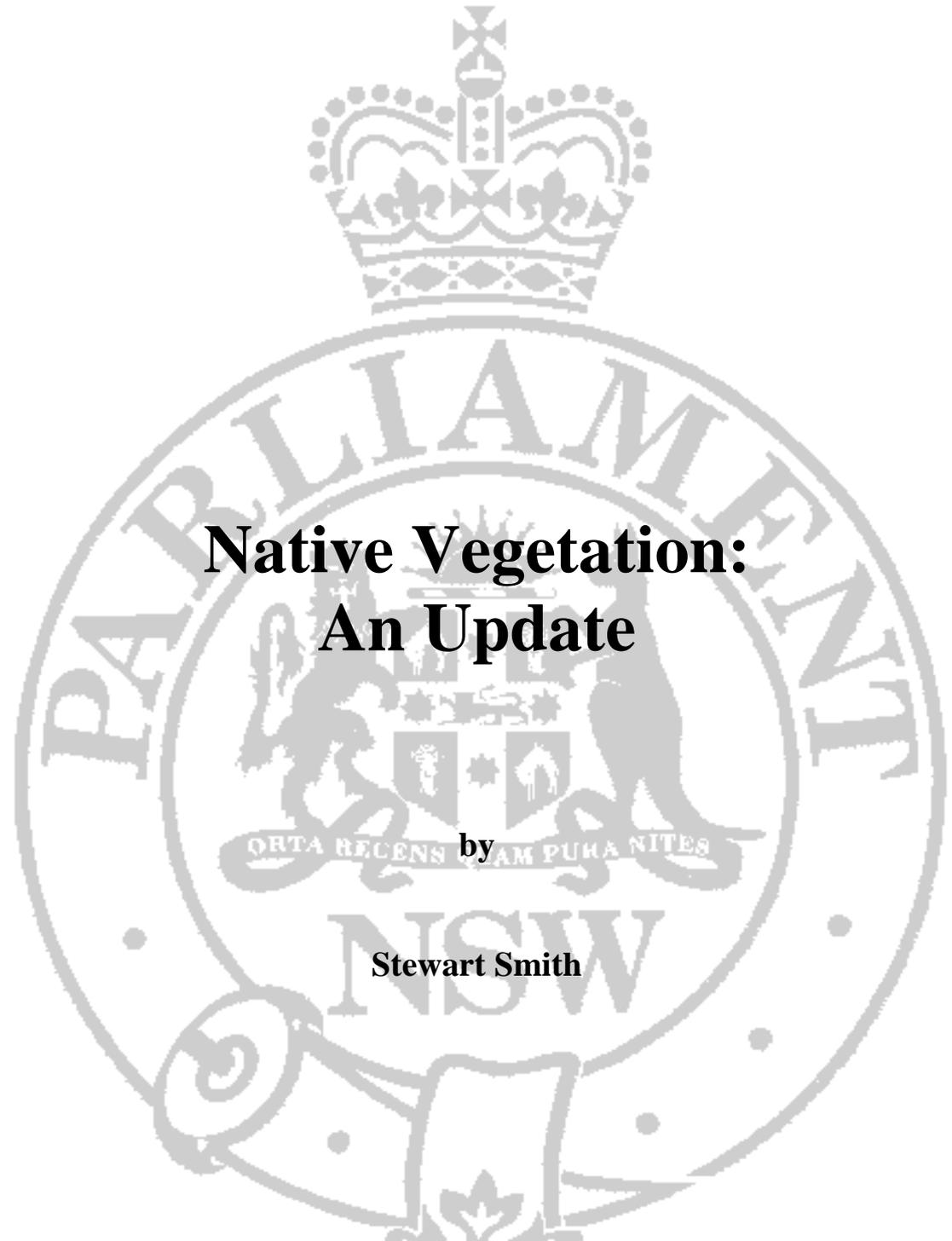


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**Native Vegetation:
An Update**

by

Stewart Smith

Briefing Paper No 6/06

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Native Vegetation: An Update

by

Stewart Smith

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EXECUTIVE SUMMARY

This Briefing Paper is an update of the 2003 Briefing Paper *Native Vegetation: Recent Developments*. Since that paper, considerable changes have occurred in the regulation of native vegetation – including new legislation and regulations gazetted in November 2005.

In late 2002, a group of leading Australian environmental scientists (the Wentworth Group) developed the *Blueprint for a Living Continent*, which outlined the changes necessary to ensure a sustainable future. In a further development, the Group proposed a radically new way of managing native vegetation in NSW. The Wentworth Model for Landscape Conservation had five interdependent components:

1. Strengthening and simplifying native vegetation regulations, ending the broadscale clearing of remnant vegetation and protected regrowth;
2. Setting environmental standards and clarifying responsibilities for native vegetation management which will, over time, create healthy rivers and catchments;
3. Using property management plans to provide investment security, management flexibility and financial support for farmers;
4. Providing significant levels of public funding to farmers to help meet new environmental standards and support on-ground conservation; and
5. Restructuring institutions by improving scientific input into policy setting, improving information systems, and regionalising administration.

The Wentworth Group's plan for native vegetation was favourably received by the NSW Government. In the lead up to the 2003 State election, then Premier Bob Carr announced a \$120 million plan to help farmers protect native vegetation, and promised the formation of a Native Vegetation Reform Implementation Group. The Implementation Group made 46 recommendations on how to implement the Government's native vegetation policies. Principal recommendations included: establish a Natural Resources Commission; establish a Natural Resources Advisory Council to provide a high level forum for stakeholder participation in natural resource management; establish Catchment Management Authorities to prepare and implement catchment plans; a new property vegetation plan system be developed.

In response, the Government introduced a suite of new bills to implement the new natural resource management regime. Legislation passed together in the second half of 2003 included: *Catchment Management Authorities Act 2003*; *Natural Resources Commission Act 2003*; and *Native Vegetation Management Act 2003*.

Demonstrating the complexity and competing interests of native vegetation management, regulations to the *Native Vegetation Act 2003* took almost two years to develop, and were gazetted on 18 November 2005. The Briefing Paper reviews these regulations and the natural resource management regime implemented by the above Acts.

The Paper concludes on the challenges facing Catchment Management Authorities and the implementation of market based instruments to manage native vegetation.

1.0 INTRODUCTION

This Briefing Paper is an update of the 2003 Briefing Paper *Native Vegetation: Recent Developments*. Since that paper, considerable changes have occurred in the regulation of native vegetation – including new legislation and regulations gazetted in November 2005.

1.1 A Brief History of Native Vegetation Regulation in New South Wales

Since the election of Labor in March 1995, the Government has had an evolutionary approach to native vegetation regulation. The most important developments are described below.

State Environmental Planning Policy 46, Protection and Management of Native Vegetation, was introduced on 10 August 1995. The aim of this Policy was to prevent inappropriate vegetation clearance. Under the original provisions of the Policy, clearing of native vegetation required development consent of the Director-General of the Department of Land and Water Conservation and the concurrence of the Director-General of the National Parks and Wildlife Service. SEPP 46 was amended twice.

The Government established the NSW Vegetation Forum (comprising representatives of key stakeholder groups) to develop long-term options to replace SEPP 46. On the basis of this consultation, the NSW Vegetation Forum recommended:¹

- A tiered approach be adopted with State guidelines, regional management plans, local agreements and a permit system;
- A self regulated (ie, clearing in a manner consistent with relevant approved plans of management) approach with approved regional guidelines and management plans and Statewide ‘safety nets’ the preferred option. Either a new Native Vegetation Management Act should be developed or a new Native Vegetation/Soil Conservation Act developed;
- Legislation should provide for the following: a NSW Vegetation Council; regional management plans; an acknowledgement of the need for landholder/community participation; stewardship incentives; ongoing research and monitoring; education services.

