

The Secretary  
Senate Finance and Public Administration Committee  
PO Box 6100  
Parliament House  
CANBERRA ACT 2600

Dear Secretary

On the 24th February 2010 the Department of Environment, Climate Change and Water (DECCW) made a submission on behalf of the NSW Government to the Senate Inquiry on Native Vegetation Laws, Greenhouse Gas Abatement and Climate Change Measures. On 8 April 2010, I appeared as a witness to the inquiry. The Inquiry asked questions regarding the influence of the Kyoto agreement on the framing of the *Native Vegetation Act 2003* (NV Act), what socio-economic matters had been considered in the framing of the laws and the conflict over the laws. The Panel requested that I provide a list of stakeholders who were consulted in the framing of the NV Act and whether a written report was prepared that considered socio-economic implications in the framing of the Act.

The attached submission provides further details regarding these matters. In particular it makes the point that in framing the NV Act, the NSW Government was aware of both the socio-economic effects of not acting, and the socio-economic impacts on particular farmers that could result from clearing laws. The potential socio-economic impacts on individual farmers informed the architecture of the Act and the incentive and mechanisms that were introduced alongside it. The socio-economic study that was conducted in advance of introducing the *Native Vegetation Regulation 2004* is provided as Attachment 1.

If you have any further inquiries in relation to this submission, please contact me on 02 9995 6739 or by email ([tom.grosskopf@environment.nsw.gov.au](mailto:tom.grosskopf@environment.nsw.gov.au)).

Yours sincerely

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Enclosures: NSW Submission to Senate Inquiry on socio economic factors  
Draft Native Vegetation Regulation 2004 Regulatory Impact Statement

## **SENATE FINANCE AND PUBLIC ADMINISTRATION COMMITTEE INQUIRY**

### **Native Vegetation Laws, Greenhouse Gas Abatement and Climate Change Measures**

## **Socio-economic factors and the Native Vegetation Act 2003**

### **The groundswell supporting native vegetation legislation**

The *Native Vegetation Act 2003* (NV Act) emerged from a gathering concern among farmers and rural communities through the 1980s and 1990s about tree decline, loss of habitat from farmland and the land degradation that resulted from these impacts (and in particular soil salinity and declining water quality).

### **The eighties and nineties**

Farmers and scientists came together in several landmark events over the 1980s and 1990s to articulate their concern over tree decline and strategies to reverse it. These included:

1. 1980 Focus on Farm Trees Conference I (Victoria)
2. 1984 Focus on Farm Trees Conference II (Armidale NSW)
3. 1993 NSW Tree Plan on behalf of the NSW Tree Forum
4. 1995 After Dieback Conference (Orange NSW)

This reflected the growing understanding among researchers of the ecological services and economic benefits that were provided by native vegetation. These include pest control, pollination of food plants, wind protection, prevention of soil erosion, preventing loss of nutrients and decomposition of organic matter, preventing soil salinity, protecting catchments and maintaining water quality. Native vegetation is also a very important sink for CO<sub>2</sub> and clearing of native vegetation is a source of increased CO<sub>2</sub> in the atmosphere (AGO 2002, DEC 2003). Clearing native vegetation is implicated in the loss of biodiversity and in the extinction of species of birds, mammals and other fauna (eg Garnett & Crowley 2000 see further references attached).

Several attempts were made during the 1990s to estimate the cost of land degradation to the Australian economy (Gretton & Salma 1996). For example, the Commonwealth Department of Environment, Sport and Territories estimated that land degradation cost \$1.15 billion in lost production (DEST 1995) which was around 5 percent of the total value of agricultural production of \$23.4 billion in 1994-1995 (ABS Cat. No. 5206.0). A Prime Ministerial statement at the time put the production equivalent of degradation at around 6

per cent of agricultural production or around \$1.5 billion (in 1994–95 values) each year (Gretton & Salma 1996).

Farmers were instrumental in the campaign to reverse land degradation and effectively formed a new movement – the Landcare movement. Governments responded to the gathering community concerns. Incipient programs like the National Tree Program and the National Soil Conservation Program in 1980s blossomed in 1990 into the Decade of Landcare which included the Landcare, One Billion Trees and Save the Bush programs. These programs between them addressed land degradation, revegetation and conservation of bushland on farms. They were ultimately expanded into the Natural Heritage Trust in the mid-1990s. Several reports on the socio-economic values of native vegetation on farmland were published as a result of these programs (see references).

The investment of governments, the insights of scientists and the sheer hard work by farmers led to massive achievements in revegetation and conservation of native bushland on properties in NSW. However, by the mid-1990s the NSW State Government responded to the gathering consensus that it was far cheaper to protect remnant vegetation than to revegetate.

The *Native Vegetation Conservation Act 1997* commenced in 1998. The Native Vegetation Advisory Council (NVAC) was established by the Act to take a pro-active role in advising the NSW Government on native vegetation throughout the state. NVAC included rural representatives, conservation groups and government agencies. As part of their work they published a series of background papers including one on the social values of native vegetation and another addressing the economic values. NVAC also convened seminars including “Native vegetation in NSW – What is its value now?” Proceedings were published looking at innovative approaches to valuing ecosystem services.

### **The year 2000 and onwards**

A report in 2000 to the Australian Conservation Foundation and the National Farmers Federation concluded that “the annual cost of degradation in rural landscapes is at least \$2 billion annually, and this figure is rising (Madden *et al* 2000).” Two years later it was reported that the cost of environmental repair was between \$2 billion and \$6 billion per annum (Morton, *et al* 2002). In the early 2000s, two-thirds of landholders reported that their property values would decline by up to 25% over the following 3 to 5 years as a result of land degradation (Allen Consulting Group 2001).

In December 2002 the NSW Premier met with the members of the Wentworth Group of Concerned Scientists and asked them to consult with farmers and environment groups to develop a new approach to vegetation management in NSW. These three groups – scientists, farmers and environmental interests – met over a period of two months and produced a landmark report *A New Model for Landscape Conservation in NSW* (Wentworth Group 2003). In 2003 the Government adopted the Wentworth Group model as the basis for its new native vegetation policy. It then appointed the independent Native Vegetation

Reform Implementation Group, chaired by the Rt Hon Ian Sinclair to advise it on implementation of the Wentworth recommendations.

The following stakeholders were involved in the development of the NV Act through the Native Vegetation Reform Implementation Group: NSW Farmers' Association (Rob Anderson and Jonathon McKeown), Total Environment Centre (Jeff Angel), Wentworth Group (Mike Young and Peter Cosier) and the World Wide Fund for Nature (Glen Klatovsky).

The Final Report from this group set out in detail the framework for what was to become the *Native Vegetation Act 2003* as well as new institutional arrangements with the initiation of independent Catchment Management Authorities, the Natural Resources Advisory Council and the Natural Resources Commission. It was fundamental to these proposed reforms that farmers would be provided with greater economic security while landscape considerations were built into business decisions.

### **Building socio-economic considerations into the Native Vegetation Act**

In framing the NV Act, the NSW Government was aware of the socio-economic effects of not acting, and the potential socio-economic impacts on individual farmers. That knowledge informed the architecture of the Act and the incentives mechanisms that were introduced alongside it.

