

AUDITOR-GENERAL'S REPORT

PERFORMANCE AUDIT

Regulating the Clearing of Native Vegetation Follow-up of 2002 Performance Audit



The Legislative Assembly
Parliament House
SYDNEY NSW 2000

The Legislative Council
Parliament House
SYDNEY NSW 2000

In accordance with section 38E of the *Public Finance and Audit Act 1983*, I present a report titled **Regulating the Clearing of Native Vegetation: Follow-up of 2002 Performance Audit**.

A handwritten signature in black ink, appearing to read 'R J Sendt'.

R J Sendt
Auditor-General

Sydney
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Foreword

The last decades of the last century were critical in the land clearing debate. By the 1980s attitudes towards land management had begun to change. New land for farming was becoming scarce and there was a growing movement to conserve the remaining native vegetation. Attitudes about clearing had become polarised.

It was in this atmosphere that the Government started regulating the clearing of native vegetation in the late 1990s. Our August 2002 audit, *Regulating the Clearing of Native Vegetation*, found that the then regulatory regime was not working. This partly reflected deficiencies in the legislation itself, and partly the way agencies were applying it.

This follow-up audit assesses the extent to which agencies have changed their practices as a result of our earlier audit. This gives Parliament and the public an update on the extent of progress made.

Also since our last report the Government has introduced new legislation, only coming into effect in December 2005. It has been designed to overcome the deficiencies alluded to above and to better manage the on-going tensions between economic development and conservation. This report assesses progress made in implementing the new regulatory regime.

But since our last report unauthorised clearing of native vegetation has continued. This report discloses official illegal land clearing figures that are only just available. This is important as we now have a baseline from which to measure illegal clearing.

R J Sendt
July 2006

Executive summary

The focus of our audit

In 1995 the Government introduced a State Environmental Planning Policy to protect remaining native vegetation of high conservation value, encourage revegetation and prevent inappropriate clearing. It confirmed this policy in the Native Vegetation Conservation Act, passed in 1997 (NVC Act 1997).

In 2002 we carried out a performance audit of the regulation of clearing of native vegetation. We reported that alleged breaches of the legislation were increasing and that the regulatory system was ineffective.

The Government reviewed its strategy and in 2003 introduced three new Acts (2003 Acts) which confirmed the 'Government's commitment to end broadscale clearing (clearing of any remnant vegetation or protected regrowth) and maintain productive landscapes'. Operation of the 2003 Acts and Regulations commenced in December 2005.

Initially the Department of Land and Water Conservation (DLWC) was responsible for administering the NVC Act 1997. The Department of Infrastructure, Planning and Natural Resources (DIPNR) was responsible from July 2003. The Department of Natural Resources (DNR) has been responsible for the NVC Act 1997 and the 2003 Acts since September 2005.

The objective of this audit was to determine whether clearing of native vegetation is now being managed in a way that is consistent with the Government's policy objectives and whether there has been progress towards achieving those objectives.

Audit opinion

There has been progress towards achieving the Government's objectives. A new regulatory system has been established that is capable of ending illegal clearing of native vegetation. However this system is not yet fully operational and it is too early to assess its performance.

In our previous audit we reported that the regulatory system established under the NVC Act 1997 was ineffective in preventing illegal clearing of native vegetation. This regulatory system continued to operate until December 2005 and continued to be ineffective. Illegal clearing continued. DNR estimates that 30,000 hectares of native vegetation was cleared illegally in 2005. This was 40 percent of total clearing.

DLWC/DIPNR (now DNR) were unable to deter illegal clearing because their prosecutions under the previous NVC Act 1997 were unsuccessful when contested. This was because of problems with meeting the evidence requirements in the NVC Act 1997 and because they were unable to accurately detect and measure illegal clearing. DNR has only measured illegal clearing accurately for 2005, ten years after regulation was introduced.

The grounds for prosecution have been changed in the new 2003 Acts and Regulations. The other issues we raised in our 2002 audit - including clarifying accountabilities, setting targets for native vegetation and monitoring illegal clearing to provide evidence for prosecutions - have also been addressed.

DNR is now in a position to achieve the Government's main objective of reducing illegal clearing, especially in the west of the State. It now must establish a record of enforcement actions that are numerous, visible and successful.

Findings of our 2002 audit

The main findings were that in 2002, after operating under the NVC Act 1997 for four years:

- accountability was not clear, including the lead agency role
- the strategy, targets and regional vegetation plans were yet to be finalised
- information on clearing of native vegetation was inadequate to regulate effectively
- the NVC Act 1997 was difficult to enforce
- no system was in place to monitor and report on regulation of native vegetation.

Findings of this follow-up audit

Chapter 1 Preventing inappropriate clearing

Illegal clearing has continued since the clearing of native vegetation was regulated in 1995. DLWC/DIPNR (now DNR) were unable to control illegal clearing under previous legislation. Many of the past problems have now been addressed and DNR has recently resumed active and visible compliance action against illegal clearing.

Approximately 74,000 hectares of native vegetation were cleared in 2005, made up of 44,000 hectares approved clearing and 30,000 hectares illegal clearing. Most of the illegal clearing was on the previously uncleared western edge of farmland in the State.

Illegal clearing was occurring before 2005 but DNR does not have adequate information to accurately measure the extent in any year before 2005.

Most land clearing in NSW was done before regulation began in 1995. However farmers with uncleared land at that date were affected by the legislation. A minority of these have cleared illegally, particularly in western areas. DNR has not yet achieved any significant increase in these farmers' cooperation and compliance.

Many farmers remain concerned that the legislation may affect their future ability to manage their land and earn an income.

DLWC/DIPNR (now DNR) undertook only a small number of prosecutions in the period 1998 to 2005. No prosecutions were successful when contested in court.

DLWC/DIPNR (now DNR) also undertook only a small number of other compliance actions - warning letters, restitution orders and stop work orders - against those who had undertaken illegal land clearing.

A major reason for failure to obtain compliance with the NVC Act 1997 was problems with prosecuting under the Act. The new 2003 Acts and Regulations address many of the enforcement problems under the previous Act.

DNR recently resumed active and visible compliance inspections on properties in western areas suspected of illegal clearing. As the NVC Act 1997 applies for any prosecutions for clearing before December 2005, it may be some time before a record of successful enforcement is established.

**Chapter 2
Issues from
previous audit**

The reform program has addressed the key systemic issues we raised in our 2002 audit and the new system seems capable of achieving the Government's objectives when fully implemented.

Responsibilities for clearing of native vegetation have been separated and clarified. Catchment Management Authorities (CMAs) are now responsible for approvals of clearing, as part of catchment management. DNR is responsible for regulating compliance with the legislation and takes enforcement actions against illegal clearing. The new arrangements have worked successfully in the first months of operation.

A new strategy has been adopted to regulate clearing of native vegetation including more consultation with farmers and payments to farmers to protect native vegetation on their properties.

The Government has set a broad target for improvement in the extent and condition of native vegetation by 2015. Achieving the Government's target by 2015 will require a major effort by DNR to reduce illegal clearing and by the CMAs to help achieve regrowth and conservation.

An improved satellite system is supplying high resolution images to monitor compliance and to support prosecutions. But there has not yet been sufficient funding to provide adequate coverage of all areas of interest in NSW.

CMA catchment officers are working with farmers to develop their proposals for clearing. To be approved, these proposals must have neutral or better impact on native vegetation and endangered species. DNR compliance officers are monitoring compliance using new satellite technology. They are detecting illegal activities and are taking some compliance actions in western areas. At present these approval and compliance processes are operational but still being developed. There is a risk of further delays before these processes are operating smoothly.

The extent and condition of native vegetation is not currently being regularly reported but DNR in future will report annually, initially on extent and subsequently on condition.

Response from the Department of Natural Resources

The Department of Natural Resources (DNR) would like to thank the Audit Office of NSW for the opportunity to respond to the findings of the follow up audit into 'regulating the clearing of native vegetation'.

Widespread clearing of native vegetation has had a significant impact on the environment across many parts of NSW. In particular, over-clearing has impacted on salinity, soil erosion, changes to the water table, and loss of habitats for plants and animals.

General Comments *In 2005, the NSW Government introduced new laws to end broadscale land clearing across the state unless it improved or maintained environmental outcomes. DNR is the government agency principally charged with ensuring our native vegetation is protected for future generations.*

DNR and other agencies, particularly the Department of Environment and Conservation, support the 13 Catchment Management Authorities (CMAs) in the preparation of Property Vegetation Plans (PVPs). The Department's compliance unit is responsible for monitoring land clearing activity across the state, and ensuring that action is taken against serious cases of illegal clearing.

The recent native vegetation reforms and changes to the institutional arrangements across Government have addressed many of the key issues raised in previous Audit.

Land clearing statistics *There is much debate on land clearing statistics in NSW. DNR has two programs for measuring land clearing: a register of clearing approvals and a compliance-monitoring program. Based on these two programs accurate, scientifically rigorous information was provided to the Audit Office:*

- 1. Approved land clearing in 2005 was 44,000 hectares (including forestry activity of 20,942 hectares and exotic vegetation of 669 hectares); and*
- 2. The compliance monitoring data covering the areas of highest risk of alleged illegal clearing was 30,000 hectares for the similar period. This assumes 70% of vegetation change detected under the compliance-monitoring program is illegal clearing with the remaining areas being legally cleared.*

Based on the above, DNR advised the Audit Office that a figure of approximately 74,000 hectares per annum is the most accurate information on clearing of native vegetation in NSW.