In response to the Vegetation Forum recommendations, the Government’s preferred long-term management regime was announced on 18 March 1997, with these proposals released for public discussion in a White Paper *A proposed model for native vegetation conservation in NSW* on 23 July, 1997. A Native Vegetation Conservation Bill was introduced by the Minister for Land and Water Conservation Hon Kim Yeadon MP on 19 November 1997. The subsequent *Native Vegetation Conservation Act 1997* came into force on 1 January 1998.

The introduction of the *Native Vegetation Conservation Act 1997* brought the clearing of native vegetation in NSW under one regime. The Act repealed clearing provisions in the:

¹ NSW Vegetation Forum, *Report on Native Vegetation Management in NSW*. August 1996 at 9.

Soil Conservation Act 1938; Western Lands Act 1901; Crown Lands (Continued Tenures) Act 1989; and the Forestry Act 1916. In addition, State Environmental Planning Policy No 46 - *Protection and Management of Native Vegetation* was repealed.

The core of the *Native Vegetation Conservation Act 1997* was the regional vegetation management plan. The plan provided specifications as to what clearing was allowed in a region. Where clearing was allowed for in the plan, no development consent for that clearing was required. Any clearing outside the specifications of the plan, or where a plan was not yet in place, required assessment and development consent from the Minister for Land and Water Conservation under Part 4 of the *Environmental Planning and Assessment Act 1979*. On the 4 September 1998 the Minister for Land and Water Conservation Hon Richard Amery MP launched the State's first draft native vegetation plan, for the Mid Lachlan region.²

Under the *Native Vegetation and Conservation Act 1997*, the following native vegetation application and outcomes were recorded:

Table 1: Native Vegetation Clearing Applications and Outcomes

| Calendar Year | Received | Processed | Approved | Withdrawn | Rejected | Refused |
|---------------|----------|-----------|----------|-----------|----------|---------|
| 1998 | 478 | 434 | 360 | 52 | 9 | 13 |
| 1999 | 805 | 760 | 714 | 23 | 23 | 8 |
| 2000 | 662 | 594 | 523 | 42 | 6 | 24 |
| 2001 | 548 | 578 | 457 | 64 | 6 | 52 |
| 2002 | 502 | 530 | 488 | 20 | 2 | 20 |
| 2003 | 522 | 547 | 494 | 30 | 2 | 21 |
| 2004 (June) | 287 | 308 | 287 | 12 | 6 | 3 |
| Total | 3804 | 3751 | 3323 | 242 | 53 | 140 |

Source: NSW Government, *Draft Native Vegetation Regulation 2004. Regulatory Impact Statement*, 2004, at 4.

The area approved for clearing is shown in Table 2:

Table 2: Area Approved for Clearing (ha)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | ha/yr average |
|---------------------------|---------|---------|---------|---------|--------|--------|--------|---------------|
| Applications for clearing | 104,810 | 276,996 | 100,489 | 133,876 | 84,878 | 86,158 | 44,951 | 128,024 |
| Area approved | 75,307 | 174,681 | 74,459 | 90,786 | 57,753 | 59,365 | 38,470 | 87,818 |

Source: NSW Government, *Draft Native Vegetation Regulation 2004. Regulatory Impact Statement*, 2004, at 5. NB: The method of recording clearing can exaggerate clearing impacts on

² Media Release, "Amery Launches first draft Native Vegetation Plan." Hon Richard Amery MP, Minister for Land and Water Conservation, 4 September 1998.

the environment, eg, due to lapsed consents (ie, approved but never cleared), removal of isolated paddock trees may cover less than ten percent of the area approved.

In August 2002 the Auditor-General released an audit report on the regulation of native vegetation clearing. The audit concluded that no single government agency is authorised to lead a whole of government response to the problems affecting native vegetation, and no agency can be held accountable and answerable for the state of native vegetation in NSW.³

The audit noted that the *Native Vegetation Conservation Act* gave emphasis to the development of native vegetation conservation strategies and regional vegetation management plans. However, some four and half years after the Act commenced, objectives, targets, strategies and plans, all of which are designed to protect and preserve native vegetation, were still to be finalised. The implications for these delays were identified as follows:

- Consents for land clearing are being issued without regional vegetation management plans in place;
- Policies, including a national commitment to ‘no net loss’, and concepts such as inappropriate clearing, have been interpreted and applied differently in different regions;
- These differences are seen by landholders as unfair and lacking transparency;
- Many regional vegetation management plans have been developed without the guidance of catchment blue prints, a strategic framework, objectives or targets;
- There has been limited assessment of socio-economic impacts.⁴

With the release of the audit report various stakeholders declared that it justified their criticisms of the *Native Vegetation Conservation Act* and the Department over the years. For instance, the NSW Farmers’ Association stated that the report proved what they have been saying for years – that the NSW *Native Vegetation Conservation Act* is ‘inefficient, ineffective and unworkable’. The Association’s Conservation and Resource Management Chair, Rob Anderson, stated:

Excessive regulation was never going to achieve the environmental results that the community is looking for. The management of natural resources needs to be a cooperative effort with the people who know the most about the land, and that's farmers....The Auditor-General is recommending that due regard should be given to socio-economic impacts of the Act, something that the Association has been lobbying strongly for. The report also states that self-regulation should be considered in many areas of NSW, recognition that farmers are the best placed to manage their land. Farmers have set aside more than 1.7 million hectares for native flora and fauna sanctuaries in cooperation with the National Parks and Wildlife Service, almost 20

³ Audit Office of New South Wales, *New South Wales Auditor-General's Report, Performance Audit, Department of Land and Water Conservation, Regulating the Clearing of Native Vegetation*. August 2002, at 17.

⁴ Audit Office of New South Wales, *New South Wales Auditor-General's Report, Performance Audit, Department of Land and Water Conservation, Regulating the Clearing of Native Vegetation*. August 2002, at 30.

times the area of native vegetation developed through controlled clearing. The best outcome for the environment will come from the Government working with farmers to ensure native vegetation is managed without the confusion that currently reigns.⁵

The Nature Conservation Council of NSW stated that the audit report confirmed widely held fears that the State Government's regulation of land clearing was unaccountable and aimless. The Council noted that both the statewide native vegetation conservation strategy and comprehensive bioregional targets for managing native vegetation had been withheld by successive ministers for two years while the pace of land clearing in NSW accelerated. NCC executive officer, Kathy Ridge, said:

No strategy, no targets, no data and next to no plans - no wonder the NSW government is being condemned. The documents and information that the Auditor General noted by their absence have been sitting on the desks of the last two Ministers for Land and Water Conservation in draft form for the last two years. They have been either unwilling or unable to put these strategies and targets into place, so it is up to the Premier to fulfil his government's obligation, both to the Parliament and the community, and release these documents. Land clearing approvals blew out by more than 18 percent last year, the third year in a row that NSW has seen an increase. That is not the mark of a government committed to addressing one of the most damaging environmental, social and economic issues facing the state.⁶

With this background of native vegetation regulatory reform, a group of scientists began to think about how to manage native vegetation more effectively.