When the NSW Government began framing the regulations, which were required before the NV Act could commence, it commissioned a Regulatory Impact Statement (RIS) (Attachment 1).

The report identified economic costs and impacts associated with the introduction of the Regulation and the economic value of native vegetation. It concluded that the socio-economic impacts of not implementing the native vegetation legislation outweighed the socio-economic impacts of taking action.

The NV Act is constructed in such a way as to enable farmers to get on with the business of farming while the important remnant vegetation is protected. Several mechanisms were built into the architecture of the NV Act to enable this to occur:

1. The regrowth date
2. Routine agricultural management activities
3. Sustainable grazing clause
4. Rotational grazing clause
5. Groundcover self-assessment
6. Other exemptions

These mechanisms are described in the original submission to the Senate Inquiry by the NSW Government.

Once the Act was implemented further mechanisms have been built into its architecture to make it more 'farmer-friendly'. In particular, the introduction of

the invasive native scrub PVPs have enabled farmers to clear or thin over 1.6 million hectares where native trees and shrubs that are regarded as woody weeds have invaded.

When the NV Act was introduced the Government introduced two key financial support programs to assist landholders who were negatively impacted or wished to take further positive action. These included:

1. Structural adjustment of approximately \$21 million (the principle of this is similar to the structural adjustment packages in the timber industry), and
2. \$120 million in incentives grants.

These incentive funds built on over \$900 million provided to landholders in NSW by State and Federal Governments over 20 years for protection of native vegetation, revegetation and other landcare measures. With the new Caring for our Country program and continued funding of Catchment Management Authorities by the NSW Government, these incentives programs continue to lead to a massive cumulative impact. Of the (over) 1,700 PVPs that have been implemented since the NV Act came into force, about 70% (over 1,200) have had access to incentives funding.

### **Current situation**

It is difficult to isolate and quantify the specific impact on agricultural production as a result of the introduction of the NV Act. In 2001-02, the preliminary estimate by the Australian Bureau of Statistics of the gross value of agricultural commodities produced was a record \$39.0 billion, an increase of 14% over the value of \$34.2 billion recorded in 2000-01 (ABS 2003). The gross value of total Australian agricultural production increased 20% from 2006-07 to \$43.3 billion in 2007-08 (ABS 2009). Across the 10 years 1996/7 – 2007/8 there has been a 63% increase in Gross Value of Production.

The farming community itself continues to invest heavily in conservation measures on farms as borne out by the continuing Landcare movement and take-up of financial incentives. Over 1,700 landholders have now adopted voluntary Property Vegetation Plans – about 1 in 25 NSW farmers.

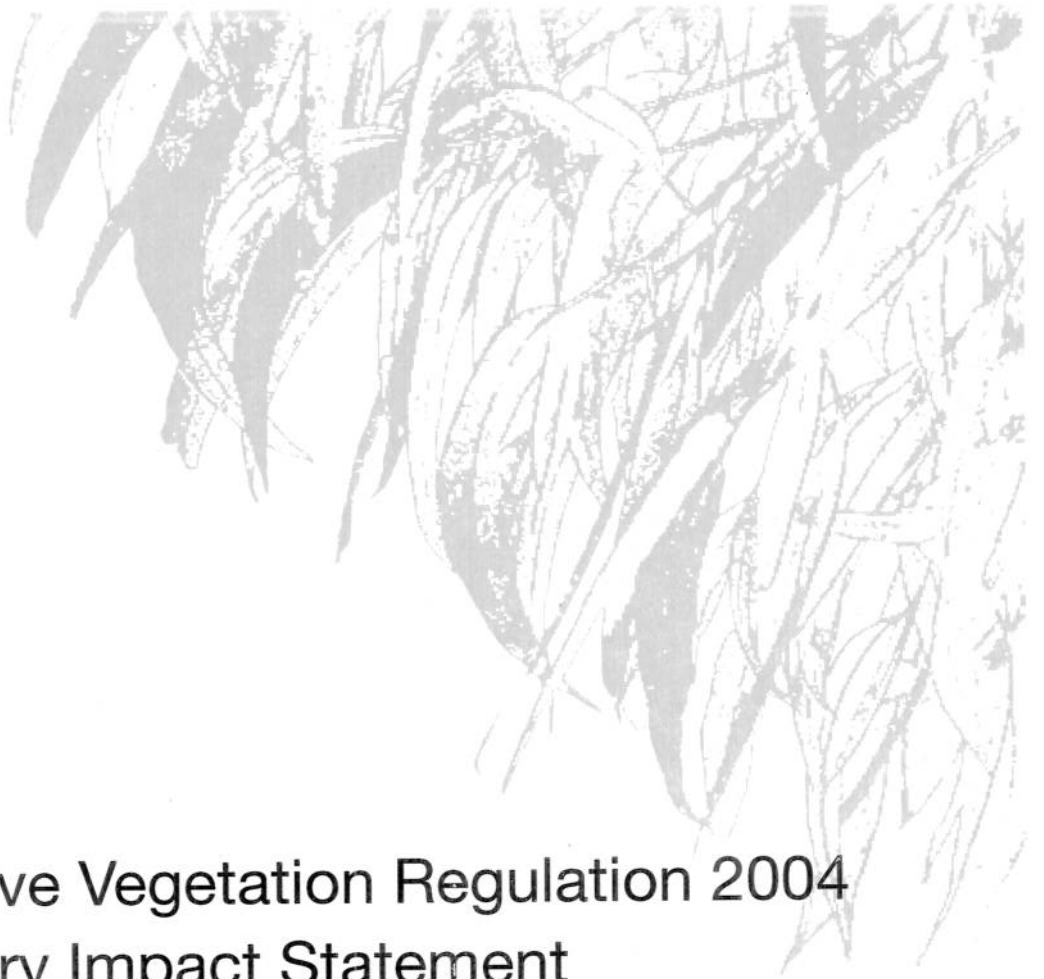
It has always been the case that it has been farmers themselves who have been concerned about overclearing in NSW. DECCW receives hundreds of reports related to native vegetation clearing through its Environment Line (in 2009 this was over 500). Reports are made by members of the public, including rural landholders and farmers.

New models for financial assistance are continuing to be developed by the NSW Government, particularly using market based instruments. The new Biobanking scheme provides great potential for farmers to earn income from the ecological services their native vegetation provides.