Vegetation Extent and Condition reports *In addition, DNR is working with the NRC and other agencies as part of the Government's Monitoring and Evaluation Strategy to provide improved reporting of vegetation extent and condition. The new system will provide updated baseline data allowing Government to produce regular reports on native vegetation extent, type, and at a later date, condition.*

**Preventing
Inappropriate
Clearing**

As indicated in the report, DNR has recently resumed active and visible compliance actions against illegal clearing against the small number of people who continue to abuse the system at the expense of the rest of the community. DNR is aware that the vast majority of land managers already act responsibly, and we will continue to work cooperatively with them.

As part of our approach to compliance DNR recently released a compliance policy, which explains the objective of ending illegal land clearing.

The compliance policy has five key elements:

- 1. Community education and engagement, to promote voluntary compliance through raising awareness of the legislation and the potential consequences of not complying;*
- 2. Monitoring of compliance with natural resource legislation: including surveys, aerial photography and satellite images, as well as auditing approved consents to check that works are being carried out correctly;*
- 3. Investigation of alleged breaches;*
- 4. Taking appropriate action when a breach has occurred; and*
- 5. Review and reporting.*

Where investigations and site inspections reveal that a breach has occurred, the action taken by DNR will depend on the significance of the breach. Actions can include warning letters, penalty notices, remediation directions, stop work orders and, in the most serious cases, prosecution. Wherever possible, a clear emphasis will be placed on remedying the environmental harm. DNR's compliance approach is about getting the best outcome for rural communities, the environment and sustainable agriculture.

**Issues From
Previous Audit**

Four government agencies and the 13 CMAs have a successful record of working cooperatively on the implementation of the native vegetation reforms since December 2003. The Government's native vegetation reform program has addressed the key systemic issues raised in the 2002 Audit which has been recognised in the follow up audit report:

- *Responsibilities for clearing have been clarified for the clearing of native vegetation between DNR, DEC, CMAs, and the Natural Resources Commission (NRC);*
- *A new strategy has been adopted to regulate the clearing of native vegetation that involves better consultation with farmers and other stakeholders;*
- *The NSW Government has set state-wide standards and targets on vegetation extent and condition;*
- *The Department now uses an improved satellite monitoring system that can provide high level images to support on ground decisions as well as prosecutions; and*
- *CMA Catchment Officers are working with farmers to prepare voluntary negotiated PVPs.*

**PVP Developer -
decision support
tool**

The PVP Developer is a computer based decision support tool that provides landholders and CMA staff with access to the best available science and information on native vegetation. The PVP Developer was built as a collaborative effort between scientists from DNR, DEC and CSIRO and has been peer reviewed. As new scientific information and local knowledge becomes available the PVP Developer will be upgraded. The process to upgrade the assessment methodology and the associated PVP Developer is clearly defined in the regulations and includes an objective review of any changes by the NRC as an independent review body.

**Concluding
Comments**

DNR welcomes the findings of the follow up audit report as a generally constructive and accurate report on regulating the clearing of native vegetation.

I trust that this report in highlighting the deficiencies with the previous system and its positive findings with regard to the recent native vegetation reforms will help to improve public confidence in the implementation of the Native Vegetation Act 2003.

(signed)

*Dr Richard Sheldrake
Director General*

Dated: 4 July 2006

**1. Has there been progress in preventing
inappropriate clearing?**

At a glance

The key question we wanted to answer was:

Has there been progress in preventing inappropriate clearing since our last audit in August 2002?

Our Assessment:

Illegal clearing has been occurring since the clearing of native vegetation was regulated in 1995. DNR was unable to control illegal clearing under previous legislation. Many of the past problems have now been addressed and DNR has recently resumed active and visible compliance action against illegal clearing.

Approximately 74,000 hectares of native vegetation were cleared in 2005, made up of 44,000 hectares approved clearing and 30,000 hectares illegal clearing. Most of the illegal clearing was on the previously uncleared western edge of farmland in the State.

Illegal clearing was occurring before 2005 but DNR does not have adequate information to accurately measure the rate of illegal clearing in any year before 2005.

Most land clearing in NSW was done before regulation began in 1995. However farmers with uncleared land at that date were affected by the legislation. A minority of these have cleared illegally, particularly in western areas. DNR has not yet achieved any significant increase in these farmers' cooperation and compliance. Many farmers remain concerned that the legislation may affect their future ability to manage their land and earn an income.

DLWC/DIPNR (now DNR) undertook only a small number of prosecutions in the period 1998 to 2005. No prosecutions were successful when contested in court. DLWC/DIPNR (now DNR) also undertook only a small number of other compliance actions - warning letters, restitution orders and stop work orders - against those who had undertaken illegal land clearing. A major reason for failure to obtain compliance with the NVC Act 1997 was problems with prosecuting under the Act. The new 2003 Acts and Regulations address many of the enforcement problems under the previous Act.

DNR recently resumed active and visible compliance inspections on properties in western areas suspected of illegal clearing. As the NVC Act 1997 applies for any prosecutions for clearing before December 2005, it may be some time before a record of successful enforcement is established.

In 1995 the Government issued State Environmental Planning Policy 46 'Protection and Management of Native Vegetation' (SEPP 46) to protect remaining native vegetation of high conservation value, encourage revegetation and prevent inappropriate clearing. Two years later it passed the *Native Vegetation Conservation Act 1997* (NVC Act 1997), virtually unchanged from SEPP 46.

In 2002 we carried out a performance audit of the regulation of clearing of native vegetation. We reported that alleged breaches of the legislation were increasing and that the regulatory system was ineffective.

The Government reviewed its strategy in 2003 and passed three new Acts - the *Native Vegetation Act 2003* (NV Act 2003), the *Catchment Management Act 2003* and the *Natural Resources Commission Act 2003* - to replace the original legislation. These new Acts only came into effect in December 2005 after the Regulations for the NV Act 2003 were gazetted.

The NSW Government has published very little information on the extent of clearing of native vegetation from 1998 to December 2005, or on the performance of its regulatory system in the period. As a result Parliament and the public have not been fully informed.

In this chapter we examine the extent of illegal clearing of native vegetation during the period the NVC Act 1997 applied, from January 1998 to December 2005, to the extent that data is available. We also examine the performance of the compliance program in deterring illegal clearing.

The agency responsible for administering the NVC Act 1997 changed several times over the period 1997-2005 due to agency restructures. Responsibilities were with:

- the Department of Land and Water Conservation (DLWC) to July 2003
- the Department of Infrastructure, Planning and Natural Resources (DIPNR) July 2003 to August 2005
- the Department of Natural Resources (DNR) from September 2005.

Although agencies changed, there was continuity of objectives, staffing and administration over the period. Therefore we refer to the previous agencies as 'DLWC/DIPNR (now DNR)'. We provide a timeline of regulation in Appendix 2.

The diagrams and tabulations of data in this report have been provided by DNR. They are the best available information on clearing of native vegetation at present.

DLWC/DIPNR (now DNR) did not measure the level of illegal clearing of native vegetation accurately until recently and the record for the period before December 2005 is incomplete. The information will improve in the next few years and more analysis will be undertaken. This could lead to corrections of the DNR data in this report.

1.1 Is the rate of clearing being reduced?

Our assessment

Illegal clearing of native vegetation has been occurring since clearing was regulated in 1995. Approximately 74,000 hectares of native vegetation were cleared in 2005, made up of 44,000 hectares approved clearing and 30,000 hectares illegal clearing. Most of the illegal clearing was on the previously uncleared western edge of farmland in the State.

Illegal clearing was occurring before 2005 but DNR does not have adequate information to accurately measure the rate of illegal clearing in any year before 2005.

30,000 hectares of illegal clearing in 2005

DNR advises that the most accurate, scientifically rigorous information on clearing of native vegetation is that the total of approved and illegal clearing of native vegetation in 2005 was approximately 74,000 hectares.

The 74,000 hectares is the total of:

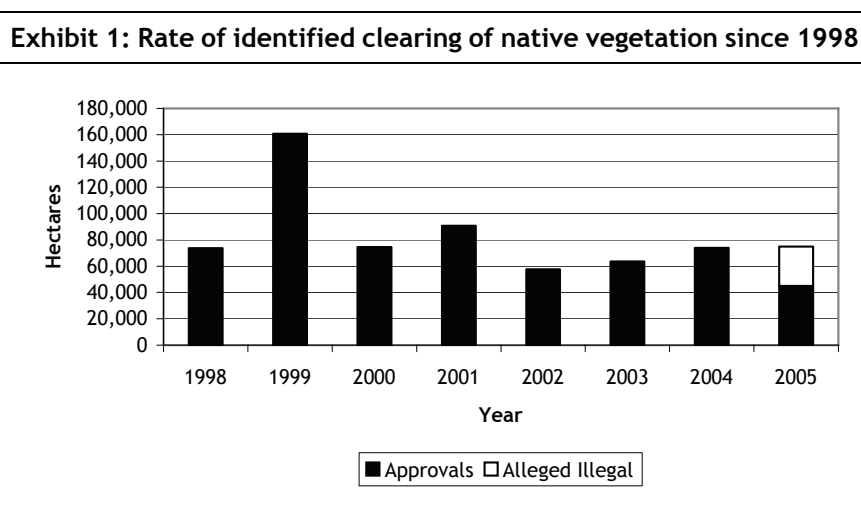
- 44,000 hectares of approved clearing in 2005
- 30,000 hectares of estimated illegal clearing in 2005.

