native vegetation and biodiversity regulations, it is minimal when considering overall economic concern at a national and territory level.

With only seven referrals submitted on land clearing proposals since the inception of the EPBC Act and only one of these directly affecting a landholder<sup>3</sup>, this suggests that there has been little impact on landholders. Although in theory the Act has the potential to prevent and proposed activity that threatens a listed species or value, in reality, these acts are very rarely used. However, even in the possible chance that an individual or local community is financially disadvantaged by the EPBC Act, many people, including Justice Branson of the Federal Court of Australia, have recognised this should not prevail over the interests of the national and international community<sup>4</sup>.

Therefore any assessment of the negative impact associated with the EPBC Act should not only take into account the impact on landholders, but also any impact on the environment and the local, state/territory, national and international community. In this light it is the Act itself that is ineffectual in protecting biodiversity or native vegetation. This shows a clear need for the Commonwealth to effectively ensure that the EPBC Act is adopted and implemented by all states/territories. The Commonwealth also needs to provide adequate policy and financial measures to ensure that state and territory governments are able to address land clearing and biodiversity issues.

In the Northern Territory negative impacts on property owners from the introduction of treeclearing regulations under the new Interim Development Control Order Number 12 have been minimal. Overall the new IDCO has not reduced the level of clearing, it has merely provided an administrative approvals process. For example, in February to March 2003 over 8000 hectares of applications to clear native vegetation in the Daly Basin were lodged. In total 7300 hectares of applications were approved by the NT Department of Infrastructure, Planning and Environment. There are currently no regulations attached to the IDCO 12 but non regulatory guidelines. The guidelines are entirely inadequate to control clearing when it remains the discretion of the

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<sup>1</sup> ABS 2003, Yearbook Australia

<sup>2</sup> NT Treasury, Economic Overview

<sup>3</sup> Environment Australia

<sup>4</sup> Booth v Bosworth (2001) FCA 1453 (17 October 2001).

landholder or clearing applicant to follow the recommendations of the clearing approval.

In relation to leasehold applications, the application and decision process is currently an internal procedure by the Pastoral Lands Board under the Pastoral Lands Act. Although broad figures on clearing rates are available it is very difficult to determine any negative impacts on landholders without access to the appropriate information.

#### Positive impacts on landholders

There are many positive impacts associated with the protection of native vegetation. Unfortunately many of these have been demonstrated as a result of land clearing, with the Murray Darling Basin a prime example. The Northern Territory is in the fortunate position, that to date, very little clearing of native vegetation has occurred. Therefore, maintaining vegetation cover offers landholders the positive benefit of preventing the following from occurring.

Destruction of habitat is the main threat to biodiversity<sup>5</sup>. The benefits associated with protection of biodiversity, other than pure aesthetic and social values, include the potential ecotourism value of the region, which some landholders have taken advantage of<sup>6</sup>. In 2001, tourism was the second largest revenue earner in the Northern Territory, and the largest provider of employment<sup>7</sup>.

Land clearing has also contributed to dryland salinity, erosion, water degradation, climate change feral animal and weed invasion, all issues that most landholders would rather avoid. It has predicted that up to 15 million hectares will be affected by dryland salinity, with implications for agricultural production, infrastructure, irrigation systems, and drinking water<sup>8</sup>. Land lost to dryland salinity has been estimated at \$700 million annual, and \$130 million annual in lost production<sup>9</sup>. The easiest way to avoid dryland salinity is to avoid clearing native vegetation.

Major opportunities exist in the Northern Territory to avoid the serious environmental and land management mistakes that have impacted other jurisdictions. It is well recognised nationally<sup>10</sup> that brodscale clearing with little or no regard for the salinity hazard is a recipe to repeat the problems of temperate Australia. However, Northern Australia provides significant opportunities to avoid the dryland salinity problems of temperate Australia

For example, in South Australia, erosion is costing as much as \$23 million a year, affecting not only the agricultural industry, but also the health of individuals<sup>11</sup>. With soil loss increasing significantly when 70% of the vegetation is removed,

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<sup>5</sup> Commonwealth of Australia (2002). Australian Terrestrial Biodiversity Assessment 2002. Land and Water Australia, Canberra

<sup>6</sup> Doley, A. (1997). Combining conservation and farming in the wheatbelt of Western Australia. In: Conservation outside nature reserves. Edited by P. Hale and D. Lamb. Centre for Conservation Biology, the University of Queensland.