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# Draft Native Vegetation Regulation 2004 Regulatory Impact Statement

## NSW Native Vegetation Reforms

Protecting and investing in healthy  
and productive landscapes for the  
people of New South Wales



NSW Government



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## ABBREVIATIONS

ACF:	Australian Conservation Foundation
API:	Air Photo Interpretation
BRS:	Bureau of Rural Sciences
CM:	choice modelling
CMA:	Catchment Management Authority
DEC:	Department of Environment and Conservation
DIPNR:	Department of Planning, Infrastructure and Natural Resources
DLWC:	Department of Land and Water Conservation
EP&A:	Environmental Planning and Assessment Act 1979
ERIC:	Environmental Research and Information Consortium Pty Ltd
IBRA:	Interim Biogeographic Regionalisation for Australia
LEC:	Land and Environment Court
NLWRA:	National Land and Water Resources Audit
NPV:	net present value
NV Act:	Native Vegetation Act 2003
NVC Act:	Native Vegetation and Conservation Act 1997
NVMF:	Native Vegetation Management Fund
NVMP:	Native Vegetation Mapping Program
NVR:	Native Vegetation Regulation 2004
NVRIG:	Native Vegetation Reform Implementation Group
PNF:	Private Native Forestry
PVP:	Property Vegetation Plan
PC:	Productivity Commission
RAMA:	routine agricultural management activity
RIS:	Regulatory Impact Statement
SCMP:	State Conservation Monitoring Project
SEPP:	State Environmental Planning Policy
TSCA:	Threatened Species Conservation Act 1995
TSR:	Travelling Stock Reserve
WTP:	Willingness to pay

## Executive Summary

The proposed Regulation is titled the Native Vegetation Regulation 2004 (NVR 2004) under the Native Vegetation Act 2003 (NV Act). The Minister for Natural Resources is the proponent and the Minister responsible for making the Regulation.

### Objectives of the Proposed Regulation

- The objective to be achieved by the proposed Regulation is:

To provide a clearly defined, equitable, consistent and streamlined framework for the management of native vegetation in New South Wales.

### Structure of the Regulatory Impact Statement

The NVR 2004 provides the regulatory basis for the streamlined delivery of Property Vegetation Plans (PVPs) and development consents. It also contains an Environmental Outcomes Assessment Methodology (EOAM) which defines the circumstances under which broadscale clearing may improve or maintain environmental outcomes. In addition the regulation defines routine agricultural management activities (RAMAs) which can be conducted without consent and outlines a methodology for determining whether or not native vegetation comprising only groundcover may be cleared.

### Approach and Methodology

The methodology adopted for the Regulatory Impact Statement (RIS) is based on the procedure set out in Schedules 1 and 2 of the *NSW Subordinate Legislation Act 1989*, as well as the *Guidelines for Economic Appraisal*, NSW Treasury and the *Regulatory Impact Statement Instruction Manual*, NSW Business Deregulation Unit.

### Regulatory Options Identified

The costs and benefits of the following three options were evaluated:

- **Option 1: 'Do nothing'**. The Regulation is not made. This would create procedural and administrative problems with many sections of the NV Act. It would not achieve the objectives as outlined.
- **Option 2: Proposed new Government statutory rule (Regulation) – Native Vegetation Regulation 2004**. The NV Act which was passed by Parliament in December 2003 provides for certain administrative and procedural activities to be prescribed in a Regulation. The proposed NVR 2004 provides the basis for those activities. Under this regulation most of the operational costs are borne by the Government. The regulation would achieve the objectives as outlined.
- **Option 3: Alternative Regulatory option with devolution of responsibility for and costs of the preparation the PVP to the landholder**. This option, which is similar in its effects to Option 2 except for shift of the cost burden to landholders, along with an expected increase in compliance costs, would achieve the objectives as outlined.

## 1. Introduction

This report, the Regulatory Impact Statement (RIS) under the *Native Vegetation Act 2003* (NV Act) sets out the analysis of the impact of the proposed Native Vegetation Regulation 2004 (NVR 2004) and the alternatives to the proposal. Preparation of the RIS involved assessing relevant costs and benefits, including the impacts on resource allocation, compliance costs, administrative costs and other costs and benefits to the community. The purpose of the RIS is to assist in the decision whether to accept, reject or modify the proposed Regulation.

The NVR 2004 provides the regulatory detail that allows for the streamlined delivery of Property Vegetation Plans (PVPs) and development consents. It also contains an Environmental Outcomes Assessment Methodology (EOAM) which defines the circumstances under which broadscale clearing may improve or maintain environmental outcomes. In addition the regulation defines routine agricultural management activities (RAMAs) which can be conducted without consent and outlines a methodology for determining whether or not native vegetation comprising only groundcover may be cleared.

### 1.1 The objectives of the proposed regulation

The objective to be achieved by the proposed Regulation is:

To provide a clearly defined, equitable, consistent and streamlined framework for the management of native vegetation in New South Wales.

### 1.2 Role of Subordinate Legislation Act

Under the *NSW Subordinate Legislation Act 1989* there is a requirement to prepare an RIS when a principal regulation is made. An RIS is seen as an effective means of raising public involvement in the regulation making process. It provides members of the community with an opportunity to understand the effects of regulations before they become law.

The primary purpose of an RIS is to ensure that the economic and social costs and benefits of regulatory proposals are examined so that Ministers proposing the regulations and members of the community can be satisfied that the benefits of the regulation justify potential costs.

Schedule 2 of the *Subordinate Legislation Act 1989* requires that the RIS must include:

- a statement of the objective[s];
- an identification of the alternative options by which those objective[s] can be achieved, wholly or in part;
- an assessment of the incremental cost and benefits of the Regulation, including the costs and benefits relating to resource allocation, administration and compliance;
- an assessment of the costs and benefits of each alternative to the making of the Regulation, including the costs and benefits relating to resource allocation, administration and compliance; with these assessments including the alternative of not proceeding with any action;
- an assessment as to which of the alternatives involves the greatest net benefit to the community; and
- a statement of the consultation program to be undertaken.

**Table 1 Summary of Native Vegetation Cover of NSW**

Dataset*	Area (ha)**	% Total
Total Area of NSW	80,120,000	100.0
Total Vegetation Cover*** of NSW (Benson 1999)#	51,810,000	64.7
Total Vegetation Cover*** of NSW (NLWRA 2001)^	53,580,000	66.9
Total Vegetation Cover*** of NSW (SCMP 2002)~	51,460,000	64.2
Adjustments:		
Conservation Area Vegetative Cover*** (Benson 1999)	5,300,000	6.6
Sydney Basin Vegetative Cover*** (Benson 1999)#	2,480,000	3.1
Total Adjustments	7,780,000	9.7
Total Area covered by NV Act****	44,300,000	55.3

\* Datasets do not delineate between remnant and regrowth.

\*\* Data rounded to nearest 10,000 ha.

\*\*\* Coverage estimated using bioregions (IBRA).

\*\*\*\* Based on 65percent average vegetation cover.

# Benson calculations using IBRA version 4.

^ NLWRA (National Land and Water Resources Audit). Data presented as major vegetation groups (e.g. Eucalypt Tall Open Forests) - Australian wide coverage - July 2001.

~ SCMP using IBRA 5.1. Using 1 km pixel presence/absence coverage.

Source: DIPNR records.

## 2.2 Clearing of Native Vegetation

### *The Impacts of Vegetation Clearing*

There is uniform acceptance across government, industry and the community that broadscale land clearing must come to an end unless it maintains or improves environmental outcomes. The clearing of native vegetation is strongly linked to soil degradation, such as erosion and salinity as well as declines in aquatic ecosystem health, water quality, and climate change. (NSW SOE Report 2003). Two thirds of landholders nationally report that their property values will decline by up to 25 percent over the next three to five years as a result of land degradation (Allen Consulting Group 2001).