2.0 THE WENTWORTH GROUP OF CONCERNED SCIENTISTS

In late 2002, a group of leading Australian environmental scientists convened at the Wentworth Hotel in Sydney. Adopting the name of 'the Wentworth Group', the Group developed the *Blueprint for a Living Continent*, which set out the changes they considered necessary to ensure a sustainable future. These were:

1. Clarify water property rights and the obligations associated with those rights to give farmers some certainty and to enable water to be recovered for the environment.
2. Restore environmental flows to stressed rivers, such as the River Murray and its tributaries.
3. Immediately end broadscale landclearing of remnant native vegetation and assist rural communities with adjustment. This provides fundamental benefits to water quality, prevention of salinity, prevention of soil loss and conservation of biodiversity.

⁵ "Time to start again on native vegetation" NSW Farmers' Association, *Media Release*, 20 August 2002. See URL: <http://www.nswfarmers.org.au>

⁶ "Auditor General's report – NSW government condemned on land clearing" NSW Nature Conservation Council, *Media Release*, 20 August 2002. See URL: <http://www.nccnsw.org.au>

4. Pay farmers for environmental services (clean water, fresh air, healthy soils). Where we expect farmers to maintain land in a certain way that is above their duty of care, we should pay them to provide those services on behalf of the rest of Australia.

5. Incorporate into the cost of food, fibre and water the hidden subsidies currently borne by the environment, to assist farmers to farm sustainably and profitably in this country.⁷

The Group noted that the Council of Australian Governments had the opportunity to make three significant changes immediately: ending broadscale clearing of remnant vegetation; the clarification of water property rights; and purchasing environmental flows for the Murray River.

The Wentworth Group recognised that over the last decade or so, a ‘quiet revolution’ has been taking place in rural Australia. Thousands of farmers want to restore damaged rivers and landscapes, but lack resources, scientific advice and are disempowered by the bureaucratic environment. The Group noted that fundamental to the success of a new model for landscape management was to simplify complex structures, empower the farming community to take control of the problem, and to back them with adequate science and funding. With this in mind, the Group proposed a radically new way of managing native vegetation in NSW. The Wentworth Model for Landscape Conservation has five interdependent components:

- Strengthening and simplifying native vegetation regulations, ending the broadscale clearing of remnant vegetation and protected regrowth;
- Setting environmental standards and clarifying responsibilities for native vegetation management which will, over time, create healthy rivers and catchments;
- Using property management plans to provide investment security, management flexibility and financial support for farmers;
- Providing significant levels of public funding to farmers to help meet new environmental standards and support on-ground conservation; and
- Restructuring institutions by improving scientific input into policy setting, improving information systems, and regionalising administration.

Under this plan, the following actions are needed:

- The State Government sets four environmental standards: water quality; salinity; biodiversity; and soil conservation;
- Independent water catchment authorities then convert these standards into practical priorities;
- Farmers are then provided with scientific and financial support to implement these on their properties through property management plans.

The Group suggested the following four statewide environmental standards should be

⁷ WWF Australia, *Blueprint for a Living Continent. A Way Forward from the Wentworth Group of Concerned Scientists*. 1 November 2002, at 4.

adopted:

- Water quality: conserving and restoring riparian vegetation 50m to 100m either side of major rivers and wetlands; 20m to 50m either side of creeks and 10m to 20m either side of streams;
- Salinity: recharge areas and areas prone to rising water tables;
- Biodiversity: conservation and restoration of threatened ecological communities and the conservation and restoration of critical habitat of threatened species;
- Soil conservation: windbreaks and conserving and restoring vegetation on slopes.

The Group noted that if these four standards are implemented across the State, there will be a dramatic improvement in the health of rivers and catchments.

Water catchments should be the basic planning unit for all natural resource management. Catchment strategies need to be prepared by regionally based institutions that have community support, local knowledge and scientific expertise. Each catchment needs to produce a simple map-based catchment plan that can translate the State environmental standards into practical rules that are easy to apply at a farm scale across the catchment.

The development of property management plans is meant to give farmers an alternative to having to apply for development consent every time they wished to clear native vegetation. Instead, farmers will be able to submit a property management plan for the management of native vegetation on their property. Once a plan is certified, any clearing consistent with the plan would be exempt from the Native Vegetation and Threatened Species Act and other relevant legislation for up to ten years. For farmers, these management plans provide greater investment security, less red tape and improved management flexibility. For the community, the plans ensure that farm management is informed by the best available science and will contribute to creating healthy rivers and catchments.

The Wentworth Group proposed a significant investment of public funds to implement the proposals – led by a new \$120 million Native Vegetation Investment Fund. If a landholder believes the viability of their business has been undermined by the introduction of the reforms, they should be able to have the government purchase their property, as a whole, at its pre-reform fair market value. A simple test should be established to determine an adverse impact.

All landholders who have their property management plan certified within the next four years should be given a grant of up to \$1000. Farmers should be given financial support where the new environmental standards applied to their property involves significant costs, or a loss of income due to above average levels of native vegetation of high conservation value.

The Group recommended the establishment of a Natural Resource Management Commission. The Commission should report directly to the Minister on:

- Statewide standards and targets;
- Accreditation of catchment strategies against these targets;
- Funding priorities for implementing catchment strategies; and
- Information and research projects.

The Group noted that there is no alternative to the regionalisation of natural resource management. There should be one single authority in each major water catchment responsible for land, water, native vegetation and biodiversity conservation. Each catchment authority should be run by a Board of experts, including experts in: running farm businesses; water quality; biodiversity conservation; and capacity building. These Boards should be answerable to the Minister. State agency officials should only attend in an observer capacity.

To finance these reforms, the Group noted that there were significant opportunities to re-allocate expenditure priorities under natural resource management programs.

The Wentworth Group's plan for native vegetation was favourably received by the NSW Government. In the lead up to the 2003 State election, then Premier Bob Carr announced a \$120 million plan to help farmers protect native vegetation. The plan included:

- \$120 million over four years to help farmers protect and replant native vegetation;
- Cutting red tape by allowing farmers to prepare a voluntary 10 year property management plan that avoids land clearing regulations;
- Fast tracking vegetation mapping to help farmers develop property management plans;
- Ending confusion about what is considered native vegetation by setting clear definitions;
- Reducing the number of State and regional committees and Government agencies responsible for land and water conservation.

The plan also included the formation of a Native Vegetation Reform Implementation Group.⁸

3.0 THE NATIVE VEGETATION REFORM IMPLEMENTATION REPORT

The Implementation Group, chaired by the Rt Hon Ian Sinclair AC, published its report in October 2003. The Implementation Group comprised the following members:

- Rob Anderson, NSW Farmers Association;
- Jeff Angel, Total Environment Centre;
- Peter Cosier, Wentworth Group;
- Col Gellatly, Premier's Department;
- Glen Klatovsky, WWF (previously World Wide Fund for Nature);
- Jonathan KcKeown, NSW Farmers Association;
- John Pierce, Treasury;
- Jennifer Westacott, Department of Infrastructure, Planning and Natural Resources;
- Roger Wilkins, The Cabinet Office;
- Mike Young, Wentworth Group.

⁸ "Premier Carr announces \$120 million plan to help farmers protect native vegetation." *News Release*, 15 March 2003.

The Implementation Group made 46 recommendations on how to implement the Government's native vegetation policies. Principal recommendations included:

- Establish a Natural Resources Commission to: recommend statewide environmental standards and targets; recommend certification of catchment plans; and conduct a statewide audit of outcomes and effectiveness at least every three years;
- Establish a Natural Resources Advisory Council to provide a high level forum for stakeholder participation in natural resource management;
- Establish Catchment Management Authorities to prepare and implement catchment plans to achieve a fully functioning and productive landscape capable of sustaining commercially viable agricultural production and the environment;
- A new property vegetation plan system be developed.