This total above omits 'exempt' clearing, which is clearing that farmers may legally carry out without approval. DNR does not measure exempt clearing.

Approved clearing in this report is from DNR records of clearing approvals. DNR has not determined whether all approved clearing was carried out.

Illegal clearing in this report is clearing of native vegetation that is not approved and not exempt under the law. DNR refers to this clearing as 'alleged illegal clearing'.

Exhibit 1 shows the known record of clearing of native vegetation, including the illegal clearing for 2005.



Source: Department of Natural Resources June 2006

Rates of illegal clearing before 2005 unknown

Approved clearing in the first half of 2006, not shown in the Exhibit 1, declined to a very low level. This would be expected, as very few approvals have been finalised since the NV Act 2003 came into effect in December 2005.

Exhibit 1 shows illegal clearing only for 2005. There is little doubt that there has also been extensive illegal clearing from the time SEPP 46 was issued in 1995 to the present. However DNR does not have adequate high resolution satellite images to accurately determine the actual rate of illegal clearing in any year before 2005.

The media have put forward higher estimates of illegal clearing in NSW for the period 1998-2005 than the 30,000 hectares per year measured in 2005.

DNR has advised us that figures of 100,000 -150,000 hectares per year of illegal clearing that have appeared in the media are not verified or substantiated by scientifically rigorous information. DNR believes they are based on erroneous extrapolations and hearsay. DNR suggests that travelling around the Central West and Northern NSW would indicate that clearing of this magnitude has not occurred.

The DNR assessment of 30,000 hectares of illegal clearing was calculated from SPOT 5 high resolution satellite images covering about 16 per cent of the State. The 16 per cent examined was selected from medium resolution satellite images and from DNR's local knowledge. DNR believes that these images cover almost all areas where clearing was occurring. DNR can detect 98 per cent of vegetation change in the areas surveyed with the high resolution satellite images.

The high resolution satellite images in fact showed a total of 42,600 hectares of clearing that required further investigation. From past experience DNR believes that 70 per cent of clearing detected, or 30,000 hectares, will prove to be illegal clearing. DNR is still carrying out follow up ground investigations of the clearing detected.

SPOT 5 and other high resolution satellites images have been available since about 2002. High resolution satellite images are expensive to purchase and to analyse and to date DNR has only purchased images of areas selected as likely to contain illegal clearing.

DNR has also purchased Landsat 7 medium resolution satellite images covering the State for the past 15 years. Medium resolution images are much less expensive than high resolution images, but less precise. They are inadequate to detect and measure clearing of vegetation such as open woodlands, isolated trees and grasslands. These types of vegetation are common in the western areas of the State where most illegal clearing has occurred.

Using a mixture of medium and high resolution satellite images, DNR has identified 12,300 hectares of land illegally cleared in 2003. This methodology was not reliable enough to identify all the illegal clearing in 2003 but did confirm that significant illegal clearing was occurring in years other than 2005.

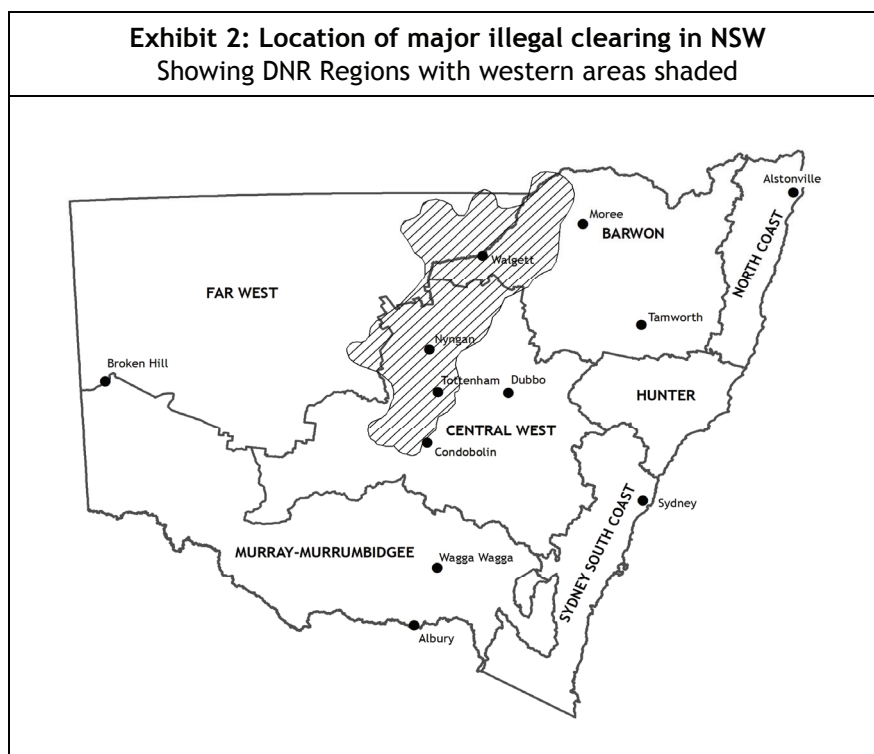
The medium resolution satellite images also provide an indication of long-term trends in the rate of clearing in the State. They indicate that the total rate of clearing dropped substantially in 1995 after the issue of SEPP 46. It dropped again after January 1998, when the NVC Act 1997 came into effect. Total clearing after 1998 appears to have continued at a similar rate until 2004. SEPP 46 and the NVC Act 1997, although not completely successful, do seem to have reduced clearing of native vegetation.

Most land suitable for agriculture in NSW had already been largely cleared before SEPP 46 was issued in 1995. There has been some further clearing of native vegetation in these developed farmland areas, both approved and illegal. Usually this clearing has been of relatively small remaining uncleared areas on farms, or to change land use of areas that had previously been cleared.

Clearing is costly, and farmers usually clear native vegetation to gain an economic return. Consequently most recent clearing, both approved and illegal, has been for farming such as wheat or tree plantations that can give a high return per cleared hectare.

Clearing highest in the central west and northwest

The greatest area of new clearing since 1997 has been in the central west and northwest of the State in the vicinity of towns such as Hillston, Condobolin, Nyngan, Tottenham, Cobar, Coonamble, Moree and Walgett. This area is on the western edge of existing wheat and sheep farms. We refer to this area as the ‘western areas’ in this report. The western areas are within the DNR regions of Central West, Far West and Barwon.



Source: Department of Natural Resources June 2006

Within these western areas, the most intensive clearing has been in the 'hotspot'- approximately the triangle between Walgett, Nyngan and Tottenham. A large part of this clearing has been illegal clearing of previously uncleared native vegetation to plant wheat (see Exhibit 2).

These western areas had retained their original native vegetation of open forest, woodland, shrubland and grassland until recently because they were considered too arid for crops. In the past 20 years the CSIRO has developed new strains of wheat suitable for arid climates. This has provided the financial incentive for clearing of native vegetation in these areas.

DLWC/DIPNR (now DNR) gave very few approvals for clearing of original native vegetation in western areas in recent years. Most clearing has been carried out without approval and is considered to be illegal. Of the total illegal clearing for 2005, more than 25,000 hectares was in DNR's Central West, Far West and Barwon Regions, mostly in the western areas shown in Exhibit 2 above.

Exhibit 3 below shows DNR's estimated illegal clearing by DNR region.

Exhibit 3: Estimated illegal clearing by DNR Region in 2005	
DNR Region	Estimated illegal clearing in 2005 Hectares
North Coast	460
Hunter	1,450
South Coast	630
Central West	17,160
Far West	6,810
Barwon	2,270
Murray/Murrumbidgee	910
Total	30,000

Source: Department of Natural Resources June 2006

There has also been clearing of native vegetation, both approved and illegal, in other areas of the State.