The Australian Bureau of Statistics estimates land degradation costs nationally \$1.15 billion per annum in lost production, 5 percent of the total value of agricultural production. The Prime Minister's Science Engineering and Innovation Council concluded that the cost of repairing damaged ecosystems nationally is \$2 - \$6 billion annually (May 2002). They recommended that the Commonwealth government urgently work with the States to limit broad scale clearing.

The loss and decline of native vegetation can lead to a substantial reduction in terrestrial habitats and is a major threat to biodiversity. As many areas have already been extensively cleared, even small amounts of additional clearing can have a relatively high impact on biodiversity.

For example, there is now a well documented pattern of accelerating extinctions occurring amongst woodland birds (Robinson & Traill 1996; Garnett & Crowley 2000; Ford et al. 2001). While many regions have already lost significant numbers of native species, regional extinctions will continue long after vegetation clearance ceases as the phenomenon known as the "extinction debt" runs its course (Possingham, 2001). As a consequence, clearing of native vegetation is listed as a "Key Threatening Process" under the *Threatened Species Conservation Act 1995*. As landscapes approach levels of clearing around 70 percent there is a rapid decline in habitat connectivity and a rapid decline in the probability of species persistence (Smith & Sivertsen 2002).

In NSW 180,000 ha of productive land is already salt affected and that area is estimated to increase eight-fold by 2050 (National Land and Water Audit). CSIRO have shown that a minimum of 30-50 percent of perennial vegetation cover is required to ultimately control groundwater rise and salinity

**Table 3 Area Approved for Clearing for All DIPNR Regions**

All DIPNR Regions	1998	1999	2000	2001	2002	2003	2004 To June	ha/yr (Ave)
Applications for clearing	104,810	276,996	100,489	133,876	84,878	86,158	44,951	128024
Area approved (ha)	75,307	174,681	74,459	90,786	57,753	59,365	38470	87,818

Source: DIPNR

The totalling of clearing application figures will provide a misleading answer to the environmental impact of vegetation clearing. The method of recording clearing can exaggerate clearing impacts on the environment because the total area of an application may be identified as being cleared when:

- invasive native shrubs are cleared with both significant environmental and agricultural benefits. Statistics relating to approvals for clearing invasive scrub are only available for the years 2000 onwards. They show that the average area approved for clearing over this period was 1997 hectares a year;
- sustainable forestry operations only remove a small percentage of vegetation over the given area;
- an application has been previously approved, but the clearing never physically took place (lapsed consent). In the financial year 2002/2003 these totalled just 495 hectares but in 2003/2004 the figure was 8,122 hectares;
- isolated paddock trees are removed in already cleared and cultivated areas, but may cover less than 10 percent of the area approved;
- only the shrub layer is cleared and trees and groundcover are retained;
- some areas have been previously cleared;

The figures do not include clearing carried out under exemptions, illegal clearing or clearing excluded under the NVC Act or clearing approved under other Acts;

### ***Exempt Clearing***

The exemptions under the NVC Act were designed to allow for the undertaking of normal farming activities. Landholders are not obliged to notify DIPNR that they are using an exemption, and it not possible to estimate the area cleared under exemptions. The range of exempt activities has been extensively revised in the NV Act.

## **2.3 Compliance**

Breaches of the NVC Act require compliance action by DIPNR. Alternative available include warning letters, stop work orders, requirements for remediation and prosecution.

In the period from 2002 to June 2004 some 330 compliance actions were initiated by DIPNR in response to actual breaches of the NVC Act. This represented an average of some 132 a year.

Almost 68 percent of those breaches required only a warning letter to achieve the desired result. Stop work orders were issued in 5 percent of cases. Remediation agreements and notices were used to resolve 21 percent of the breaches of the Act. Prosecutions were initiated in respect of less than 4 percent of breaches and some breaches were settled out of court. Following court proceedings remediation orders were issued for the remaining 2 percent of breaches.

It is likely that a proportion of illegal clearing activity arises from the misinterpretation of the exemptions under the NVC Act. Their replacement by Routine Agricultural Management Activities (RAMAs) and clearer definitions under the NV Act should overcome such problems. It is anticipated



### 3. Alternative Options to Achieve Policy Objective

Three alternative options were identified for achieving the policy objective of the proposed Regulation. They were:

- **Option 1: ‘Do nothing’. The Regulation is not made.**
- **Option 2: The Proposed new Government statutory rule (Regulation) – Native Vegetation Regulation 2004 with operational costs borne by the Government is made.**
- **Option 3: An Alternative statutory rule (Regulation) which devolves to the landholder the responsibility for, and costs of, preparing a Property Vegetation Plan is made.**

#### 3.1 Description of Alternative Options

A description of each of the three options selected for detailed benefit cost analysis follows.

##### 3.1.1 Option 1: ‘The ‘Do Nothing’ Scenario

###### Summary of option 1 effects:

Under this scenario the regulations referred to in the NV Act would not be made. This would create procedural and administrative problems with many sections of the Act.

A basic objective of the NV Act is to prevent broadscale clearing unless it improves or maintains environmental outcomes. However, the Act itself does not define the term “improve or maintain environmental outcomes.” Rather it specifies (clauses 15 and 32) that regulations may define the circumstances in which broadscale clearing is to be regarded as improving or maintaining environmental outcomes for development consent or for the purposes of a property vegetation plan (PVP).

In the absence of a regulation virtually all proposals for clearing remnant vegetation would have to be assessed as development applications (DAs) requiring consent as provided for in S14(3) of the NV Act. The proposal may also need to meet the requirements of S79C of the Environmental Planning and Assessment Act 1979 (EP&A Act). A refusal of development consent may leave open an appeal to the Land and Environment Court (L&EC).

The option of a PVP would not be viable in the absence of a regulation since the proponent would not have available the principles of assessment to be applied to such plans, detail of their form and content, or the circumstances under which clearing would be deemed to improve or maintain environmental outcomes. Similarly there would be no facility available to the proponent to incorporate offsets into their proposal.

In addition the proponent would be responsible for meeting all the costs associated with the preparation of the plan with no certainty that it would meet the test of improving or maintaining environmental outcomes.

Relying on the Act alone would deny landholders the expectations and benefits of a more standardised and transparent method of applying for approval to clear native vegetation that has been built up in the minds of stakeholders prior to and following the passing of the NV Act by both houses of the Parliament.

- **Part 5: *Broadscale clearing***

Under the NV Act no proposal for broadscale clearing can be approved unless it can be shown that the clearing will improve or maintain environmental outcomes.

Part 5 of the NV Reg provides that any proposal for broadscale clearing will be assessed according to the Environmental Outcomes Assessment Methodology (EOAM). The EOAM developed in association with the regulation provides detailed assessment procedures that determine the circumstances in which broadscale clearing can be regarded as improving or maintaining environmental outcomes. It addresses the key environmental values of water quality, land degradation, salinity and biodiversity.

Clearing associated with a PVP proposal can include offsets that may enable the clearing proposal to be deemed to improve or maintain environmental outcomes.