In response, the Government introduced a suite of new bills to implement the new natural resource management regime. Legislation passed together in the second half of 2003 included:

- *Catchment Management Authorities Act 2003*;
- *Natural Resources Commission Act 2003*; and
- *Native Vegetation Management Act 2003*.

Each of these Acts are reviewed below.

4.0 NEW NATURAL RESOURCE MANAGEMENT LEGISLATION

4.1 The Catchment Management Authorities Act 2003

This Act repealed the *Catchment Management Act 1989* and established boards of authority, which came into effect on 23 January 2004, for 13 catchment areas. The boards are responsible for involving regional communities in management of the natural resource management issues facing their region, and are the primary means for the delivery of funding from the NSW and Commonwealth Governments to help land managers improve and restore the natural resources of the State.

The boards comprise between five and seven members who have skills and knowledge in the following areas:

- (a) primary production,
- (b) environmental, social and economic analysis,
- (c) State and local government administration,
- (d) negotiation and consultation,
- (e) business administration,
- (f) community leadership,
- (g) biodiversity conservation,
- (h) cultural heritage,
- (i) water quality.

Board members, as far as practicable, must reside in the area of operations of the authority. An authority is subject to the control and direction of the Minister.

The Combined Catchment Management Authorities Annual Report describes the responsibilities of the Authorities as follows:

- Plans
 - Integration of existing catchment, water, native vegetation and other natural resource management plans into a Catchment Action Plan;
 - Manage community involvement in preparation of water sharing and groundwater plans.
- On Ground Works
 - For example, river rehabilitation, native vegetation management, salinity programs and projects.
- Community Education and Support
 - Provision of advice and support to stakeholders and community;
 - Aboriginal consultation on Catchment Action Plans, natural resource programs and investment strategies;
 - Provision of community education and capacity building;
 - Technical advice on vegetation management, soil and land management, riparian management and other natural resource management issues.
- Investment
 - Implementation of Catchment Action Plans;
 - Development of investment strategies;
 - Native vegetation management fund;
 - Approved National Action Plan for Salinity and Water Quality and Natural Heritage Trust 2 programs;
 - Delivery of incentives through Property Vegetation Plans and other mechanisms.
- Property Vegetation Plans and Consent
 - Certify property vegetation plans for establishing continuing uses and delivery of incentive payments;
 - Assessment of all vegetation consents under the *Native Vegetation Conservation Act 2003*.⁹

The 13 Catchment Management Authority Boards are:

Border Rivers-Gwydir Catchment Management Authority
Central West Catchment Management Authority
Hawkesbury-Nepean Catchment Management Authority
Hunter-Central Rivers Catchment Management Authority
Lachlan Catchment Management Authority
Lower Murray-Darling Catchment Management Authority
Murray Catchment Management Authority

⁹ Combined NSW Catchment Management Authorities, *Annual Report 2003/04. Volume 1: CMA Activities and Achievements*, at 3.

Murrumbidgee Catchment Management Authority
Namoi Catchment Management Authority
Northern Rivers Catchment Management Authority
Southern Rivers Catchment Management Authority
Sydney Metropolitan Catchment Management Authority
Western Catchment Management Authority

4.2 The Natural Resources Commission Act 2003

This Act established the Natural Resources Commission, which provides independent advice to the Government on natural resource management. The Commission is part of the Premier's Department, reflecting its independent nature, and reports jointly to the Premier and the Minister for Natural Resources. The current chair of the Commission is Dr Tom Parry, with four assistant commissioners.

The Commission's core functions are to:

- Recommend state-wide standards and targets for natural resource management;
- Review and recommend the approval of Catchment Action Plans prepared by 13 Catchment Management Authorities across NSW;
- Audit Catchment Management Authorities' implementation of these plans and their effectiveness in achieving state-wide standards and targets.

In addition, the government can ask the Commission to undertake assessments and inquiries into other natural resource management issues. For instance, currently the Commission is also:

- Supervising the environmental impact of the cloud seeding trial in the Snowy Mountains;
- Advising the Department of Planning on coastal protection issues; and
- Preparing to audit water sharing plans under the *Water Management Act 2000*.

The Act also provides the guiding principles that the Commission is to have regard to, as follows:

- (a) the principles of ecologically sustainable development; and
- (b) the social and economic implications of its recommendations and advice; and
- (c) an integrated approach to natural resource management issues; and
- (d) regional variation in the environment; and
- (e) indigenous knowledge of natural resource management; and
- (f) State and national legislation and policies that are relevant to natural resource management.

As an indication of the sweeping reforms of the package of natural resource management legislation, with the establishment of the Natural Resources Commission the following committees/commissions were abolished:

- Resource and Conservation Assessment Council;
- Healthy Rivers Commission;
- Coastal Council;
- State Catchment Management Co-ordinating Committee;

- Native Vegetation Advisory Council;
- Water Advisory Council;
- State Wetland Advisory Committee;
- State Weir Review Committee;
- Advisory Council on Fisheries Conservation;
- Fisheries Resource Conservation and Assessment Council.

In February 2006 the State Government adopted all the natural resource management state-wide targets as proposed by the Commission. Seven ‘macro environmental’ targets were developed that deal with: biodiversity; water; land; and community. In addition, a further six ‘specific-priority’ targets were developed that provide additional guidance on where, how or why to focus natural resource management investment. The targets are presented in table 3.

Table 3: State-wide Targets for Natural Resource Management

| Biodiversity | |
|---------------------|---|
| Macro-Environmental | 1. By 2015 there is an increase in native vegetation extent and an improvement in native vegetation condition. 2. By 2015 there is an increase in the number of sustainable populations of a range of native fauna species. |
| Specific Priorities | 3. By 2015 there is an increase in the recovery of threatened species, populations and ecological communities. 4. By 2015 there is a reduction in the impact of invasive species. |
| Water | |
| Macro-Environmental | 5. By 2015 there is an improvement in the condition of riverine ecosystems. 6. By 2015 there is an improvement in the ability of groundwater systems to support groundwater dependent ecosystems and designated beneficial uses. 7. By 2015 there is no decline in the condition of marine waters and ecosystems. |
| Specific Priorities | 8. By 2015 there is an improvement in the condition of important wetlands, and the extent of those wetlands is maintained. 9. By 2015 there is an improvement in the condition of estuaries and coastal lake ecosystems. |
| Land | |
| Macro-Environmental | 10. By 2015 there is an improvement in soil condition. |
| Specific Priorities | 11. By 2015 there is an increase in the area of land that is managed within its capability. |
| Community | |
| Macro-Environmental | 12. Natural resource decisions contribute to improving or maintaining economic sustainability and social well-being. |
| Specific Priorities | 13. There is an increase in the capacity of natural resource managers to contribute to regionally relevant natural resource management. |

Source: Natural Resources Commission, *Fact Sheet. State-wide targets for natural resource management*. February 2006. See website: <http://www.nrc.nsw.gov.au>. Accessed February 2006.

4.3 The Native Vegetation Act 2003

This Act repealed the *Native Vegetation Conservation Act 1997* and introduced a new regime of managing native vegetation. In summary, the five objects of the Act are:

- To provide for, encourage and promote the management of native vegetation;
- To prevent broadscale clearing unless it improves or maintains environmental outcomes;
- To protect native vegetation of high conservation value;
- To improve the condition of existing native vegetation; and
- To encourage the revegetation of land.