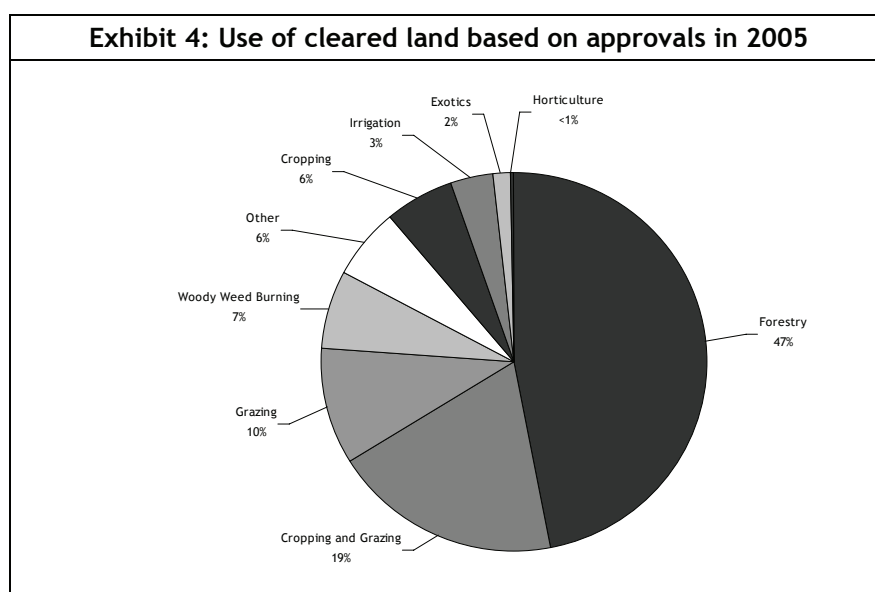
The largest element of approved clearing is for sustainable forestry. In sustainable forestry only a small part of the native forest is removed at any time. The remainder is maintained and the forests continue to be used and renewed sustainably. Most approvals of clearing for forestry have been for steep state-protected land on the north coast and dividing range. In 2005 20,940 hectares were approved for forestry, nearly half the total approvals.

Illegal plantations threaten native forest species

Illegal clearing in the higher rainfall areas of the coast and dividing range has usually involved clearing all or most native vegetation on a site for plantations of native and exotic tree species. The vegetation cleared is mainly native closed forest (often rainforest) and open forest.

There have been many areas cleared illegally for plantations, but most areas were small. The total land cleared illegally has been much less than that cleared for cropping and grazing in the western areas. However these small areas can have significant conservation value. Much of the native forest had already been cleared, and illegal clearing in these areas can significantly reduce remaining stocks of particular species.

Exhibit 4 indicates the intended uses of land approved for clearing in 2005. DNR has only been able to provide the distribution for approved clearing and the diagram does not include illegal clearing. Most illegal clearing has been for high value activities such as cropping, forestry, plantations, grazing and irrigation development, and particularly for cropping. Therefore the proportion of total clearing for cropping in 2005 would be higher than shown in Exhibit 4.



Source: Department of Natural Resources May 2006

Contentious issue - clearing invasive native species

The broad picture of clearing of native vegetation given above oversimplifies the complexity of clearing. The issues differ from place to place and with different types of vegetation. Management of invasive native species is an example.

Management of invasive native species has been, and still is, an issue in the western areas. These species, also called woody weeds, are native woody plants that grow back quickly over areas that have previously been cleared or damaged. They form a dense cover which may grow several metres high. Their shade prevents growth of native grasses and may leave the ground surface unprotected against erosion (see Exhibit 5). Extensive erosion has occurred in some areas.

Farmers ('farmers' in this report includes the roles of both landholder and land manager) usually see managing invasive native species as clearing regrowth on established farming land to keep their land productive. Environmentalists are concerned about any clearing of native vegetation. Clearing of invasive native species may require heavy bulldozers and chains and these tend to alarm environmentalists and draw media attention.

Exhibit 5: Invasive Native Species



Budda with minimal groundcover



Turpentine with minimal ground cover

Source: Department of Natural Resources June 2006

Farmers and environmentalists participated in developing new procedures to evaluate proposals to clear native vegetation, including invasive native species. DNR has incorporated these procedures into decision-making software used by catchment officers to assist them to assess applications to clear native vegetation (PVP Developer - see Chapter 2).

Clearing of invasive native species classified as regrowth will normally be permitted without consent. Clearing of invasive native species not classified as regrowth will only be permitted if the total impact on the environment is positive. There are still some issues and DNR is currently reviewing the rules for clearing of invasive native species.

1.2 Has there been an increase in cooperation and compliance by the farmers?

Our assessment

Most land clearing in NSW was done before regulation began in 1995. However farmers with uncleared land at that date were affected by the legislation. A minority of these have cleared illegally, particularly in western areas. DNR has not yet achieved any significant increase in these farmers' cooperation and compliance. Many farmers remain concerned that the legislation may affect their future ability to manage their land and earn an income.

Farmers had mixed reactions to the clearing legislation

Farmers were concerned about legislation restricting clearing of native vegetation since it was first proposed. However most had cleared and developed land suitable for crops or pasture on their property before SEPP 46 in 1995 and the NVC Act 1997 and were not affected.

However a significant number had uncleared land on their properties and were affected. Some protested. Protests began in February 1998; in April 1998 3,000 farmers held a rally outside Parliament House to protest against restrictions on clearing native vegetation. In the same month farmers locked the then Premier in the Walgett Airport terminal.

The farmers' key concern was that, in their view, the Government was giving inadequate attention to the impact of the legislation on their ability to effectively manage their properties. They felt that the legislation would affect their potential to earn income.

Some farmers maintained that they had been planning to clear native vegetation on their properties for a considerable time and had not anticipated the legislation. Their plans now needed approval and, in many cases, would not be approved if they applied. If they could not clear, they lost expected income and their property values might fall.

A number of affected farmers decided to clear illegally without seeking approval. Very few of these have incurred significant penalties. Those who wished to clear but accepted the law may be unable to clear in future.

The NVC Act 1997 required that socio-economic benefits (which are very difficult to measure) be weighed against environmental losses (which are also difficult to measure) .

The socio-economic effects on farmers became an area of contention. The new NV Act 2003 contains provisions to address socio-economic considerations by permitting a range of routine agricultural management activities. This enables farmers to continue day-to-day management of their properties without disruption.

In addition the Government has recently committed \$37 million for a socio-economic package to help farmers who suffer economic hardship as a result of the impacts of the NV Act 2003 (see Chapter 2).

Some changes in farmers' attitudes

After ten years of discussion there has been some change in farmers' attitudes to clearing of native vegetation. Many farmers now have a strong appreciation of the importance of native vegetation in the landscape and accept the need to regulate. Farmers' complaints now are often about aspects of the administration of the legislation.

The farmers' peak body, the NSW Farmers' Association, has warned on a number of occasions of the depth of farmers' disappointment and anger. However it has participated on committees on the legislation and regulations since 2002 and hosted public consultations. Recently it has been warning farmers that the Government is building a more reliable system to detect infringements.

Despite these changes, there is little doubt that opposition to the legislation continues in sections of the farming community.

A minority of farmers remains strongly opposed, particularly in western areas. Public meetings in farming areas where many have been affected by the legislation still draw considerable numbers. Some have continued to clear illegally even though they are now aware that their activities can be detected from satellites.

Many farmers not immediately affected by the legislation are still concerned that the legislation may affect their future ability to manage their land and earn an income.

1.3 Have enforcement actions been successful?

Our assessment

DLWC/DIPNR (now DNR) were unable to control illegal clearing under the NVC Act 1997. They undertook only a small number of prosecutions in the period 1998 to 2005. No prosecutions were successful when contested in court. They also undertook only a small number of other compliance actions - warning letters, restitution orders and stop work orders - against those who had undertaken illegal land clearing.

A major reason for failure to obtain compliance with the NVC Act 1997 was problems with prosecuting under this Act. The new 2003 Acts and Regulations address many of the enforcement problems under the NVC Act 1997. DNR recently resumed active and visible compliance inspections on properties in western areas suspected of illegal clearing. As the NVC Act 1997 applies for any prosecutions for clearing before December 2005, it may be some time before a record of successful enforcement is established.

**Contested
prosecutions have
been unsuccessful**

DLWC/DIPNR (now DNR) undertook only a small number of prosecutions in the period 1998 to 2005. The majority of prosecutions were successful, but no prosecutions were successful when contested in court.

Exhibit 6: Prosecutions since 1998	
Successful (all uncontested)	18
Unsuccessful (contested and acquitted)	6
Withdrawn	5
Total	29

Source: Department of Natural Resources June 2006

The primary cause of failure of contested prosecutions was the difficulty of prosecuting under the NVC Act 1997. The main problems were with :

- the exemptions under the NVC Act 1997
- the need to identify the person clearing the land.

There were also problems with inadequate information on areas cleared and with deficiencies in preparation and presentation of evidence to a level to satisfy courts.

Before prosecuting, DNR employs other compliance actions including warning letters, remediation agreements, remediation notices and stop work orders. Exhibit 7 shows the number of compliance actions since 2002.

Exhibit 7: Compliance actions since 2002	
Compliance actions since 2002	Actions
Prosecutions	12
Stop work orders	21
Remediation notices	69
Remediation agreements	60
Warning letters	361
Total	523

Source: Department of Natural Resources June 2006

The total compliance activities, of about 500 actions over four years or an average of 130 per year, mostly warning letters, is low considering the number of breaches believed to have been occurring.

To illustrate, DNR detected 691 separate alleged breaches of the NVC Act 1997 in 2005, containing 30,000 hectares of suspected illegal clearing, using high resolution satellite information. It is not unreasonable to assume that similar levels of breaches were occurring in previous years. This would indicate that DLWC/DIPNR (now DNR) were only taking action on 25 per cent of illegal clearing.