- **Part 6: *Special provision for vulnerable land***

Part 6 outlines provisions that are to apply to:

- State protected lands.
- Identification of protected regrowth on steep or erodible land or protected riparian land
- limitation of RAMAs on protected riparian land; and
- Clearing of lignum on special category land.

- **Part 7: *Saving and transitional provisions***

Schedule 3 of the Subordinate Legislation Act identifies matters of a savings or transitional nature as not requiring regulatory impact assessment.

- **Part 8: *General***

This part contains details of the methodology to be used to calculate the percentage of groundcover that comprises indigenous species for the purposes of section 20 of the Act under which the clearing of certain groundcover is permitted.

It also contains provisions relating to penalty notice offences, the issue of false or misleading information and the extension of the Act to the Wollongong LGA.

The Regulation contains one Schedule that specifies the various penalties for offences by section under the Act and by clause under the Regulation for offences by individuals and corporations.

### **Summary of Option 2 effects.**

Once the Act is proclaimed it is anticipated that virtually all proposals for clearing of native vegetation will be made in the context of PVPs which provide the foundation for the new system of native vegetation management. It will of course still be possible for landholders to make a development application involving broadscale clearing.

Under the new arrangements all PVPs and development applications involving broadscale clearing will be assessed according to the Environmental Outcomes Assessment Methodology (EOAM) to determine whether the broadscale clearing improves or maintains environmental outcomes for water quality, land degradation, salinity and biodiversity (referred to as the 'improve or maintain test').



## 3.2 Expected Distributional Effects of the Regulations

The NVR 2004 contains provisions which provide a number of mechanisms for ensuring that activities on, and proposed for, land supporting native vegetation are assessed in accordance with the principles of the NV Act. In particular, it delivers flexibility to landholders in the management of native vegetation, incentives to manage native vegetation sustainably and brings to an end uncontrolled broadscale clearing in New South Wales. Without the proposed Regulation the opportunity to offset clearing which on balance has a net environmental benefit would be lost.

Option 3 has an adverse distributional effect in that it transfers substantial costs to landholders who have to pay for professional advice, data collection, maps, etc.

The contribution of the NSW Government to PVP preparation under Option 2 offsets these costs and provides substantial assistance to proponents to meet their obligations. There is a greater level of DIPNR financial and other resource input and consequent integrity of the process compared with Option 3.

### *Means and Processes of Enforcing the Regulation*

The Regulation will be administered through:

- the Minister, DIPNR and CMAs;
- authorised officers and / or entities appointed by the Minister, DIPNR; and
- enforcement provisions supported by proceedings before a Local Court or the Land and Environment Court, providing that proceedings are commenced within, but not later than, two years after the date on which the offence is alleged to have been committed; or two years after the date on which evidence of the alleged offence first came to the attention of an authorised officer.

## 3.3 Stakeholders

The identified parties in the public and private sectors affected by the Regulation are as follows:

- Minister for Natural Resources;
- Department of Infrastructure Planning and Natural Resources;
- Department of Environment and Conservation;
- NSW Farmers' Association;
- Local Courts;
- Land and Environment Court;
- Catchment Management Authorities; and
- Landholders throughout NSW.

- costs and benefits are expressed over a five-year time frame, the commencement date and end year being the same for each alternative option;
- the year 2004/05 is the base year or Year 1 for the purpose of the RIS; and
- all costs and benefits are expressed in 2004 constant \$ values.

#### 4.1 Net Economic Benefits

There are four components to the assessment of the net economic benefit of conserving native vegetation (Lockwood and Walpole 1999).

- transaction costs associated with establishing and implementing the proposed Regulation;
- net on-farm costs;
- community benefits (including value of the species conserved); and
- catchment benefits (eg, through avoided damage to infrastructure and amenities from dryland salinity and soil erosion which impact on downstream rural and urban populations).

Estimation of landholder on-farm costs and benefits is beyond the scope of this RIS and so emphasis is placed on (i) the transaction/compliance costs and (ii) community or public benefit associated with conservation, aesthetic and biodiversity values as measured by willingness to pay (WTP). Past expenditure on agreed incentives (funded from The Native Vegetation Management Fund) included in approved property agreements under the NVC Act can be considered a proxy for the on-farm net present value of benefits and costs under PVPs. PVPs would not be undertaken if there is no net benefit to the landholder. Similarly public expenditure to mitigate catchment impacts would not be undertaken unless there was a perceived net benefit to the community.

Economic impacts of conserving native vegetation include the broader social and environmental impacts on the community, on individual landholders and government. As there is a lack of detailed regional and site-specific data on the economic costs and benefits, the identification and transfer of attribute values needs to be done with care.

The background paper prepared for the Native Vegetation Advisory Council in 2000, the *Economic Values of the Native Vegetation of New South Wales* summarises the key economic concepts (Gillespie 2000), as do the series of publications funded by the Land and Water Resources Research and Development Corporation (LWRRDC) from the Johnstone Centre, Charles Sturt University, Albury (Lockwood, Walpole, Miles et al.) in the late 1990s<sup>2</sup>.

The total economic value of native vegetation includes both use (i.e., people using native vegetation either directly or indirectly and deriving value from its use) and non-use values (i.e., the enjoyment of the native vegetation even without direct or indirect contact, eg, option values, quasi-option values, vicarious use values, bequest values and existence values).

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<sup>2</sup> Lockwood, M., & Carberry, D. (1998) *Stated Preference Surveys of Remnant Native Vegetation*, Johnstone Centre Report No. 104; Walpole, S., Lockwood, M. & Miles, C.A. (1998) *Influence of Remnant Native Vegetation on Property Sale Price*, Johnstone Centre Report No. 106; Miles, C., Lockwood, M., Walpole, S., & Buckley, E. (1998) *Assessment of the On-farm Economic Values of Remnant Native Vegetation*, Johnstone Centre Report No. 107; Walpole, S., & Lockwood, M. (1999) *Catchment Benefits of Remnant Native Vegetation Conservation*, Johnstone Centre Report No. 129; Walpole, S., & Lockwood, M. (1999) *A revised incentive policy for remnant vegetation conservation*, Johnstone Centre Report No. 131; Lockwood, M., Walpole S., & Miles C. (2000) *Economics of remnant native vegetation conservation on private property*, Research Report 2/00, National Research and Development Program on Rehabilitation, Management and Conservation of Remnant Vegetation.

whose unit values (or attribute implicit prices) can be varied rather than being limited to a particular combination of attributes at fixed levels as in contingency valuation modelling studies<sup>3</sup>.

The key CM study is one commissioned by the National Land and Water Resources Audit (*Towards the development of a transferable set of value estimates for environmental attributes*, van Bueren M., and Bennett J., *The Australian Journal of Agricultural and Resource Economics* (2004), 48:1, pp. 1-32.). Relevant CM studies are summarised in Table 5.

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<sup>3</sup> Gillespie Economics (2003) *Regulatory Impact Statement - Hunter Catchment Management Trust Regulation 2003*: p. 34 and van Bueren M. and Bennett J. (2004) *Towards the development of a transferable set of value estimates for environmental attributes*, *The Australian Journal of Agricultural and Resource Economics*, 48:1, pp. 26-27).