Part 3 of the Act provides for the clearing of native vegetation. Native vegetation must not be cleared except in accordance with: a development consent granted in accordance with the Act; or a property vegetation plan. A person who carries out or authorises the carrying out of clearing in contravention of this section is liable to the maximum penalty under s126 of the *Environmental Planning and Assessment Act 1979*. This is currently 10,000 penalty units (\$1,100,000). In addition, a court may also direct that person to plant new trees and vegetation and maintain those trees and vegetation to a mature growth, and provide a security for the performance of that obligation.

The Act defines broadscale clearing of native vegetation to mean the clearing of any remnant native vegetation or protected regrowth. Remnant native vegetation means any native vegetation other than regrowth, whilst regrowth means any native vegetation that has regrown since the earlier of the following dates:

- 1 January 1983 in the case of land in the Western Division and 1 January 1990 for all other land;
- The date specified in a property vegetation plan.

The Minister is not to grant development consent for broadscale clearing unless the clearing will improve or maintain environmental outcomes. How these outcomes are defined was left to the regulations, and is explained in detail at the end of this section. The Act ties in the consent provisions of the *Environmental Planning and Assessment Act 1979*. The Minister is the consent authority for any development applications to clear native vegetation, and Part 4 of the EPA Act applies to the determination process of granting (or not) development consent by the Minister. However, the Regulations state that the normal provisions to consider in the EPA Act (section 79C) in determining a development application do not apply. Instead, the Minister is to have regard to any relevant provisions of catchment action plans, and as stated, consent is not to be granted unless the clearing concerned will improve or maintain environmental outcomes.

The Act provides for activities that are permitted to be carried out without consent or according to a property vegetation plan. These include: routine agricultural management activities; continuation of existing farming activities; and sustainable grazing.

Part 4 of the Act provides for property vegetation plans. These plans may include the

following (section 28):

- (a) proposals for clearing native vegetation on the land;
- (b) the identification of native vegetation on the land as regrowth;
- (c) proposals relating to the thinning of native vegetation in the central area of the State that has regrown between 1 January 1983 and 1 January 1990;
- (d) proposals to enable landholders to obtain financial incentives for the management of natural resources, being proposals relating to the carrying out or funding of native vegetation management activities by catchment management authorities or other bodies;
- (e) proposals relating to the continuation of existing farming or other rural practices;
- (f) provisions excluding clearing for routine agricultural management or other activities from being permitted clearing;
- (g) such other provisions as are prescribed by the regulations.

The Minister is not to approve a plan if it proposes broadscale clearing of native vegetation unless the clearing concerned will improve or maintain environmental outcomes. A property vegetation plan is valid for up to a maximum of 15 years. If agreed by the land owner, a property vegetation plan may be registered on the title of the land so that it applies to any successors in title of the land.

Part 5 of the Act deals with its enforcement. For this part, a reference to a contravention of the Act includes: the Act itself; a property vegetation plan; conditions of development consent granted to clear native vegetation; and an order or direction of the Director-General. This includes: powers of entry and inspection; stop work orders; directions for remedial work; and provisions for appeals. The Act provides for any person to bring proceedings in the Land and Environment Court for an order to remedy or restrain a contravention of the Act.

The *Native Vegetation Act* and natural resource management reforms were accompanied by significant funding. Some \$434 million over four years was committed from the Natural Heritage Trust, National Action Plan for Salinity and Water Quality, the NSW Sustainability Trust and NSW Land and Water Management Plan Program. The funds are to be spent via the Catchment Management Authorities.¹⁰

The Act was supported by a wide range of interest groups, and was assented to on 11 December 2003. However, the implementation of the Act relied on the development and implementation of its regulations. Indicating the complexity and competing issues when dealing with native vegetation, these regulations took almost two years to develop, and were gazetted on 18 November 2005.

4.4 The Native Vegetation Act Regulations

The Act only allows broadscale clearing where it improves or maintains environmental outcomes. Part 5 of the regulations deals with the assessment methodology to determine

¹⁰ Hon Dr David Kemp MP “\$434 Million to Protect Conserve and Repair NSW Environment”. *Media Release*, 25 February 2004.

these environmental outcomes. The regulations have also adopted and gazetted the related document, *Environmental Outcomes Assessment Methodology*. This document, which defines the scientific methodology to determine the outcomes, is applied using a computer based decision support software known as the PVP Developer. This software weighs up the positive and negative benefits of different management actions helping assessment officers to make decisions based on the best scientific information available. The PVP Developer will be used by Catchment Management Authorities to assist farmers prepare Property Vegetation Plans and determine whether broadscale clearing improves or maintains environmental outcomes.

The overall impacts of proposed broadscale clearing are to be determined by separately assessing the impacts of the proposal on:

- water quality;
- salinity;
- biodiversity; and
- land degradation.

The PVP Developer contains key questions and scientific standards to assess broadscale clearing for each of these areas. The software allows local environmental variables and details of the clearing and any offset proposals to be entered into the computer. The results assist decision makers to determine whether the proposed broadscale clearing is to be regarded as improving or maintaining environmental outcomes in accordance with this Environmental Outcomes Assessment Methodology.

If the PVP Developer determines that a proposed broadscale clearing will not result in an improved or maintain environmental outcomes, the regulations permit an accredited expert to make an assessment as to whether the proposed clearing will improve or maintain environmental outcomes if they are of the opinion that:

- a minor variation to the methodology would result in a positive determination; and
- strict adherence to the Assessment Methodology is in this particular case unreasonable and unnecessary.

However, there are six factors that an expert cannot vary, including: riparian buffer distances; classification of vegetation as likely habitat for threatened species; classification of a plant species as a threatened species; classification of the vegetation type or landscape type as over cleared; and the assessment of the regional value of vegetation.

4.5 Stakeholder Response to the Regulations

In response to the gazettal of the Regulations, NSW Farmers stated that whilst the new system has potential, the Regulations are too prescriptive. NSW Farmers will continue to press the Government to deliver:

- A “broadscale” clearing policy that does not require approval for clearing individual trees. The policy should focus on delivering landscape scale outcomes and not the micro-management of individual plants;

- A whole-of-landscape approach to vegetation management that balances social, economic and environmental outcomes. The Government is considering the need for a whole-of-landscape approach to accommodate areas such as Walgett and Nyngan, and the southern Mallee, whereby farmers can group together to develop regions in an economically and environmentally sustainable way.
- A proper funding mechanism to address the inevitable social and economic impacts of the Government enforcing biodiversity conservation on private land;
- Exemptions that ensure routine agricultural practices can continue without red tape – the exemptions provided in the regulation are too prescriptive;
- Improvements to the system for invasive species management;
- Stronger decision powers for CMAs;
- Increased privacy regarding information contained in property vegetation plans;
- Provision for private native forestry based on a practical code of practice.¹¹

According to NSW Farmers, the funding provisions are insufficient to address the socio-economic impacts of enforcing biodiversity conservation on private land across NSW. Farmers should not be expected to provide a public good without payment for the provision of that service – particularly when providing that service significantly impacts on their ability to earn income from their business. In this regard, the Association is pressing the government to implement a scheme that pays farmers at fair market rates for providing biodiversity services on their land. However, NSW Farmers also noted that payment for biodiversity services is not the full answer. Farmers want the flexibility to manage land for both conservation and production so they can afford to fund their own environmental initiatives. Land degradation, feral animal and weed control are major environmental problems that are costly to address. Prescriptive environmental legislation not only restricts farmers ability to take effective action; it reduces their ability to pay for that action.¹²

The Total Environment Centre also recognized advances in the regulatory environment, but stated that more needs to be done, including:

- a strong compliance and monitoring system;
- curbs on the use of rotational agriculture, that converts remnant vegetation to regrowth and makes it easier to clear;
- urgent review of so-called invasive scrub clearing, which can create a cover for the return of broadscale clearing;
- controls on private native forestry, which is currently unsustainable and not subject to acceptable environmental prescriptions;
- increased protection for native grasslands;
- new urban planning controls that put development in already cleared locations and

¹¹ NSW Farmers Association, *Native Vegetation, Frequently Asked Questions*. January 2006. See website: http://www.nswfarmers.org.au/rural_campaigns/native_vegetation. Accessed April 2006.