<sup>7</sup> Northern Territory Government (2002). Tourism – a key industry in the Territory. [http://www.nt.gov.au/dcm/otd/publications/otd\\_general/tourism.pdf](http://www.nt.gov.au/dcm/otd/publications/otd_general/tourism.pdf)

<sup>8</sup> Walker, G., Gilfedder, M., and Williams, J. (1999). Effectiveness of Current Farming Systems in the Control of Dryland Salinity. CSIRO Land and Water, Canberra

<sup>9</sup> PMSEIC (1999). Dryland Salinity and its impacts on Rural Industries and the Landscape. Prime Minister's Science, Engineering and Innovation Council Occasional Paper No. 1. Department of Industry, Science and Resources, Canberra.

<sup>10</sup> Australian Dryland Salinity Assessment 2000

<sup>11</sup> Williams, P. and Young, M. (1999). Costing Dust: How much does wind erosion cost the people of South Australia? CSIRO Land and Water, Canberra.

clearing of native vegetation is one of the major causes of erosion<sup>12</sup>. Land clearing and agriculture have wrought extensive changes through changed water flows, tillage, fertiliser use, and pollution from pesticides and herbicides which has resulted in increase sediment input and nutrients into rivers increasing the risk of toxic algal blooms<sup>13</sup>. This could impact on drinking water quality for both humans and livestock.

In Northern Australia significant gains could be made for limited effort relative to the cost of care in Southern Australia. There are potential huge gains to be made by promoting ecologically sustainable land use and preventing degradation compared with the cost of rehabilitation<sup>14</sup>. Likewise, wise management now to protect the landscape and prevent dryland salinity now will prove far more cost effective than any attempts to remediate the problems in the future.<sup>15</sup>

Land clearing produces a net loss of carbon, and has contributed to 15% of Australia's total greenhouse gas emissions<sup>16</sup>. CSIRO have estimated that temperature could increase by 0.4° to 2° C in Northern Territory, with the greatest warming to occur in the north-west. It is expected that rainfall will decrease, and the frequency and intensity of tropical hurricanes to increase<sup>17</sup>. All this could potentially have negative impacts on agriculture and pastoralism, with less water available for crops and livestock, increased heat stress to livestock and salt intrusion onto fertile floodplains<sup>7</sup>.

Retaining native vegetation may also reduce the costs associated with management of feral animals and weeds. Properties that have reduced native vegetation cover on their properties must now actively manage these exotic invasions at their own expense<sup>6</sup>.

### Impact on property values

In determining property values, environmental values should be figured into the equation. Currently biodiversity and native vegetation conservation has no market value and is therefore assumed to have no dollar value. However, if costs resulting from reduction of native vegetation are taken into account, such as loss of productive topsoil to erosion, loss of viable land to dryland salinity, then the value of conserving native vegetation is much greater.

In the Northern Territory rates of clearing across all tenure has been comparatively low. Available soils in the Northern Territory that are suitable for improved pasture and cropping are limited, thus limiting capacity for improving property values through clearing for pasture improvement. Market values for large pastoral properties reflect the value of production of the properties with a complete or near complete vegetation structure. The area where significant vegetation clearance has occurred on Tipperary Station and Willaroo Station. much of this area remains non productive or underutilised.<sup>18</sup> Many past attempts

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<sup>12</sup> Scott, A. (2001). Water erosion in the Murray-Darling Basin: Learning from the past. Technical Report 43/01. CSIRO Land and Water, Canberra.

<sup>13</sup> [http://www.clw.csiro.au/issues/rivers/surface\\_hydrodynamic.html](http://www.clw.csiro.au/issues/rivers/surface_hydrodynamic.html)

<sup>14</sup> Australian Terrestrial Biodiversity Assessment 2002

<sup>15</sup> Australian Dry land Salinity Assessment 2000

<sup>16</sup> Australian Greenhouse Office

<sup>17</sup> CSIRO (2001). Climate Change – Impacts for Australia. CSIRO Atmospheric Research, Melbourne.