However DLWC/DIPNR (now DNR) did not have adequate data from high resolution satellite to detect all clearing that was taking place before 2005. It had to rely on reports from field officers and neighbours and the limited information it could obtain from medium resolution satellite imagery. Even when it detected clearing it usually did not have adequate information to prosecute successfully.

DNR has only recently begun investigating whether landholders are complying with compliance notices it did issue.

**Problems greatest
in hotspots**

The problems of administering the law were greatest in the area of extensive illegal clearing on the western edge of established farming.

DLWC/DIPNR (now DNR) withdrew compliance officers from the Nyngan and Tottenham areas in 2002 after departmental officers were illegally detained on a property under investigation. It was considered too difficult for them to obtain the level of site evidence required for successful prosecutions in conditions of possible harassment.

DLWC/DIPNR (now DNR) subsequently failed to win several significant contested prosecutions for illegal clearing in western areas. The failed prosecutions received wide publicity. Many farmers in the area appear to have decided they were unlikely to be penalised for illegal clearing. Applications for approvals for clearing in the western areas fell to very low levels by about 2002. The satellite images from 2003 and 2005 discussed above indicate that illegal clearing continued, but the rate is not known for most years.

From mid 2004 DLWC/DIPNR (now DNR) ceased initiating any prosecutions for clearing. It continued to issue remediation notices and negotiated remediation agreements when landowners were willing. The negotiated agreements did not always comply with the intent of the legislation that original native vegetation be retained or restored.

DNR recently resumed active and visible compliance actions that include on-site inspections in the Central-West of the State.

**Queensland system
more successful**

Queensland has similar issues of illegal clearing of native vegetation to NSW but has been undertaking 30-50 prosecutions per year.

Exhibit 8: Queensland's approach

The remaining area of uncleared native vegetation in Queensland is about four times that in NSW (Queensland 81 million hectares, NSW 21 million hectares). Total clearing of native vegetation in Queensland has been about 500,000 hectares per year over recent years - about six to seven times the total rate of clearing in NSW. Of this, illegal clearing has been about 100,000 hectares per year, about three times the illegal clearing measured in NSW in 2005.

Queensland implemented legislation against illegal clearing of native vegetation before NSW. It contained fewer exemptions than the NSW NVC Act 1997 and the occupier of the land was deemed to be responsible for clearing in the absence of evidence to the contrary. Therefore Queensland's Act was more easily enforced than the NSW legislation.

Queensland also:

- moved quickly to establish comprehensive vegetation mapping over Queensland by satellite surveillance and ground control and therefore has had a better basis for evidence acceptable to courts
- had a centralised administration of compliance
- has had less compliance staff than NSW throughout the period (currently 35 in NSW, 25 in Queensland), but appointed compliance officers with a background of providing evidence for courts.

Queensland has been undertaking 30-50 prosecutions per year and has had a success rate of greater than 90 per cent. NSW, by comparison, undertook 29 prosecutions total from 1998 to mid 2004 (average 5 per year) and none from mid 2004 to the end of 2005. As in NSW, less than 20 per cent of Queensland prosecutions have been contested, but in Queensland most contested prosecutions have been successful. This record is a deterrent to illegal clearing.

**Achieving
successful
enforcement**

The difficulties with enforcing the NVC Act 1997 have been addressed in the NV Act 2003, which came into effect in December 2005. The exemptions have been changed and the occupier of the land is deemed to be responsible for clearing in the absence of evidence to the contrary. Other problems, such as obtaining adequate information on illegal clearing to meet evidence requirements in courts, have also been addressed. These are discussed further in Chapter 2.

DNR recently resumed active and visible compliance inspections on properties in western areas suspected of illegal clearing under the NVC Act 1997. It is still uncertain whether illegal clearing carried out before December 2005 can be prosecuted successfully, given that all previous contested prosecutions under the NVC Act 1997 failed. If successful prosecution proves difficult it may be some time before a record of successful enforcement is established under the NV Act 2003.

2. Have the key issues from the previous audit been addressed?

At a glance

The key question we wanted to answer was:

Has action been taken to address the key systemic issues from the previous audit?

Our assessment:

The reform program has addressed the key systemic issues we raised in our 2002 audit and the new system seems capable of achieving the Government's objectives when fully implemented.

Responsibilities for clearing of native vegetation have been separated and clarified. Catchment Management Authorities (CMAs) are now responsible for approvals of clearing, as part of catchment management. DNR is responsible for regulating compliance with the legislation and takes enforcement actions against illegal clearing. The new arrangement has worked successfully in the first months of operation.

A new strategy has been adopted to regulate clearing of native vegetation. Key changes are more consultation with farmers and payments to farmers to protect native vegetation on their properties.

The Government has set a broad target for improvement in the extent and condition of native vegetation by 2015. Achieving the Government's target by 2015 will require a major effort by DNR to reduce illegal clearing and by the CMAs to help achieve regrowth and conservation.

An improved satellite system is supplying high resolution images to monitor compliance and to support prosecutions. But there has not yet been sufficient funding to provide adequate coverage of all areas of interest in NSW.

CMA catchment officers are working with farmers to develop their proposals for clearing. To be approved, these proposals must have neutral or better impact on native vegetation and endangered species. DNR compliance officers are monitoring compliance using new satellite technology. They are detecting illegal activities and are taking some compliance actions in western areas. At present these approval and compliance processes are operational but still being developed. There is a risk of further delays before these processes are operating smoothly.

The extent and condition of native vegetation is not currently being regularly reported but DNR in future will report annually, initially on extent and subsequently on condition.

In our 2002 audit we found the system for regulating the clearing of native vegetation was ineffective. Responsibilities were unclear, the strategy and targets were not finalised and the systems to monitor changes in native vegetation were not operating satisfactorily.

As discussed in Chapter 1, following the 2002 audit the Government reviewed its strategy and in 2003 introduced three Acts (see Appendix 2) to 'reflect the Government's commitment to end broadscale clearing (clearing of any remnant vegetation or protected regrowth) and maintain productive landscapes'.

These 2003 Acts made major changes to the system of regulation of clearing of native vegetation. The changes did not come into effect until December 2005, after the Regulations of the NV Act 2003 were gazetted. The new approach has involved extensive organisational changes and has not yet been fully implemented. It is too soon to make findings on whether the performance of the new system is achieving the Government's policy objectives.

In this chapter we examine whether the systemic problems we identified in the original audit have been adequately addressed. We also discuss the risks that remain while completing implementation of the new system.

2.1 Has accountability for protecting native vegetation been clarified?

Our assessment

Responsibilities for clearing of native vegetation have been separated and clarified. Catchment Management Authorities are now responsible for approvals of clearing, as part of catchment management. DNR is responsible for regulating compliance with the legislation and takes enforcement actions against illegal clearing. The new arrangement has worked successfully in the first months of operation.

The regulatory structure is complex

The new structure established in the 2003 legislation clarifies responsibilities. The responsibilities of organisations in the new structure include:

- The Natural Resources Commission (NRC) recommends broad state-wide targets for native vegetation to the Government.
- Catchment Management Authorities (CMAs) prepare catchment action plans to achieve the state-wide targets and also manage approvals of farmers' property vegetation plans and incentive payments
- DNR monitors and report annually on progress toward achieving the Government's targets for extent and condition of native vegetation
- DNR regulates compliance with the legislation and takes enforcement actions against illegal clearing
- DNR and the Department of Environment and Conservation program the decision support software (PVP Developer) with rules and databases on native vegetation and endangered species.

The structure requires interaction between three centralised government agencies and 13 regional CMAs. Most notably, it separates responsibilities for approving clearing of native vegetation and for regulation of clearing. CMAs are now responsible for approvals of clearing as part of catchment management. CMAs will be aiming to work with the farmers and achieve their trust. DNR is responsible for monitoring the extent and condition of native vegetation and for taking compliance action against illegal clearing.

It is too soon to tell whether this new structure and accountabilities are operating effectively. The agencies and CMAs have worked together successfully in the first months of operation, but there is a risk that they will not continue to align their activities to achieve an integrated whole-of-government approach.

A number of actions have been taken to achieve coordination between the agencies and CMAs:

- the Minister for Natural Resources has established a ministerial review committee to oversee the early stages of implementation of the NV Act 2003
- agencies and CMAs have developed memorandums of understanding between themselves
- the Government has adopted a Standard for Quality Natural Resource Management recommended by the NRC. CMAs will develop their quality assurance systems against this standard
- CMAs are coordinating their activities through a Chairs' Council.

There is also an issue of apparent overlap of the responsibilities above with local government responsibility for clearing approvals. DNR and CMAs are currently working with local government to clarify responsibilities.

2.2 Has a native vegetation conservation strategy been adopted, targets defined and regional action plans developed?

Our assessment

A new strategy had been adopted to regulate clearing of native vegetation. Key changes are more consultation with farmers and payments to farmers to protect native vegetation on their properties. The Government has set a broad target for improvement in the extent and condition of native vegetation by 2015. Achieving the Government's target by 2015 will require a major effort by DNR to reduce illegal clearing and by the CMAs to help achieve regrowth and conservation.