¹² NSW Farmers Association, *Native Vegetation, Frequently Asked Questions*. January 2006. See website: http://www.nswfarmers.org.au/rural_campaigns/native_vegetation. Accessed April 2006.

protect remaining native vegetation, especially along the coast.¹³

4.6 The Natural Resources Advisory Council

Although with no formal legislative backing, the Natural Resources Advisory Council of NSW (NRAC) was established by the Government as part of its suite of natural resource management reforms. The Council is the single forum for stakeholder advice to government on natural resources management and land use issues. It is an independent body reporting to the Minister for Natural Resources and the Rural and Natural Resources Standing Committee of Cabinet. In September 2004, the Government announced the appointment of Ms Linda Burney MP as the Minister's independent Convenor of the Council.

NRAC comprises 27 members representing a broad range of natural resource management stakeholders including State and local government, forestry, fishing, farming, environmental, Aboriginal, union and industry sectors. Of the 27 members, five are from government departments. NRAC's principal functions are to:

- provide the Government with policy advice on sustainable natural resource management and economic development in NSW;
- assist the Government to prioritise resources and strategies to promote sustainable natural resource management in NSW;
- strategically oversee the policy and regulatory environment and the NRM legislative reforms in NSW;
- acknowledge differences, facilitate common understanding and broker consensus between stakeholder representatives when necessary.

The Natural Resources Advisory Council has three Standing Committees that examine and identify issues and solutions specific to their members' expertise. They are:

- Coastal and Planning Standing Committee;
- Sustainable Resource and Conservation Standing Committee;
- Primary Industry and Economic Development Standing Committee.

5.0 THE DEPARTMENT OF NATURAL RESOURCES COMPLIANCE POLICY

In 2002 the Audit Office of NSW released a performance review of the then Department of Land and Water Conservation in relation to native vegetation management. In regards to compliance and enforcement of the *Native Vegetation Conservation Act*, the audit found that the likelihood of breaches of the Act is high, and that the number of alleged breaches is steadily increasing. However, the Department's compliance and enforcement efforts have been characterised by:

¹³ Total Environment Centre, *Land Clearing*, see website: http://www.tec.org.au/index.php?option=com_content&task=view&id=258&Itemid=301. Accessed April 2006.

- A reactive approach (responding to allegations) rather than a pro-active approach (based on systematic monitoring or audit);
- Lengthy response times and minimal use of enforcement provisions;
- An increasing amount of regulation which is complex, costly, and difficult to enforce;
- An Act that is difficult to enforce because of broadly worded exemptions;
- A lack of information on the use of exemptions.¹⁴

In a formal response to the audit report, the Department of Land and Water Conservation noted that the development of a systematic monitoring program is advancing, with the goal being a program that will monitor clearing, revegetation and regeneration. The expense and time required to comprehensively map the vegetation of the State was also noted, with \$17 million allocated to this task by the State Government over the period 1999 – 2006. The Department also noted that its *Native Vegetation Act Compliance Policy* is now publicly released, and the fact that alleged breaches of the Act are growing at 20 percent per annum largely reflects the increasing level of awareness of the Act and its requirements.¹⁵

The Department of Natural Resources (formerly the Department of Land and Water Conservation) has a generic compliance policy that covers all the legislation the Department is responsible for – including the *Native Vegetation Act 2003*. The compliance policy is explained below. However, it is important to note that Catchment Management Authorities do not exercise enforcement actions for or on behalf of the Department. CMAs may be consulted by and liaise with the Department but they do not undertake any investigatory or prosecution functions for the Department.

The Department's Compliance Policy notes that it undertakes three types of monitoring activities.

1. Detection

The Department's detection activities include both aerial and ground survey, aerial photography and the use of satellite images (high resolution satellite imagery is used to monitor compliance with natural resource legislation across NSW).

2. Audit and Review of Approvals

A large number of approvals (consents) are granted under relevant legislation in order to equitably share natural resources. The Department conducts audits and reviews to verify compliance with these approvals and to improve the quality and effectiveness of its approvals.

3. Reports of Possible Breaches

The Department receives reports of alleged breaches from external sources including

¹⁴ Audit Office of New South Wales, *New South Wales Auditor-General's Report, Performance Audit, Department of Land and Water Conservation, Regulating the Clearing of Native Vegetation*. August 2002, at 47.

¹⁵ Audit Office of New South Wales, *New South Wales Auditor-General's Report, Performance Audit, Department of Land and Water Conservation, Regulating the Clearing of Native Vegetation*. August 2002, at 9.

members of the public, local councils and other government bodies. All alleged breaches detected, or reported, are recorded, assessed and considered for action in accordance with this Policy.

All alleged breaches of natural resources legislation are prioritised for investigation using a risk management approach in line with the Australian Standard. For all alleged breaches recorded, initial desktop assessment and prioritisation (into low, medium and high risk) is conducted. This assessment comprises:

- a review of the Department's records for applications, approvals, previous compliance investigations and any other documentation relating to the land as well as the people that may be involved. Relevant material such as recent and historic aerial photography, satellite imagery, maps, plans and previous reports may also be examined; and
- an assessment of the likely environmental harm, impacts on other resource users and the effect on the integrity of a consent and/or the regulatory system;
- Further investigation may be warranted following the outcome of the desktop assessment and this may involve a site inspection and collecting information from the landholder. Before undertaking a site inspection, wherever possible, officers will contact the landholder to arrange a visit to the property.
- During an investigation, compliance officers will gather evidence of the incident in order to establish whether an offence has occurred and the identity of the person(s) who may be responsible. This evidence may take the form of videos, photographs, samples and physical evidence, witness statements and records of interview.

If, after full investigation, it is considered that a breach has occurred, DNR will take appropriate action depending on the significance of the breach. In determining the significance DNR will consider:

- The degree of environmental harm or potential harm resulting from the breach;
- Issues of the equitable use of natural resources;
- The severity of the breach;
- The integrity of the consent and/or the regulatory system, such as;
 - avoiding a poor precedent being set; and
 - an unreasonable or extreme interpretation in relation to a condition of consent.
- The public interest including for example:
 - if action would be perceived as counter-productive by bringing the law into disrepute (eg where consent for the activity would have been granted if an application had been made, or where a change in the law is imminent which would make the activity permissible);
 - the level of public concern; and
 - the need for either general or specific deterrence.
- Any aggravating factors, including for example:
 - whether an individual is culpable (eg they are aware or should be aware that they are committing a breach and continue regardless);
 - whether an individual has a history of prior breaches where the Department

- has taken action; and
- whether the breach is ongoing.
- Any mitigating factors, including for example:
 - whether the individual had acted in accordance with DNR advice (or CMA advice in the case of the *Native Vegetation Act 2003*);
 - whether the individual is not culpable; and
 - whether the individual is willing to co-operate and the extent to which they have already done so.