<sup>18</sup> Land Clearing in the Northern Territory, Department Of infrastructure, Planning and Environment, NT Government 2002

by Territory and Commonwealth Governments at improving productivity through clearing and pasture production have failed.

#### Government measures to mitigate negative impacts

The most effective measure the government has undertaken to mitigate negative impacts to landholders is to introduce regulations on land clearing. For all the reasons mentioned above, strong land clearing regulations will prevent many of those concerns from occurring. This not only benefits the landholder, but also the wider community, as it will reduce the need in the future to subsidise land reclamation projects, drought packages, etc.

In December 2002, the Northern Territory government introduced new land clearing controls on freehold under the IDCO 12. However, only 3 months later the Minister for Planning, Kon Vatskalis, approved applications to clearing in excess of 7300ha in the Daly Basin. This is the beginning of potential large scale land clearing resulting from the proposed expansion of large scale intensive irrigated agriculture. Up to 400 000 hectares is to be made available in a Government subsidised agricultural development scheme in the Daly Basin. This new proposal creates a number of potential impacts on the catchment including soil erosion, biodiversity loss, salinity and decline in water quality.

The current Northern Territory land clearing legislation and guidelines indicates that the governments focus is not on biodiversity and native vegetation protection, but rather on economic growth and development. The Forward by the NT Minister for Infrastructure Planning and Environment, the Hon Kon Vatskalis to the Land Clearing Guidelines states "the future development of the Territory will involve some clearing of vegetation and land that is capable of supporting such enterprises."<sup>19</sup>

For example in the Daly Basin Government subsidised agricultural expansion has afforded landholders perverse incentives to clear native vegetation. In 2001 The NT Government subdivided auctioned 30 000 hectares of Crown land. Seven lease blocks were sold with a lease condition of upgrade to freehold tenure if \$250 000 of property improvements are undertaken within three years. **These property improvements include clearing of native vegetation. In addition, free 2500 ML/ha water licences were granted to each lease.**

Although this Government subsidy may prove attractive to some potential landholders, the negative consequences to them in the future could be severe. With community and Commonwealth pressure increasing, it is foreseeable that the Northern Territory will have to strengthen its land clearing legislation and regulations, with possible negative impacts for current landholders that are required to clear their properties.

Essentially the NT Government is setting-up property owners to be impacted by future regulatory regimes – very similar to the situation now affecting property owners in other Australian jurisdictions. With potential for increased property subdivisions with similar lease conditions to clear native vegetation in the Daly Basin and in other catchments the NT Government is providing

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<sup>19</sup> Land clearing Guidelines, Department of Infrastructure Planning and Environment, March 2002.

incentives that will develop into a future significant impact over an increased number of property owners.

**This type of subsidised agricultural expansion needs to be abolished if the NT Government wants to mitigate regulatory impacts on property owners.**

The government has provided financial assistance to landholders protecting their natural resources. Landcare groups across Australia have received funding from Natural Heritage Trust (NHT), which was established by the government in 1997 with the goal of helping conserve the environment and natural resources. As members of a Landcare group, landholders have the opportunity to apply for some of the money to implement conservation projects on their property.

Impacts on non-landholders and regional communities

Reducing the likelihood of erosion, salinity, global warming and lost biodiversity through regulating land clearing (see above) benefits not only the landholder, but also the regional and national community. In South Australia, wind erosion has resulted in increased asthma attacks in regional communities, which not only affects the health of those individuals, but is also costing millions in medical attention<sup>20</sup>.

In the Northern Territory, tourism potential benefits far outweigh agricultural and pastoral benefits, not only in revenue, but also in the number of people employed in the region<sup>21</sup>. For example, in the Daly Basin, as substantial nature based tourism and recreational fishing industry has been established in the last two decades. This growing industry relies on maintaining and improving catchment health and retaining environmental features and ecosystems processes. Large scale irrigated agriculture in the upper catchment has the potential to impact negatively on catchment health, thus degrading the asset base sustaining growth in the regional economy.

In addition a number of Indigenous Communities are located in the Daly catchment and use the resources of the River for daily living. Impacts on the health of the Daly River from subsidised agricultural expansion will impact negatively on local Indigenous economies and standard of living.