It is assumed that the area of native vegetation conserved as a result of the operation of the NVR 2004 and the conservation outcomes achieved each year are a one-off impact. On this basis the one-off national WTP values from Table 5 have been used as a base source of value estimates. These WTP value estimates need to be adjusted to fit the policy frame. van Bueren and Bennett point out that populations from different states have similar values in the national context, but in the regional context the values are markedly different, particularly for case studies within a narrow local context within regions; with a scaling factor of 2-26 being used depending on the attribute. The proposed regulation refers to the State context, with a much larger frame of reference than a specific region. A scaling factor of x3 has been used.

The transfer and calibration of the van Bueren and Bennett national WTP value estimates to assess the impacts of remnant native vegetation conservation in a New South Wales context, along with the Lockwood and Carberry regional WTP estimates are summarised in Table 6. This table indicates the following based on 2004 \$ values:

- WTP for remnant native vegetation conservation (excluding any additional species protection) ranges from a lower bound of \$2.55 to an upper bound of \$4.51 (giving a mid-point of \$3.53) per household per 10,000 ha based on the studies quoted; and
- WTP for species protection ranges from \$2.02 to \$16.54 (giving a mid-point of \$9.28) per household per additional species protected.

**Table 6 Transfer and Calibration of National WTP Value Estimates to NSW Regional Prices**

Attribute	Units	Scaling factor adopted	WTP national values for calibration to regional values (\$ 2004)	Regional WTP values (\$ 2004) [Impact per hhold pa]
van Bueren & Bennett ( <i>see</i> Table 5)				
▪ Landscape aesthetics [ <i>farmland repaired and bush protected</i> ]	\$ per 10,000 ha land restored or protected from degradation	x 3	\$0.85	\$2.55 per 10,000 ha
▪ Species protection [ <i>number of species protected from extinction</i> ]	\$ per species protected	x 2	\$8.27	\$16.54 per species
Lockwood & Walpole ( <i>see</i> Table 5)				
▪ Native vegetation conserved	\$ per 10,000ha native vegetation conserved	-	-	\$4.51 per 10,000 ha
▪ Native plant and animal species conserved in the region	\$ per species conserved	-	-	\$2.02 per species

There is no specific data available on changes in the levels of the average number of native plants and animals protected or conserved. On the assumption that there is no change in the number of species with native vegetation conservation, no account is taken of this impact in the economic evaluation.

A conservative estimate of the value of the potential net economic benefit of native vegetation conservation from the perspective of the wider community in New South Wales is the aggregation of the native vegetation data based on the number of households in New South Wales<sup>8</sup>. It was assumed

<sup>8</sup> Number of households in New South Wales as at 30 June 2001 was 2,454,676. ABS Catalogue No. 3101.0 (4 June 2004) *Australian Demographic Statistics*, Table 18: Estimated Residential Households as at 30 June 2001. If 25,000 ha were conserved each year, the aggregate one-off value of the WTP is \$15.6 million (i.e. \$626 per ha).

The Option costs for the most part become benefits (avoided costs) of 'doing something' under the proposed Regulation or other regulatory or non-regulatory alternatives. This Option does not meet the policy objective of the proposed Regulation but is the base case scenario against which all options must be evaluated.

The impacts associated with the implementation of Option 1 – 'Do nothing' are incurred by DIPNR or other agencies, landholders or the broader community.

For DIPNR and other agencies, the cost impacts have been grouped under the following headings and are summarised in Table 8. The agency costs by major cost category and by year are summarised in Table 9.

- Mapping and PVP Developer;
- Staff training and operating costs;
- Monitoring and Compliance; and
- Enforcement.

For landholder there would be cost impacts associated with the preparation of a case for any development applications that may be made and or the preparation costs for a PVP should landholders proceed in that direction. There could also be some costs arising from compliance activity.

In theory, without the NVR 2004 the main area of clearing would be in respect of regrowth, clearing for routine agricultural management activities (RAMAs) and clearing for invasive scrub. The removal of SEPP 46 exemptions such as 2 hectare and minimal tree clearing (7 trees per hectare) may increase the risk of RAMAs being misused or misinterpreted resulting in excess and inappropriate clearing.

The value of foregone community benefits (Table 10) is a conservative estimate of the potential net economic benefit of native vegetation conservation to the wider community in New South Wales. These impacts are summarised in Table 10, while the landholder costs by major cost category and by year are summarised in Table 11.

**Table 9 Option 1 – ‘Do nothing’: Agency Costs by Major Cost Category and by Year (\$’000)**

Item	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Total Costs
Mapping and PVP Developer	1008.9	4826.9	1939.4	1939.4	1939.4	1939.4	13593.4
Staff training costs	0	141.8	70.9	70.9	70.9	70.9	425.3
Monitoring and Compliance	0	1417.5	2476.5	2582.5	2320.5	2220.5	11017.5
Enforcement	0	310.6	310.6	310.6	310.6	310.6	1553
<b>Total</b>	<b>1008.9</b>	<b>6696.7</b>	<b>4797.4</b>	<b>4903.4</b>	<b>4641.4</b>	<b>4541.4</b>	<b>26589.2</b>

Source: Appendix A Table A.1.

**Table 10 Option 1 - ‘Do nothing’: Landholder Costs**

Item	Units	No. units	Unit cost (\$)	Total cost* (\$’000)	Comment
<b>Mapping:</b>					
- Maps	\$/map/applic.	2	150	225.0	
- Preparation of DA	days/applic	3	200	450.0	
- Professional adviser for DA	days/applic	6	1000	5400.0	+20% incidentals
- Develop / ‘ground truth’ PVP	days/applic	-	200	-	
- Professional adviser for PVP	days/applic	-	1000	-	+20% incidentals
<b>Subtotal Mapping</b>				<b>6075.0</b>	
<b>Monitoring and Compliance:</b>					
- Responding to warning letters, remedial action, etc	compliance actions	240	100	120.0	4 hours / action @ \$25/hr
- Professional adviser	days/case	0.5	1000	1440.0	+20% incidentals
- Small offence settled out-of-court	LS	10	40000	2520.0	
- Moderate offence (goes to court / settlement)	LS	2	175000	2205.0	
- Larger offence (goes to court, etc)	LS	2	245000	3087.0	
<b>Subtotal Compliance</b>				<b>9372.0</b>	
<b>Community Benefit Foregone:</b>					
- Invasive native scrub cleared	\$/10,000ha / hhold	1997	2.55	6249.4	\$0.51 / ha / hhold
<b>Subtotal Community Benefit Foregone</b>				<b>6249.4</b>	
<b>Total</b>				<b>21696.4</b>	

\* Over five years.

Source: Appendix A Table A.1.

**Table 11 Option 1 – ‘Do nothing’: Landholder Costs by Major Cost Category and by Year**

Item	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Total Costs
Mapping costs	0	1215.0	1215.0	1215.0	1215.0	1215.0	6075.0
Compliance	0	1874.4	1874.4	1874.4	1874.4	1874.4	9372.0
Community benefit foregone	0	1249.9	1249.9	1249.9	1249.9	1249.9	6249.4
<b>Total</b>	<b>0</b>	<b>4339.3</b>	<b>4339.3</b>	<b>4339.3</b>	<b>4339.3</b>	<b>4339.3</b>	<b>21696.4</b>

Source: Appendix A Table A.1.