New strategy and target adopted

The Government adopted a new strategy for achieving its aims for native vegetation following the reports of the Wentworth Group of Concerned Scientists and the Native Vegetation Reform Implementation Group in 2003. Key changes in strategy were:

- establishing catchment management authorities to provide a focus to involve local communities in regional planning and decision making on natural resources, including native vegetation
- involving the farmers more in developing property vegetation plans for their properties
- providing \$120 million over four years as incentive payments to farmers to improve native vegetation on their properties.

The Government introduced three new Acts in 2003 to implement the new strategy. It also later approved an additional \$37 million to assist farmers facing economic hardship due to the 2003 legislation.

NRC recommends broad targets for natural resource management to Government. The Government's current state-wide target for native vegetation is:

By 2015 there is an increase in native vegetation extent and an improvement in native vegetation condition.

The baseline for measuring this target is 2005, or from the time when an initial monitoring baseline is measured.

NRC says that some of the state-wide targets it recommended for natural resource management are 'ambitious'. The target for native vegetation seems ambitious as both approved and illegal clearing continue at present. Achieving the Government's target by 2015 will require a major effort by DNR to reduce illegal clearing and by CMAs to increase the extent and condition of native vegetation.

In the new system CMAs develop the Government's broad state-wide targets into specific and measurable targets for their catchments. They then prepare catchment action plans. The 13 CMAs have now produced draft catchment action plans. We did not investigate the CMAs' proposals for increasing the extent and condition of native vegetation.

2.3 Is information collected systematically to monitor and regulate clearing of native vegetation in NSW?

Our assessment	An improved satellite system is supplying high resolution images to monitor compliance and to support prosecutions. But there has not yet been sufficient funding to provide adequate coverage of all areas of interest in NSW.
DNR can now monitor clearing	<p>DNR is purchasing high resolution images taken from a satellite. Using these images, DNR can detect approximately 98 per cent of vegetation change in areas surveyed. The images can provide evidence to identify the property on which the clearing occurred, the extent of clearing or modification of native vegetation and clearing rates over time (see Exhibit 9 next page).</p> <p>Queensland experience is that the information from these images, with some additional on-ground evidence, is compelling to courts in compliance actions.</p> <p>The high resolution images purchased by DNR to date do not adequately cover all areas of interest in the State. DNR has been using a risk management approach to allocate its limited resources. It has purchased images for areas believed to have significant illegal clearing. It then identifies all probable illegal clearing and ranks cases for further investigation.</p> <p>Several satellite companies hold records of high resolution images taken across NSW. DNR could at any time purchase images to examine the historical record of clearing over all areas of interest. The main constraint has been funding to obtain and analyse all the images required.</p>

Exhibit 9: Satellite images of clearing on a western NSW property

February 2005



January 2006



The clump of native vegetation in the centre of the image has been removed

Source: Department of Natural Resources June 2006. Note: Images modified to remove identifiable features of the farms.

The information from satellites should reduce DNR's past reliance on catchment officers, neighbours and other ground based sources reporting cases of illegal clearing. DNR now uses these reports as part of its process to rank areas of interest. To discourage further clearing, DNR is publicising its new capacity to detect illegal clearing and the consequences of being detected.

2.4 Are processes in place to assess proposals, monitor compliance, detect infringements and implement enforcement?

Our assessment

CMA catchment officers are working with farmers to develop their proposals for clearing. To be approved, these proposals must have neutral or better impact on native vegetation and endangered species. DNR compliance officers are monitoring compliance using new satellite technology. They are detecting illegal activities and are taking some compliance actions in western areas. At present these approval and enforcement processes are operational but still being developed. There is a risk of further delays before these processes are operating smoothly.

Property vegetation plans increases farmer involvement

The core of the new system to assess proposals for clearing is the Property Vegetation Plan (PVP). The farmer can negotiate a PVP or submit a development application to obtain a clearing approval under the new legislation. The farmer develops the PVP in consultation with a CMA catchment officer. To be approved, the PVPs must have neutral or positive impact on the native vegetation and endangered species on the property.

In many cases the farmer will have to provide offsetting improvements to native vegetation at another point on the property to receive an approval. This may make it difficult for many farmers to obtain an approval.

Farmers can also submit a PVP to obtain incentive payments to protect or improve native vegetation on their property. CMAs have received hundreds of requests to assist in preparing PVPs since the NVC Act 2003 and Regulations commenced in December 2005. The majority of applications for PVPs to date are to obtain incentive payments. As would be expected, only a small number of PVPs have proceeded to approval at this stage.

Frustration with the approval process

Catchment Officers work with farmers to develop the PVP using decision-support software called PVP Developer. The PVP Developer makes recommendations to assist Catchment Officers to determine acceptable improvements to native vegetation on the property to offset proposed clearing. The PVP Developer, with its associated datasets, is operating but some of its recommendations have been questioned.

Many Catchment Officers are qualified to make minor changes to the PVP Developer on a clearing proposal if its recommendations appear questionable. They may, for example, use data that better reflects local conditions instead of the data in the PVP databases. Any change to the PVP Developer must be made publicly available. So far Catchment Officers have been reluctant to make any changes to the PVP Developer and it is the effective final decision-maker.

There are efforts underway to review and, where necessary, refine the PVP Developer and the data in the databases. However the present procedure for improving the PVP Developer when faults are found or improvements proposed is complex and time consuming. This is causing some frustration with the PVP Developer in parts of the farming community.

The problems with the PVP Developer may be the usual problems of bringing a new computer-based system to full operational state. With management commitment we expect the problems will be resolved, but it may be some time before the approval part of the regulatory process is operating smoothly.

DNR needs a record of successful enforcement

A successful compliance and enforcement process is essential if illegal clearing is to be reduced. DLWC/DIPNR (now DNR) has had powers to enforce compliance since 1998 under the NVC Act 1997 but to date all contested prosecutions have failed.

The NV Act 2003 and its Regulations address many problems in prosecuting under the NVC Act 1997 and better information is becoming available on suspected illegal clearing. DNR now has the basis to establish a successful compliance program and has recently resumed active compliance actions in the Central West Region.

DNR still needs to improve its ability to provide evidence acceptable to courts. A number of compliance officers in DNR have come from agencies with no compliance responsibilities or compliance culture. Many DNR compliance officers do not have adequate training or experience in compliance actions, including taking evidence and managing prosecutions.

By contrast, most Queensland compliance officers have a background in compliance from working in enforcement agencies such as the police.

2.5 Is the extent and condition of native vegetation monitored and reported?

Our assessment

The extent and condition of native vegetation is not currently being regularly reported but DNR in future will report annually, initially on extent and subsequently on condition.

The condition of native vegetation will be reported

To date there has not been regular public reporting of the extent and condition of native vegetation. The Government has set a target for these for 2015. DNR will monitor and report annually on progress towards achieving this target. Initially DNR will report on the extent of native vegetation. It will report on condition as soon as it has established adequate monitoring. The Government's State of the Environment Report will also include reporting on the extent and condition of native vegetation.

The system for monitoring and reporting on the extent and condition of native vegetation is still being developed. The major problems in the NVC Act 1997 have been addressed in the new Acts and Regulations. DNR recently put its compliance policy and procedures on the internet. The processes underlying the PVP Developer are available to the public. Memorandums of understanding have been established between DNR, the CMAs and the other agencies involved in the regulatory process

However many operational procedures and guidelines exist only in draft. This is not surprising as the new management systems are still being developed, but the system should be documented and operating under a quality assurance system as soon as possible.

Appendices

Appendix 1: About the audit

Audit objective	The audit objective was to determine whether clearing of native vegetation was being managed in a way that was consistent with the Government's policy objectives, and showing progress towards achieving those objectives.
Lines of inquiry	<p>In reaching our opinion against the audit objective, we sought to answer the following questions:</p> <ol style="list-style-type: none">1. Has there been progress in conserving native vegetation and preventing inappropriate clearing since our last audit in August 2002?2. Has action been taken to address the key systemic issues from the previous audit?
Audit criteria	<p>In answering the lines of inquiry, we used the following audit criteria (the 'what should be') to judge performance. We based these standards on our research of current thinking and guidance on better practice. They have been discussed and, wherever possible, agreed with those we are auditing.</p> <p>For line of inquiry 1 we assessed the extent to which:</p> <ul style="list-style-type: none">▪ the rate of clearing of native vegetation is being reduced▪ there has been an increase in cooperation and compliance of the farmers with the authorities▪ enforcement actions have been successful when there have been significant breaches of the (previous) law. <p>For line of inquiry 2 we assessed the extent to which:</p> <ul style="list-style-type: none">▪ accountability for protecting native vegetation has been clarified▪ a native vegetation conservation strategy has been adopted, targets defined and regional action plans developed▪ information is collected systematically to monitor and regulate clearing of native vegetation in NSW▪ processes are in place to assess proposals, monitor compliance, detect infringements and implement enforcement▪ the new system of regulation of clearing of native vegetation is documented, monitored and audited.
Audit scope	<p>The audit focussed on illegal clearing of native vegetation since our last audit in 2002, particularly:</p> <ul style="list-style-type: none">▪ the extent and rate of illegal clearing▪ the impact of compliance actions (warning letters, restitution orders, stop work orders and prosecutions).