Strong vegetation protection regulations and the removal of Government policy to subsidise agricultural expansion will mitigate impacts on regional communities. This particularly is the case to remove lease conditions with requirements for vegetation removal and free water licenses. In addition, the Government needs to provide property owners with incentives and resourced management tools to manage vegetation and natural resources.

Current natural resource management and catchment management regimes are totally inadequate in the Northern Territory. Catchment planning is currently at an early stage and has not been implemented in most Territory jurisdictions. For this reason, there is an urgency to develop and apply an integrated approach to NRM and incorporating vegetation management into this.<sup>22</sup>

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<sup>20</sup> Williams, P. and Young, M. (1999). Costing Dust: How much does wind erosion cost the people of South Australia? CSIRO Land and Water, Canberra.

<sup>21</sup> Northern Territory Government (2002). Tourism – a key industry in the Territory.

[http://www.nt.gov.au/dcm/otd/publications/otd\\_general/tourism.pdf](http://www.nt.gov.au/dcm/otd/publications/otd_general/tourism.pdf)

<sup>22</sup> Native Vegetation National Overview ANZECC 1999

## Efficiency and effectiveness of environmental regimes

Although the EPBC Act has a clear statement on what it wants to achieve, and how it will achieve it, to date it hasn't been very effectual in achieving these outcomes. However, it is a beginning....

The Wentworth Group<sup>23</sup> has proposed a model for landscape conservation in NSW, which could be the base for native vegetation protection around Australia. The proposal suggests that the main components that need strengthening include:

- Native vegetation regulations need to be simplified and strengthened to end broad-scale clearing
- Environmental standards need to be developed and the responsibilities for native vegetation management clarified;
- Use management plans to provide investment security and flexibility for farmers;
- Provide farmers with funding to enable them to meet new environmental standards and support conservation;
- Improve scientific input, information systems and regional administration.

### Perverse environmental outcomes?

On the matter of panic clearing, it must be said at the outset that this occurs *prior* to the introduction of clearing controls, as an expression of landholders' recognition of the effectiveness of clearing control regulations. So let there be no confusion about this: land clearing regulations are effective, and do not result "in a greater reduction of native vegetation and/or biodiversity than would have occurred in their absence".

Rather, accelerated and often ill-considered clearing has occurred during times when governments have announced intent to strengthen clearing regulations, but have failed to place interim controls or moratoria on clearing during the period between their announcement and the actual proclamation of permanent regulations. This "panic clearing" happens prior to and in the absence of regulations. The great tragedy of this is that despite advice describing the risks of panic clearing and the measures which have shown to be effective in averting it, governments do not always see fit to implement such measures. So it is not the regulations, but the way that they are introduced which can lead to a temporary acceleration of land clearing or the clearing of areas which may otherwise have been left intact.

In fact, issues of compliance and enforcement are something of "red herring" in some states, given the current rates of legally permitted land clearing. It is true that there has been and is still an unacceptable amount of illegal land clearing and other breaches of both biodiversity and vegetation protection regulations<sup>24</sup>. However, the great bulk of land clearing in Australia is carried out under permits issued by government, and permitted under the current weak biodiversity and vegetation regulations at state and federal level. Better enforcement of these laws will make only a marginal difference in terms of meeting the objectives of conservation and sustainable land use.

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<sup>23</sup> Wentworth Group (2003). A new model for landscape conservation in New South Wales – The Wentworth Group of Concerned Scientists Report to Premier Carr. WWF Australia, Sydney.

<sup>24</sup> NSW Auditor-General 2002, Performance Audit- DLWC- Regulating the Clearing of Native Vegetation



In the Northern Territory under the IDCO 12 referred to above there are only guidelines to follow to assess clearing applications. There is no regulatory regime and therefore no penalties for breaches of clearing approvals. Unfortunately, the controls in the Northern Territory do not have the capacity to reduce the rate of clearing across freehold land in the Territory or control the impacts of clearing operations. In addition, the Leasehold Guidelines are currently managed internally without public transparency so there is no opportunity to assess the efficiency or effectiveness of environmental regulation on leasehold land.