## 5.2 Option 2: Proposed new Government statutory rule (Regulation)

The proposed Regulation contains a number of mechanisms to achieve the stated policy objectives. As with Option 1, the impacts are either attributed to the DIPNR/CMA or other agencies, landholders or the broader community. This option provides offsets for approved clearing under PVPs and DIPNR/CMA would have a key role in the use of the PVP Developer process and its ‘PVP Mapper’ component in the clearing approval process and the biodiversity assessment of offset sites. Until SPOT 5 satellite imagery is available (Year 2) it will be necessary to use alternatives such as aerial photographs.



**Table 12 Option 2 – Proposed New Government Statutory Rule: Agency Costs**

Item	Units	No. units	Unit cost (\$)	Total cost** (\$'000)	Comment
<b>Mapping and PVP Developer:</b>					
- SPOT 5 satellite imagery	LS	-	5000000	5000.0	sunk cost
- Existing aerial mapping	LS	-	12000000	12000.0	sunk cost
- PVP Developer				1008.9	< Yr 1
.. <Yr 1 (DEC: \$950K & DIPNR: \$59.8K)				2914.7	Yr 1
.. Yr 1 on (DIPNR)*				784.7	Yr 2 on
- Enhancements to PVP Developer	5% initial devel. cost pa				
- Hardware - Yr 1:					
.. Laptop	3 per CMA	36	4515	162.5	12 CMAs
.. Printer	3 per CMA	36	714	25.7	12 CMAs
.. Digital camera	3 per CMA	36	636	22.9	12 CMAs
- Hardware - Yr 2:					
.. Laptop	3 per CMA	36	4515	162.5	12 CMAs
.. Printer	3 per CMA	36	714	25.7	12 CMAs
.. Digital camera	3 per CMA	36	636	22.9	12 CMAs
Staffing	2.3	28	75000	13041.0	12 CMAs
Ongoing replacement/upgrading	EFT/CMA			295.6	Yr 2 on
	20% initial capital cost				
<b>Subtotal Mapping and PVP Developer</b>				<b>18467.2</b>	
<b>Staff training (guidelines, protocols, etc)</b>					
.. Yr 1	EFT per 6 months	6	75000	283.5	+26% on-cost
.. Yr 2 on	EFT per 3 months	6	75000	567.0	+26% on-cost
<b>Subtotal Staff Training</b>				<b>850.5</b>	
<b>Monitoring and Compliance:</b>					
- Ortho-rectification of aerial photos: Yrs 1-5	EFT	2	75000	945.0	+26% on-cost
- Compliance activity: Yrs 1-5	EFT	4	75000	1890.0	+26% on-cost
- Public register ongoing management	EFT	0.1	75000	47.3	+26% on-cost
- PANRIIe & Hot Spots Monitoring Program					DIPNR
.. Yr 1	LS	-	567000	567.0	
.. Yr 2 on	LS	-	1626000	1626.0	
.. Yr 3 on	LS	-	1732000	1732.0	
.. Yr 4 on	LS	-	1470000	1470.0	
.. Yr 5 on	LS	-	1370000	1370.0	
- Head Office support	EFT	3	75000	1417.5	+26% on-cost
<b>Subtotal Monitoring and Compliance</b>				<b>11064.8</b>	
<b>Enforcement:</b>					
- Small offence (settled out of court)	no. cases	120	5000	125.0	DIPNR
- Moderate offence (goes to court / settlement)	no. cases	0.5			DIPNR
.. Legal (barristers, expert witnesses, etc e/s)	days/case	5	7500/day	187.5	
.. Local Court costs	days/case	1	2900/day	29.0	
- Larger offence (goes to court, etc)	no. cases	1			DIPNR
.. Legal (barristers, expert witnesses, etc e/s)	days/case	10	7500/day	375.0	
.. LEC costs	days/case	2	6000/day	60.0	
<b>Subtotal Enforcement</b>				<b>776.5</b>	
<b>Total Costs</b>				<b>31159.0</b>	

\* Includes communication and training costs for CMA and DIPNR officers.

\*\* Over five years.

DEC: Department of Environment & Conservation

LEC: Land and Environment Court

Source: Appendix A Table A.2.

**Table 17 Option 2 – Proposed New Government Statutory Rule: Economic Benefits by Major Benefit Category and by Year**

Item	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Total benefit
Landholder: Private benefit	0	3832.1	3832.1	3832.1	3832.1	3832.1	19160.3
Community: WTP	0	15648.6	15648.6	15648.6	15648.6	15648.6	78242.8
<b>Total</b>	<b>0</b>	<b>19480.6</b>	<b>19480.6</b>	<b>19480.6</b>	<b>19480.6</b>	<b>19480.6</b>	<b>97403.1</b>

Source: Appendix A Table A.2.

### 5.3 Option 3: An Alternative Statutory Rule (Regulation)

This option differs from Option 2 in that DIPNR has a significantly reduced role in the PVP process. The responsibility for preparing the PVP rests with the landholder with the result that there is a reduction in DIPNR/CMA hardware and staffing costs. These savings to DIPNR are partially offset by costs to proponents in the form of professional services from private providers in the preparation of PVPs and the cost of resources to meet the requirements of the property mapping process.

For DIPNR and other agencies, the cost impacts are summarised in Table 18 and the costs by major cost category and by year are summarised in Table 19.

The landholder cost impacts are summarised in Table 20 and table 21. The private benefits to landholders are summarised in Table 22 and 23.



**Table 19 Option 3 - Alternative Regulatory Option: Agency Costs by Major Cost Category and by Year**

Item	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Total Costs
Mapping and PVP Developer	1008.9	4768.9	2007.0	2007.0	2007.0	2007.0	13805.9
Staff training costs	0	47.2	23.6	23.6	23.6	23.6	141.8
Monitoring and Compliance	0	1426.9	2485.9	2591.9	2329.9	2229.9	11064.8
Enforcement	0	155.3	155.3	155.3	155.3	155.3	776.5
<b>Total</b>	<b>1008.9</b>	<b>6398.4</b>	<b>4671.9</b>	<b>4777.9</b>	<b>4515.9</b>	<b>4415.9</b>	<b>25788.9</b>

Source: Appendix A Table A.3.