The applicability of, and weight to be given to, each of the above factors will depend on the circumstances of each particular case. Officers will make their determination on the level of significance with reference to internal policies, peer review as well as supervisor support.

After consideration of all appropriate factors alleged breaches are classified as being of low, medium and high significance in accordance with the Department's risk management framework. This classification guides the action to be taken.

In events determined to be of low significance, the following actions may be taken:

- finalise the case (only where the degree of harm is low to very low, there are no aggravating circumstances, the public interest does not compel further action and some mitigating circumstances exist);
- send an advisory letter to the alleged offender to assist that person to meet their duty of care in the future;
- send a warning letter to the alleged offender to encourage that person to meet their duty of care in the future; and
- negotiation of a corrective request.

In breaches determined to be of medium significance, the Department will focus on achieving outcomes that repair any harm that has been caused, by negotiating remediation agreements or by issuing orders. Other options available for dealing with these breaches could include one or more of the following:

- issue of a Stop Work Order where the activity is continuing (and the landholder has been asked to stop), or there is a risk that the landholder will recommence the activity;
- issue of a Penalty Notice in relation to the breach;
- negotiation of a corrective request;
- suspend any relevant license, approval or consent; and
- debit of a water account.

In cases determined to be of high significance, the Department may use one or more of the following responses:

- issue a Stop Work Order;
- require remediation of the harm arising from the breach. Landholders will be given an opportunity to comment on the intended outcomes of a notice and unless there

are reasons to issue a notice urgently, the terms of the notice will be negotiated. If agreement cannot be reached, DNR will issue a remediation notice;

- issue a Penalty Notice. Penalty Notices should not be used in relation to the more serious breaches and where prosecution is the more appropriate outcome;
- commence proceedings in the Land and Environment Court or in a Local Court ; or
- cancel or suspend any relevant licence, approval or consent.

In all prosecutions in which the Department is involved, the burden of proof to secure a conviction rests with the Department. All matters in which the Department exercises its regulatory role are criminal in nature. Therefore, the standard of proof required to enable a court to find that an offence has been proved, is proof ‘beyond reasonable doubt’, as to the elements of the offence.

The Department will review its implementation of this Policy and its compliance program annually and will report on implementation in each Annual Report.¹⁶

6.0 MAJOR REPORTS SINCE THE IMPLEMENTATION OF THE NATIVE VEGETATION ACT 2003

6.1 Productivity Commission

The Productivity Commission released a report on the impacts of native vegetation regulations on landholders in 2004. The report focused on the impacts of regulatory regimes. The Commission was not asked to assess the benefits of retaining native vegetation and/or biodiversity conservation as such. In this regard, the Commission noted that considering only the costs imposed on landholders by environmental policies would not provide a sound basis for decision making. However, the Commission stated:

- both positive and negative impacts of regulatory regimes on landholders and regional communities were considered; and
- although environmental benefits accruing to the community at large were not assessed, this does not imply that the community-wide benefits from native vegetation management are insignificant. Indeed, benefits may be very large – however the benefits are likely to be context specific and difficult to quantify.¹⁷

The Commission noted that private protection of native vegetation and biodiversity, and the range of environmental services they deliver, is likely to be significantly greater than zero because many production and consumption benefits from environmental services accrue to landholders. Nonetheless, this is likely to fall short of the level society deems appropriate because of:

- market distortions or regulations that directly or indirectly discourage private

¹⁶ Department of Natural Resources, Compliance Policy (ND) see <http://www.dlwc.nsw.gov.au/legal/comp-policy.htm>, Accessed April 2006.

¹⁷ Productivity Commission, *Impacts of Native Vegetation and Biodiversity Regulation*. Productivity Commission Inquiry Report No 29, 8 April 2004, at 4.

- conservation effort;
- the absence of markets for many environmental services;
- ignorance of the benefits of environmental services; and
- differences in risk preferences and concern for future generations.¹⁸

The Commission identified four broad types of impacts on farming practices of native vegetation regulations:

- preventing expansion of agricultural activities;
- preventing changes in land use – eg from grazing to cropping;
- inhibiting routine management of vegetation regrowth and clearing of woodland thickening to maintain areas in production; and
- inhibiting management of weeds and vermin.¹⁹

Using the Moree Plains Shire as a case study, the Commission estimated landholders' returns if they were not constrained by clearing restrictions. Estimates suggested that prohibitions on broadscale clearing could reduce the present value of net returns (2003 dollars) to land, capital and management over a 40 year period by \$27 - \$84 million, depending on the productivity of the newly cleared land.

The Commission suggested three ways to reduce adverse impacts of native vegetation regulation:

- Improve the existing regulatory regime. Fundamental reform is needed for several reasons:
 - Regulation of native vegetation is inflexible, prescriptive and 'input' rather than 'outcome' focused;
 - Regulation of clearing is a partial measure – it does nothing to ensure ongoing management of native vegetation or its regeneration;
 - Jurisdictional regulation by design or accident has muddied the issue of landholder and community responsibility.
- Promote private conservation;
- Clarify landholder and community responsibilities;
 - The Commission considered it reasonable to expect landholders in the aggregate to bear the costs of actions that directly contribute to sustainable resource use, and hence the long term viability of their operations;
 - The wider public should bear the costs of actions to promote public-good environmental services – such as biodiversity, threatened species preservation and greenhouse gas abatement – and which are likely to impinge significantly on the capacity of landholders to utilize their land for production.

¹⁸ Productivity Commission, *Impacts of Native Vegetation and Biodiversity Regulation*. Productivity Commission Inquiry Report No 29, 8 April 2004, at 19.

¹⁹ Productivity Commission, *Impacts of Native Vegetation and Biodiversity Regulation*. Productivity Commission Inquiry Report No 29, 8 April 2004, at xxx.

Finally, the Commission noted that if landholders and local communities are expected to address, and largely pay for, some environmental problems (such as salinity) themselves, there is a strong case for allowing them greater flexibility and authority to devise and implement efficient ways of doing so – not simply imposing solutions from above. Policy mechanisms that regional bodies could employ to achieve regional objectives include: commercial or market-based instruments; voluntary efforts; codes of practice; education; or even regulations stipulating certain practices. Redistributive mechanisms may be appropriate in some instances to share costs among landholders. As an example, in some areas currently only those landholders with remnant native vegetation on their properties bear the costs of clearing regulations, which, among other things, are aimed at controlling salinity, caused largely by past clearing on other properties.²⁰

6.2 The ABARE Report on Native Vegetation

In March 2006 ABARE (Australian Bureau of Agricultural and Resource Economics) released a report on the impacts on productivity and returns on native vegetation.²¹

ABARE noted that farmers will conserve native vegetation on their property if it generates private benefits, for example, in the form of shelter for livestock and windbreaks. However, the broader benefits that the conservation of native vegetation can generate are public in nature in that they are not exclusive. Those individuals that generate the benefits from increased native vegetation do not retain them in full, for their own use or to on–sell them to other potential beneficiaries. As a consequence, they are likely to under invest in the delivery of the benefits generated by native vegetation. Government involvement in the management of native vegetation may be justified if these non-exclusive benefits can be delivered cost effectively.

ABARE investigated how vegetation is related to farm productivity by conducting 386 face-to-face interviews of broadacre farmers situated in central and western New South Wales. The survey region covered the western half of the Central Division and extended into the Western Division — an area of approximately 400 000 square kilometres at the interface of the wheat–sheep and the pastoral zones. The region is characterised by cattle, wool, prime lamb and extensive dryland cropping operations on farms with diverse levels of vegetation.