We also examined the extent that the systemic problems we identified in the original audit have been addressed, including changes made to legislation, technology and administrative processes likely to impact on the rate of illegal clearing.

The audit did not examine:

- the merits of Government policy objectives
- the extent of clearing in areas where native vegetation was primarily managed by local government planning controls
- the effectiveness of operations after 1 December 2005 when operations commenced under the NV 2003 Act and Regulations.

Audit approach

We reviewed documentation on the performance of systems, operations and organisation structures since our last audit and also on recent changes to the regulation of native vegetation.

We supplemented this knowledge with discussions with:

- the Department of Natural Resources
- the Natural Resources Commission
- Catchment Management Authorities
- the Department of Environment and Conservation
- selected stakeholder groups including representatives of the NSW Farmers Association and environmental groups.

We visited the Central West Catchment Management Authority and the Central West Regional Office of the Department of Natural Resources.

We discussed Queensland experience with regulation of clearing of native vegetation with officers of the Queensland Department of Natural Resources and Mines.

The Department of Natural Resources provided the information for tabulations and graphs on the performance of the NSW regulatory system in the report.

Audit selection

We use a strategic approach to selecting performance audits which balances our performance audit program to reflect issues of interest to Parliament and the community. Details of our approach to selecting topics and our forward program are available on our website.

Audit methodology

Our performance audit methodology is designed to satisfy Australian Audit Standards AUS 806 and 808 on performance auditing, and to reflect current thinking on performance auditing practices. We produce our audits under a quality management system certified to International Standard ISO 9001. Our processes have also been designed to comply with the auditing requirements specified in the *Public Finance and Audit Act 1983*.

Acknowledgements We gratefully acknowledge the co-operation and assistance provided by representatives in the Department of Natural Resources, the Department of Environment and Conservation, the Natural Resources Commission and the Catchment Management Authorities. In particular we wish to thank Tom Grosskopf our liaison officer and also Peter Wells and Lucian McElwain who assisted him.

We also wish to thank the officers of DNR Central West Region, Central West Catchment Management Authority and representatives of farming and environmental groups who participated in interviews for this audit.

Audit team Our team leader for the audit was Chris Bowdler, who was assisted by Neville Johnson. Sean Crumlin provided direction and quality assurance.

Cost Including printing and overheads, the estimated cost of the audit is \$206,000.

Appendix 2: Timeline of regulation of native vegetation

Date	Action
August 1995	State Environmental Planning Policy 46 'Protection and Management of Native Vegetation' (SEPP 46) implemented, preventing farmers from clearing native vegetation without consent.
December 1995	Threatened Species Conservation Management Act introduced, restricting use of private land, without compensation, to protect threatened species.
December 1997	Government gazettes new <i>Native Vegetation Conservation Act 1997</i> , virtually unchanged from SEPP 46. The NVC Act 1997 comes into effect on 1 January 1998.
February - April 1998	Farmers protest against land clearing restrictions. In April 3,000 farmers protest outside the NSW Parliament.
April 1998	Farmers lock NSW Premier Carr in Walgett Airport to protest against native vegetation laws.
July 2001	Premier Carr announces review of clearing exemptions for farmers.
July 2002	Premier Carr announces review of native vegetation legislation headed by John Kerin, a former Commonwealth Minister for Primary Industry.
August 2002	NSW Auditor-General issues performance audit <i>Department of Land and Water Conservation - Regulating the clearing of native vegetation</i> .
November 2002	Wentworth Group of Concerned Scientists issues their report <i>Blueprint for a Living Continent</i> .
December 2002	Premier Carr calls on the Wentworth Group to try and break the deadlock between the NSW Farmers' Association and the environmentalists on native vegetation management in NSW.
February 2003	Wentworth Group produces a discussion paper: <i>A New Model for Landscape Conservation in NSW</i> . NSW Farmers' Association and environmental groups gave in principle support.
15 March 2003	Premier Carr announces \$120 million plan to help farmers protect native vegetation '... to give farmers a financial incentive to protect and plant new native vegetation on their properties'.
March 2003	Government forms the Native Vegetation Reform Implementation Group, chaired by Mr Ian Sinclair, a former Commonwealth Minister.
March 2003	Farmers blockade Department of Land and Water Conservation inspectors at Nyngan.
October 2003	Native Vegetation Reform Implementation Group issues its final report containing 48 recommendations. The Group's report becomes the basis for the new regulatory framework.

July 2003	Agency reorganisation - Department of Land and Water Conservation disbanded. Department of Infrastructure, Planning and Natural Resources (DIPNR) and Department of Environment and Conservation (DEC) formed.
December 2003	<i>Native Vegetation Act 2003</i> , <i>Catchment Management Act 2003</i> and <i>Natural Resources Commission Act 2003</i> passed by NSW Parliament.
April 2004	Farmers blockade DIPNR inspectors at a property under investigation in the western area.
September 2004	Draft Regulations for <i>Native Vegetation Act 2003</i> released. These were prepared with stakeholder involvement. Trials of the new approval processing software on 100 farms. DEC requirements for protection of threatened species included in Regulations.
January 2004	Natural Resources Commission established. It began operations in May 2004. Its role is providing the Government with independent advice on a range of natural resource issues.
August 2005	DIPNR disbanded. Department of Natural Resources created.
1 December 2005	Operations commenced under the <i>Native Vegetation Act 2003</i> and Regulations. <i>Native Vegetation Conservation Act 1997</i> repealed.

Performance Audits by the Audit Office of New South Wales

Performance Auditing

What are performance audits?

Performance audits are reviews designed to determine how efficiently and effectively an agency is carrying out its functions.

Performance audits may review a government program, all or part of a government agency or consider particular issues which affect the whole public sector.

Where appropriate, performance audits make recommendations for improvements relating to those functions.

Why do we conduct performance audits?

Performance audits provide independent assurance to Parliament and the public that government funds are being spent efficiently and effectively, and in accordance with the law.

They seek to improve the efficiency and effectiveness of government agencies and ensure that the community receives value for money from government services.

Performance audits also assist the accountability process by holding agencies accountable for their performance.

What is the legislative basis for Performance Audits?

The legislative basis for performance audits is contained within the *Public Finance and Audit Act 1983, Part 3 Division 2A*, (the Act) which differentiates such work from the Office's financial statements audit function.

Performance audits are not entitled to question the merits of policy objectives of the Government.

Who conducts performance audits?

Performance audits are conducted by specialist performance auditors who are drawn from a wide range of professional disciplines.

How do we choose our topics?

Topics for performance audits are chosen from a variety of sources including:

- our own research on emerging issues
- suggestions from Parliamentarians, agency Chief Executive Officers (CEO) and members of the public
- complaints about waste of public money
- referrals from Parliament.

Each potential audit topic is considered and evaluated in terms of possible benefits including cost savings, impact and improvements in public administration.

The Audit Office has no jurisdiction over local government and cannot review issues relating to council activities.

If you wish to find out what performance audits are currently in progress just visit our website at www.audit.nsw.gov.au/

How do we conduct performance audits?

Performance audits are conducted in compliance with relevant Australian standards for performance auditing and operate under a quality management system certified under international quality standard ISO 9001.

Our policy is to conduct these audits on a "no surprise" basis.

Operational managers, and where necessary executive officers, are informed of the progress with the audit on a continuous basis.

What are the phases in performance auditing?

Performance audits have three key phases: planning, fieldwork and report writing.

During the planning phase, the audit team will develop audit criteria and define the audit field work.

At the completion of field work an exit interview is held with agency management to discuss all significant matters arising out of the audit. The basis for the exit interview is generally a draft performance audit report.

The exit interview serves to ensure that facts presented in the report are accurate and that recommendations are appropriate. Following the exit interview, a formal draft report is provided to the CEO for comment. The relevant Minister is also provided with a copy of the draft report. The final report, which is tabled in Parliament, includes any comment made by the CEO on the conclusion and the recommendations of the audit.

Depending on the scope of an audit, performance audits can take from several months to a year to complete.

Copies of our performance audit reports can be obtained from our website or by contacting our Office Services Manager.

How do we measure an agency's performance?

During the planning stage of an audit the team develops the audit criteria. These are standards of performance against which an agency is assessed. Criteria may be based on government targets or benchmarks, comparative data, published guidelines, agencies corporate objectives or examples of best practice.

Performance audits look at:

- processes
- results
- costs
- due process and accountability.

Do we check to see if recommendations have been implemented?

Every few years we conduct a follow-up audit of past performance audit reports. These follow-up audits look at the extent to which recommendations have been implemented and whether problems have been addressed.

The Public Accounts Committee (PAC) may also conduct reviews or hold inquiries into matters raised in performance audit reports. Agencies are also required to report actions taken against each recommendation in their annual report.

To assist agencies to monitor and report on the implementation of recommendations, the Audit Office has prepared a Guide for that purpose. The Guide, *Monitoring and Reporting on Performance Audits Recommendations*, is on the Internet at www.audit.nsw.gov.au/publications/better_practice/better_practice.htm

Who audits the auditors?