**Table 20 Option 3 - Alternative Regulatory Option: Landholder Costs**

Item	Units	No. units	Unit cost (\$)	Total cost* (\$'000)	Comment
<b>Mapping:</b>					
- Maps	\$/map/applic.	2	150	660.0	
- Develop / 'ground truth' PVP	days/applic.	3	200	1320.0	
- Professional adviser for PVP	days/applic.	6	1000	15840.0	+20% incidentals
<b>Subtotal Mapping</b>				<b>17820.0</b>	
<b>Monitoring and Compliance:</b>					
- Responding to warning letters, remedial action, etc	compliance actions	120	100	60.0	4 hours / action @ \$25/hr
- Professional adviser	days/case	0.5	1000	720.0	+20% incidentals
- Small offence settled out-of-court	LS	5	40000	1260.0	
- Moderate offence (goes to court with settlement)	LS	1	175000	1102.5	
- Larger offence (goes to court, etc)	LS	1	245000	1543.5	
<b>Subtotal Compliance</b>				<b>4686.0</b>	
<b>Community Benefit Foregone:</b>					
- Invasive native scrub cleared	\$/hhold / 10,000ha	-	-	-	
<b>Subtotal Community Benefit Foregone</b>				<b>-</b>	
<b>Total</b>				<b>22506.0</b>	

\* Over five years.

Source: Appendix A Table A.3.

**Table 21 Option 3 - Alternative Regulatory Option: Landholder Costs by Major Cost Category and by Year**

Item	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Total Costs
Mapping costs	0	3564.0	3564.0	3564.0	3564.0	3564.0	17820.0
Compliance	0	937.2	937.2	937.2	937.2	937.2	4686.0
Community benefit foregone	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>4501.2</b>	<b>4501.2</b>	<b>4501.2</b>	<b>4501.2</b>	<b>4501.2</b>	<b>22506.0</b>

Source: Appendix A Table A.3.

**Table 22 Option 3 - Alternative Regulatory Option: Economic Benefits**

Item	Units	No. units	Unit cost (\$)	Total benefit* (\$'000)	Comment
<b>Economic Benefit:</b>					
- Landholder: Private benefit	\$/ha	25,000ha	153	19160.3	ex NVMF
- Community: WTP	\$/10,000ha / hhold	25,000ha	2.55	78242.8	
<b>Total Economic Benefit</b>				<b>97403.1</b>	

\* Over five years.

Source: Appendix A Table A.3.

**Table 24 Summary of Economic Evaluation and Net Present Value Comparison**

Item	Option 1 [‘Do nothing’]	Option 2 [Proposed Regulatory Option]	Option 3 [Alternative Regulatory Option]	Incremental of Option 1 Option 2	Option 3
<b>Agency Costs (\$’M):</b>					
Mapping and PVP Developer	13.6	18.5	13.8	4.9	0.2
Staff training	0.4	0.9	0.1	0.4	-0.3
Monitoring and Compliance	11.0	11.1	11.1	0.0	0.0
Enforcement	1.6	0.8	0.8	-0.8	-0.8
Subtotal Agency Costs	26.6	31.2	25.8	4.6	-0.8
<b>Landholder Costs (\$’M):</b>					
Mapping	6.1	1.8	17.8	-4.3	11.7
Compliance	9.4	4.7	4.7	-4.7	-4.7
Community benefit foregone	6.2	-	-	-6.2	-6.2
Subtotal Landholder Costs	21.7	6.4	22.5	-15.3	0.8
<b>Total Costs (\$’M)</b>	<b>48.3</b>	<b>37.6</b>	<b>48.3</b>	<b>-10.7</b>	<b>0.0</b>
<b>Benefits (\$’M):</b>					
Landholder: Private benefits	-	19.2	19.2	19.2	19.2
Community value: WTP	-	78.2	78.2	78.2	78.2
<b>Total Benefits (\$’M)</b>	<b>-</b>	<b>97.4</b>	<b>97.4</b>	<b>97.4</b>	<b>97.4</b>
<b>Net Benefits (\$’M)</b>	<b>-48.3</b>	<b>59.8</b>	<b>49.1</b>	<b>108.1</b>	<b>97.4</b>
<b>Net Present Value (\$’M):</b>					
@4%	-43.3	53.0	43.5	96.2	86.7
@7%	<b>-40.0</b>	<b>48.6</b>	<b>39.9</b>	<b>88.6</b>	<b>79.9</b>
@10%	-37.2	44.7	36.7	81.9	73.9
<b>RANKING</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>

Any apparent differences in totals are due to rounding.

Source: Appendix A, Tables A.1 to A.4.

## 5.5 Sensitivity Analysis

Sensitivity analysis of the impact of changes in the key assumptions was carried out as part of the economic evaluation of the regulatory options to assess robustness of the evaluation outcome and the ranking of the options, namely:

- discount rates were varied to 4 and 10 percent respectively;
- agency and landholder compliance costs were increased by 20 percent;
- landholder private benefits were assumed to be nil;
- community willingness to pay for the conservation of native vegetation was assumed to be nil, the area conserved was varied to a lower bound area of 17,000 hectares and an upper bound area of 34,000 hectares; and
- costs were increased by 20 percent, benefits were reduced by 20 percent and both effects combined.

The sensitivity testing of changes in the key assumptions had no effect on the relative ranking of the two regulatory options based on their NPVs. In particular, the magnitude of the WTP value estimated is not critical to the outcome of the RIS. The regulatory strategy embodied in Option 2 remained the preferred strategy from an economic perspective. Changes in NPVs with sensitivity testing of the key assumptions by option are summarised in table 25.

Option 1 (the 'Do nothing' or no regulation scenario). Option 2 also has a net economic advantage of some \$8.7 million over Option 3 (the alternative regulatory option).

The proposed NVR 2004 provides the greatest public economic benefit and represents a robust outcome. The objective of the NVR 2004 is *'reasonable and appropriate'* and *'in accord with the objective[s], principles, spirit and intent of the enabling Act [The Native Vegetation Act 2003]'* and *'there are no inconsistencies with the objectives of other Acts, statutory rules and stated government policies'* (Subordinate Legislation Act 1989, Schedule 1). The 'Do nothing' scenario does not meet the objective of the proposed Regulation, in particular as it does not allow any clearing of native vegetation through the use of offsets.

The proposed Regulation will provide consistency, administrative certainty and clarity in decision-making by CMAs and DIPNR staff when clearing approval is provided and when actions that are permitted under the NV Act without approval require interpretation. The proposed Regulation will provide the mechanisms for the decision-making process to support the granting of clearing approval, particularly with respect to the 'improve and maintain environmental outcomes' test.

## 6. Public Consultation Program

The public consultation program for the RIS will include:

- publication of notice of availability for inspection in:
  - The NSW Government Gazette;
  - The Sydney Morning Herald;
  - The Land;
- exhibiting the draft Regulation and the RIS on the Department's website and at Regional Offices throughout NSW;
- providing copies of the draft Regulation and the RIS to the following stakeholder groups for comment:
  - Catchment Management Authorities (12);
  - NSW Farmers Association;
  - Environmental Groups; and
  - all Local Government Councils.

## 7. Data and Information Sources Used

### Data Sources

ABS Catalogue No. 3101.0 *Australian Demographic Statistics*, Table 18: Estimated Residential Households as at 30 June 2001, 4 June 2004.

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## Information Sources

In the preparation of the Regulatory Impact Statement information was sourced from numerous officers of DIPNR. Sloane Cook & King Pty Ltd, Economic, Agricultural and Natural Resource Consultants assisted with the preparation of the economic evaluation of the impacts of the regulatory options.

## Attachments

Appendix A to the RIS comprises five worksheets.