The ABARE report noted that the level of vegetation on a property is a key determinant of productivity of broadacre agricultural enterprises – both grazing and cropping. The ABARE survey results showed that farms with lower vegetation density had significantly higher total factor productivity. Throughout the rangelands area of the survey, on average 28 percent of farmers reported that they wished to develop their rangeland areas for higher livestock carrying capacity or for cropping if all potential restrictions could be relaxed. In cropping areas, isolated paddock trees can limit the efficiency of cropping management

²⁰ Productivity Commission, *Impacts of Native Vegetation and Biodiversity Regulation*. Productivity Commission Inquiry Report No 29, 8 April 2004, at xlv.

²¹ ABARE, *Native Vegetation management on broadacre farms in New South Wales: impacts on productivity and returns*. Abare eReport 06.3, March 2006.

practices imposing constraints on some farmers. ABARE conducted what is called a total factor productivity analysis, which is a ratio of all output quantities on a farm to all input quantities. Output quantities include the crop produced, livestock as well as other sources of on-farm derived income. Input quantities include fixed costs such as land and machinery, and variable cost items such as labor and material. Farms in the North West Slopes and Plains were found to be twice as productive as farms in western NSW.

ABARE found that vegetation density has a significant negative impact on total factor productivity on broadacre farms in the survey region. However, it was also noted that while farms with low vegetation densities are, on average, associated with higher total factor productivity, it was also not possible to conclude that continual removal of vegetation will necessarily lead to higher productivity, particularly in rangeland areas. At low vegetation densities, research has suggested that increasing vegetation levels, up to some point, is consistent with increased productivity on some farms, particularly grazing properties.

Regulations that prevent the clearing of native vegetation on private agricultural land can impose opportunity costs – ie, the cost of forgoing a profitable activity. The opportunity costs of forgone crop development in the survey area were calculated by ABARE, based on a hypothetical blanket ban that effectively prevented any broadscale clearing. Over the entire survey region, 19 percent of survey farmers wished to clear land for crop development. The opportunity cost of native vegetation conservation varies over the total survey region; ninety per cent of the estimates fell between \$187 and \$1445 a hectare of potential crop development area. The median opportunity cost per hectare in the Central Division (\$596) is 57 per cent higher compared with the Western Division (\$379), consistent with more favorable cropping opportunities in the former. The median cost of forgone crop development across the survey region is around \$156,000 per farm. The estimated opportunity cost per landholder in the Central Division (where cropping is better suited) ranged from less than \$1,000 for the lowest 5 per cent to greater than \$1.9 million for the worst affected 5 per cent. Where the expected private benefits from clearing exceed the expected private costs of clearing, including expected penalties for illegal clearing, there is a strong financial incentive for some farmers to ignore regulatory constraints. The total opportunity cost of forgone crop development on rangelands is as high as \$1.1 billion across the survey region. Most of the cost is borne in the Central Division areas.

ABARE concluded that a broad based regulatory approach to managing native vegetation may fail to differentiate between sites where conserving native vegetation generates net benefit versus net costs. Policy instruments that allow farmers to conserve native vegetation at sites within their property with relatively lower opportunity costs are likely to lower the cost of native vegetation conservation to individual farmers. If equivalent environmental outcomes can be generated at different sites, market based initiatives that allow native vegetation to be conserved at sites where the opportunity cost is relatively low may lower the overall cost of delivering environmental outcomes.

6.3 The Agriculture and Food Policy Reference Group

The Agriculture and Food Policy Reference Group was commissioned in March 2005 by the Commonwealth Government to help guide the development of future directions in Australian Government policies and programs affecting the agriculture and food sector.

On 16 February 2006, the Reference Group released its report — *Creating our Future: Agriculture and Food Policy for the Next Generation*. The Group identified the major issues that need attention if the agriculture and food sector is to be successful over the next ten to fifteen years. A core component of the report was a chapter on environmental services on private land. The Reference Group highlighted that market based incentives are likely to be more effective than regulation in recognizing the role of farmers in enhancing natural resource management on behalf of the wider community. Market based incentives include: payments for entering voluntary covenants; offset trading; and environmental service auctions. The Group recommended:

A successful national program to provide market based incentives for landholders to deliver public good benefits on private land is needed and should:

- operate nationally, but with regional organisations having an active role;
- allow multiple purchasers of environmental services;
- be voluntary, equitable and competitive between potential suppliers;
- be determined on the basis of the environmental outcomes of the area being conserved relative to the cost;
- be efficient to run and effective in providing value for money for landholders, taxpayers and the community.²²

The Reference Group noted that the impending conclusion in mid 2008 of the Natural Heritage Trust and National Action Plan on Salinity and Water Quality programs provide an ideal opportunity to establish a market based initiative as an important element of a successor program.

7.0 CONCLUSION

The three reports summarized above have one common thread. Market based instruments are an important element in the suite of tools to manage native vegetation on private land. In July 2002 the then NSW Department of Land and Water Conservation announced the development of an Environmental Services Scheme, which examined the use of market mechanisms for native vegetation conservation. The Scheme was designed to investigate ways of opening up new income streams for landholders by creating markets for the environmental services which they can provide.²³ Since then, the Department has been a participant in the National Market-based Instruments Pilot Program, under the auspices of the National Action Plan for Salinity and Water Quality. The Program has recently released its evaluation of round one of the projects, and concluded:

²² Commonwealth of Australia, *Creating Our Future. Agriculture and food policy for the next generation*. Report by the Agriculture and Food Policy Reference Group to the Minister for Agriculture, Fisheries and Forestry. February 2006, at 153.

²³ Izmir, G. "Government strategies in the management of landclearing." in *I Can See Clearly Now... Land Clearing and Law Reform*, National Environmental Defenders Office, Network Conference, July 2002, at 58.

- Auctions, cap and trade (for point sources) and offsets can be successfully used to address a wide variety of water quality, salinity and environmental problems in the Australian landscape;
- Market based instruments, especially auctions, can deliver large cost savings relative to traditional natural resource management.²⁴

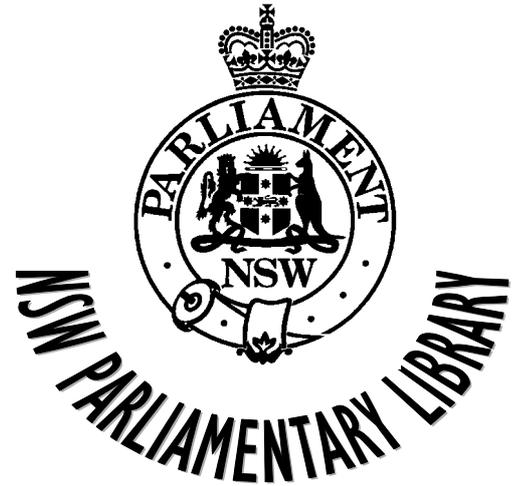
On 2 December 2005 Australian Government Ministers on behalf of the Natural Resource Management Ministerial Council announced that up to \$5 million in extra funding will be provided by Australian, State and Territory governments for round two of the National Market Based Instruments Pilot Program. Round two projects will investigate ways of progressing market based instruments from trial to implementation.²⁵

In NSW, the challenge will be how Catchment Management Authorities use this knowledge and apply market based instruments within the framework of the *Native Vegetation Conservation Act 2003*.

²⁴ National MBI Working Group, *Evaluation of Round One of the Market Based Instrument Pilot Program*. 17 August 2005, at 2.

²⁵ See the National Market Based Instruments Pilots Program website: www.napswq.gov.au, Accessed May 2006.

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