Our performance audits are subject to internal and external quality reviews against relevant Australian and international standards. This includes ongoing independent certification of our ISO 9001 quality management system.

The PAC is also responsible for overseeing the activities of the Audit Office and conducts reviews of our operations every three years.

Who pays for performance audits?

No fee is charged for performance audits. Our performance audit services are funded by the NSW Parliament and from internal sources.

For further information relating to performance auditing contact:

Stephen Horne
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Performance Audit Reports

No	Agency or Issues Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
78	State Rail Authority (CityRail) State Transit Authority	<i>Fare Evasion on Public Transport</i>	6 December 2000
79	TAFE NSW	<i>Review of Administration</i>	6 February 2001
80	Ambulance Service of New South Wales	<i>Readiness to Respond</i>	7 March 2001
81	Department of Housing	<i>Maintenance of Public Housing</i>	11 April 2001
82	Environment Protection Authority	<i>Controlling and Reducing Pollution from Industry</i>	18 April 2001
83	Department of Corrective Services	<i>NSW Correctional Industries</i>	13 June 2001
84	Follow-up of Performance Audits	<i>Police Response to Calls for Assistance The Levying and Collection of Land Tax Coordination of Bushfire Fighting Activities</i>	20 June 2001
85*	Internal Financial Reporting	<i>Internal Financial Reporting including a Better Practice Guide</i>	27 June 2001
86	Follow-up of Performance Audits	<i>The School Accountability and Improvement Model (May 1999) The Management of Court Waiting Times (September 1999)</i>	14 September 2001
87	E-government	<i>Use of the Internet and Related Technologies to Improve Public Sector Performance</i>	19 September 2001
88*	E-government	<i>e-ready, e-steady, e-government: e-government readiness assessment guide</i>	19 September 2001
89	Intellectual Property	<i>Management of Intellectual Property</i>	17 October 2001
90*	Intellectual Property	<i>Better Practice Guide Management of Intellectual Property</i>	17 October 2001
91	University of New South Wales	<i>Educational Testing Centre</i>	21 November 2001
92	Department of Urban Affairs and Planning	<i>Environmental Impact Assessment of Major Projects</i>	28 November 2001
93	Department of Information Technology and Management	<i>Government Property Register</i>	31 January 2002
94	State Debt Recovery Office	<i>Collecting Outstanding Fines and Penalties</i>	17 April 2002
95	Roads and Traffic Authority	<i>Managing Environmental Issues</i>	29 April 2002
96	NSW Agriculture	<i>Managing Animal Disease Emergencies</i>	8 May 2002
97	State Transit Authority Department of Transport	<i>Bus Maintenance and Bus Contracts</i>	29 May 2002
98	Risk Management	<i>Managing Risk in the NSW Public Sector</i>	19 June 2002

No	Agency or Issues Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
99	E-Government	<i>User-friendliness of Websites</i>	26 June 2002
100	NSW Police Department of Corrective Services	<i>Managing Sick Leave</i>	23 July 2002
101	Department of Land and Water Conservation	<i>Regulating the Clearing of Native Vegetation</i>	20 August 2002
102	E-government	<i>Electronic Procurement of Hospital Supplies</i>	25 September 2002
103	NSW Public Sector	<i>Outsourcing Information Technology</i>	23 October 2002
104	Ministry for the Arts Department of Community Services Department of Sport and Recreation	<i>Managing Grants</i>	4 December 2002
105	Department of Health Including Area Health Services and Hospitals	<i>Managing Hospital Waste</i>	10 December 2002
106	State Rail Authority	<i>CityRail Passenger Security</i>	12 February 2003
107	NSW Agriculture	<i>Implementing the Ovine Johne's Disease Program</i>	26 February 2003
108	Department of Sustainable Natural Resources Environment Protection Authority	<i>Protecting Our Rivers</i>	7 May 2003
109	Department of Education and Training	<i>Managing Teacher Performance</i>	14 May 2003
110	NSW Police	<i>The Police Assistance Line</i>	5 June 2003
111	E-Government	<i>Roads and Traffic Authority Delivering Services Online</i>	11 June 2003
112	State Rail Authority	<i>The Millennium Train Project</i>	17 June 2003
113	Sydney Water Corporation	<i>Northside Storage Tunnel Project</i>	24 July 2003
114	Ministry of Transport Premier's Department Department of Education and Training	<i>Freedom of Information</i>	28 August 2003
115	NSW Police NSW Roads and Traffic Authority	<i>Dealing with Unlicensed and Unregistered Driving</i>	4 September 2003
116	NSW Department of Health	<i>Waiting Times for Elective Surgery in Public Hospitals</i>	18 September 2003
117	Follow-up of Performance Audits	<i>Complaints and Review Processes (September 1999) Provision of Industry Assistance (December 1998)</i>	24 September 2003
118	Judging Performance from Annual Reports	<i>Review of Eight Agencies' Annual Reports</i>	1 October 2003

No	Agency or Issues Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
119	Asset Disposal	<i>Disposal of Sydney Harbour Foreshore Land</i>	26 November 2003
120	Follow-up of Performance Audits NSW Police	<i>Enforcement of Street Parking (1999) Staff Rostering, Tasking and Allocation (2000)</i>	10 December 2003
121	Department of Health NSW Ambulance Service	<i>Code Red: Hospital Emergency Departments</i>	15 December 2003
122	Follow-up of Performance Audit	<i>Controlling and Reducing Pollution from Industry (April 2001)</i>	12 May 2004
123	National Parks and Wildlife Service	<i>Managing Natural and Cultural Heritage in Parks and Reserves</i>	16 June 2004
124	Fleet Management	<i>Meeting Business Needs</i>	30 June 2004
125	Department of Health NSW Ambulance Service	<i>Transporting and Treating Emergency Patients</i>	28 July 2004
126	Department of Education and Training	<i>School Annual Reports</i>	15 September 2004
127	Department of Ageing, Disability and Home Care	<i>Home Care Service</i>	13 October 2004
128*	Department of Commerce	<i>Shared Corporate Services: Realising the Benefit including guidance on better practice</i>	3 November 2004
129	Follow-up of Performance Audit	<i>Environmental Impact Assessment of Major Projects (2001)</i>	1 February 2005
130*	Fraud Control	<i>Current Progress and Future Directions including guidance on better practice</i>	9 February 2005
131	Follow-up of Performance Audit Department of Housing	<i>Maintenance of Public Housing (2001)</i>	2 March 2005
132	Follow-up of Performance Audit State Debt Recovery Office	<i>Collecting Outstanding Fines and Penalties (2002)</i>	17 March 2005
133	Follow-up of Performance Audit Premier's Department	<i>Management of Intellectual Property (2001)</i>	30 March 2005
134	Department of Environment and Conservation	<i>Managing Air Quality</i>	6 April 2005
135	Department of Infrastructure, Planning and Natural Resources Sydney Water Corporation Sydney Catchment Authority	<i>Planning for Sydney's Water Needs</i>	4 May 2005
136	Department of Health	<i>Emergency Mental Health Services</i>	26 May 2005
137	Department of Community Services	<i>Helpline</i>	1 June 2005
138	Follow-up of Performance Audit State Transit Authority Ministry of Transport	<i>Bus Maintenance and Bus Contracts (2002)</i>	14 June 2005

No	Agency or Issues Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
139	RailCorp NSW	<i>Coping with Disruptions to CityRail Passenger Services</i>	22 June 2005
140	State Rescue Board of New South Wales	<i>Coordination of Rescue Services</i>	20 July 2005
141	State Budget	<i>In-year Monitoring of the State Budget</i>	28 July 2005
142	Department of Juvenile Justice	<i>Managing and Measuring Success</i>	14 September 2005
143	Asset Management	<i>Implementing Asset Management Reforms</i>	12 October 2005
144	NSW Treasury	<i>Oversight of State Owned Electricity Corporations</i>	19 October 2005
145	Follow-up of 2002 Performance Audit	<i>Purchasing Hospital Supplies</i>	23 November 2005
146	Bus Transitways	<i>Liverpool to Parramatta Bus Transitway</i>	5 December 2005
147	Premier's Department	<i>Relocating Agencies to Regional Areas</i>	14 December 2005
148	Department of Education and Training	<i>The New Schools Privately Financed Project</i>	8 March 2006
149	Agency Collaboration	<i>Agencies Working Together to Improve Services</i>	22 March 2006
150	Follow-up of 2000 Performance Audit	<i>Fare Evasion on Public Transport</i>	26 April 2006
151	Department of Corrective Services	<i>Prisoner Rehabilitation</i>	24 May 2006
152	Roads and Traffic Authority	<i>The Cross City Tunnel Project</i>	31 May 2006
153	Performance Information	<i>Agency Use of Performance Information to Manage Services</i>	21 June 2006
154	Follow-up of 2002 Performance Audit	<i>Managing Sick Leave in NSW Police and the Department of Corrective Services</i>	29 June 2006
155	Follow-up of 2002 Performance Audit	<i>Regulating the Clearing of Native Vegetation</i>	July 2006

* Better Practice Guides

Performance audits on our website

A list of performance audits tabled or published since March 1997, as well as those currently in progress, can be found on our website www.audit.nsw.gov.au.

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