## 2.4 Adequacy of assessments of economic and social impacts

A recent study implied that landholders shouldered a disproportionate share of the costs associated with implementing environmental regulations<sup>25</sup>, and this study has been used as 'proof' by some that regulations should be changed. However, this study has been shown to contain a number of methodological flaws<sup>26</sup>. In order to adequately assess the economic and social impacts of regulating native vegetation the following must be taken into account:

- Eliminate survey bias through random sampling when finding participants for surveys;
- Develop a process that will more fully determine costs and benefits of environmental regulations. There needs to be proper incorporation of private costs of land clearance with private benefits in these studies;
- Average years should be used to demonstrate equity and income loss, rather than good years, as this ignores the variability of risk in agriculture;
- When comparing relative costs of farm and urban households, a proper definition needs to be outlined on the basis for the comparison<sup>27</sup>;

## 2.5 Transparency and community consultation

In the Northern Territory under the new IDCO12 and the Litchfield Area Plan<sup>28</sup> applications to clear are lodged with the Department of Infrastructure, Planning and Environmental and Development Assessment Services respectively. Assessments to clear under the Planning Act are made publicly available on hard copy, and a period of ten days is provided for public submissions. However, there are minimal requirements on applications made under these planning controls, with limited assessments undertaken of the vegetation to be cleared, threatened species and threatened ecosystems, catchment requirements. Assessments and decisions on clearing applications in the case of IDCO12 are made internally, without public access.

In addition, there is no requirement for property plans before clearing commences and there is a complete absence of catchment plans, conservation plans, water resource plans or natural resource management plans or salinity action plans across the Territory. Hence there exist no guiding tools for applicants or for the public to determine if decisions and assessments of applications are being made with the appropriate planning tools. **This level of**

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<sup>25</sup> Sinden (2002). Who pays to protect native vegetation?: Costs to farmers in Moree Plains Shire, New South Wales. Paper presented to the 46<sup>th</sup> Annual Conference of the Australian Agricultural and Resource Economics Society, Canberra, 12-15/2/2002.

<sup>26</sup> Moss, W. (2002) Costs to farmers of protecting native vegetation in the Moree Plains: A critique of Sinden, J.A (2002). WWF Australia, Sydney.

<sup>27</sup> Moss, W. (2002) Costs to farmers of protecting native vegetation in the Moree Plains: A critique of Sinden, J.A (2002). WWF Australia, Sydney.

<sup>28</sup> Litchfield Area Plan 1992, Northern Territory Government

**planning which requires a high level of community consultation is essential if the process for assessment vegetation and environmental regulation is to become transparent in the Northern Territory.**

## **2.6 Options to reduce adverse impacts of environmental regimes**

For example in the Daly Basin Government subsidised agricultural expansion has afforded landholders perverse incentives to clear native vegetation. In 2001 The NT Government subdivided auctioned 30 000 hectares of Crown land. Seven lease blocks were sold with a lease condition of upgrade to freehold tenure if \$250 000 of property improvements are undertaken within three years. **These property improvements include clearing of native vegetation. In addition, free 2500 ML/ha water licences were granted to each lease.**

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Essentially the NT Government is setting-up property owners to be impacted by future regulatory regimes – very similar to the situation now affecting property owners in other Australian jurisdictions. With potential for increased property subdivisions with similar lease conditions to clear native vegetation in the Daly Basin and in other catchments the NT Government is providing incentives that will develop into a future significant impact over an increased number of property owners.

**This type of subsidised agricultural expansion needs to be abolished if the NT Government wants to mitigate regulatory impacts on property owners.**

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<sup>1</sup> ABS 2003, Yearbook Australia

<sup>1</sup> NT Treasury, Economic Overview

<sup>1</sup> Environment Australia

<sup>1</sup> Booth v Bosworth (2001) FCA 1453 (17 October 2001).

<sup>1</sup> Commonwealth of Australia (2002). Australian Terrestrial Biodiversity Assessment 2002. Land and Water Australia, Canberra

<sup>1</sup> Doley, A. (1997). Combining conservation and farming in the wheatbelt of Western Australia. In: Conservation outside nature reserves. Edited by P. Hale and D. Lamb. Centre for Conservation Biology, the University of Queensland.

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[http://www.nt.gov.au/dcm/otd/publications/otd\\_general/tourism.pdf](http://www.nt.gov.au/dcm/otd/publications/otd_general/tourism.pdf)

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