

## Submission Armidale NPA to NRC ecological thinning Pilliga SCAs

### Submission to NRC re draft report on active and adaptive cypress management in the Brigalow and Nandewar state conservation areas: ecological thinning in Pilliga SCAs.

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I write on behalf of Armidale Branch of National Parks Association of NSW (NPA), an independent non-profit organisation dedicated to protecting nature through community action.

The Pilliga forests of the Brigalow Belt South Bioregion have been identified by the federal government as one of Australia's 15 national biodiversity hotspots. It is extremely important to get the underlying scientific assumptions right and to maintain conservation priorities for appropriate management of community conservation areas such as the Brigalow and Nandewar State Conservation Areas.

Our members have a long history of active and informed concern for conservation of the vegetation communities and wildlife of the Pilliga region of NSW. This ranges from campaigning in the nineties for rejection of a charcoal plant which planned to process most of the ironbark trees from Pilliga Forest for proposed silicon production in Lithgow, to detailed submissions during the the Western Regional Assessments process, and to numerous submissions/letters campaigning against likely environmental impacts of Santos' current plans for 850 coal seam gas wells in the Pilliga forest areas.

Some of our members have served on the Regional Advisory Committees for the area, conducted practical field ecology excursions in the Pilliga for Botany and Ecosystem Management students at the University of New England, and carried out independent environmental and ecological assessments for various consultancies.

We are aware that money for the 2005 BBS/Nandewar restructure package in fact came from National Parks & Wildlife Foundation revenue collected from pollution fines – a somewhat dubious application of funds meant for nature conservation. It was partly used to do some ecological thinning in State Forests and SCAs using displaced timber workers, an initiative which was discontinued when the money ran out and it was found to be uneconomic. The monitoring and assessment of this “ecological thinning” management was never completed, and there is no direct data to show that it had positive environmental/conservation outcomes or improved the management of cypress stands for timber or for biodiversity conservation.

We are appalled at the NRC draft report's recommendations to implement so-called “ecological thinning” in the Pilliga and Pilliga West State Conservation Areas, and to recommend funding it by means of allowing commercial logging and use of “residues” for biomass burning or garden woodchips - propositions which we emphatically reject. The draft recommendations have clearly been made in order to facilitate supply of cypress logs to the Gunnedah Timber Mill, NOT to “improve the management of the Brigalow and Nandewar State Conservation Areas”

We believe that the terms of reference set out by the O'Farrell Government have been manipulated for political ends to ensure that logging of cypress in Pilliga SCAs can be allowed to supply the Gunnedah Timber Mill, which claims to be running out of log supplies. This political ploy to placate National Party MPs and certain cross-bench MPs with the balance of power in the Upper House appears to have compromised the scientific objectivity of the NRC and led to distortion of its draft recommendations for political ends.

We do not accept that the NRC's draft findings and recommendations will “*improve the management of the Brigalow and Nandewar State Conservation Areas*”, or that “*new spatial data and analysis on the density and distribution of white cypress pine in the State Conservation Areas*” is adequate, accurate and detailed enough to justify the recommendations. A quick scan of the NRC maps indicates that there are severe discrepancies in the data on the density and distribution of cypress pine in the Pilliga SCAs which are purported to justify the NRC findings and recommendations. The draft report fails to credibly establish the scientific need or economic feasibility for ecological thinning of white cypress pine.

**Thinning** is a recognised silvicultural technique, like thinning densely sown carrots in a vegetable patch. It may be appropriate in some timber production forests, but adding the word “ecological” does not make it necessarily an appropriate technique to manage naturally regenerating native forests, particularly if in a designated conservation area and if not scientifically analysed as part of total integrated landscape management.

“**Ecological thinning**” is a theoretical concept, a catchphrase very popular with current natural resource managers/users. It is a term widely used to by forestry interests to imply that all timber harvesting is sustainable, and that because trees can regrow, wood is always renewable resource. Many scientists dispute these ideas. There is widespread scientific criticism about this application of the concept of ecological thinning as an appropriate management tool for conservation areas, and about its inclusion in adaptive management plans for SCAs.

Prof. Steve Dovers (Dovers and Mobbs, 1997, p49) of the ANU Fenner School for the Environment wrote of how adaptive management could be misused: *Adaptive Management may be used to defend regimes which avoid reform, justifying doubtful practices while waiting for further evidence (in conflict with the precautionary principle). It may simply provide a façade for investigation, hiding indecision. There is potential use of Adaptive Management to support different positions based not on participatory and informed learning but on preconceived and rigid interests. Adaptive Management is to an extent, an empty vessel that we can fill as we wish.*

White Cypress Pine (*Callitris glaucophylla*) is a valuable timber species, long managed for timber production in the Pilliga forests by the NSW Forestry Commission. The main “ecological” management for many years was to ringbark Eucalypts to increase density/yield of harvestable cypress pine stems, a practice which seriously reduced the overall biodiversity of the forests, and in places artificially increased the density of cypress stems. Thinning of cypress has not generally been part of silvicultural management due to lack of funds and lack of commercial uses for residues from thinning operations.

Cypress pine regenerates by seed, depending on rainfall events, droughts and wildfires, and may form very dense stands such that growth increment virtually ceases in 20 years, forming a stunted “locked-up” forest of small stems that will not produce good sawlogs. The occurrence of lock-up has been used by DPI to classify cypress regrowth as invasive native scrub on private land, allowing its thinning to be carried out as routine agricultural management under native vegetation laws, but there is little evidence that re-introduction of logging into the Pilliga SCAs can be justified as “ecological thinning”.

Thinning the stems to an optimum density to maximise annual increment production for sawlogs is an obvious forestry solution to lock-up, but has not been much practiced in forestry/silviculture, and has never been found to be economic or “ecologically necessary”. Nevertheless it is now widely advocated by logging interests, renamed as “ecological thinning” to make it sound respectable and sustainable, and to try and gain access to more timber in the conservation estate, including National Parks.

The NSW Forestry Commission revised old Management Plans for the Pilliga forests in the 1990s. Data from a series of established growth plots showed that timber extraction was well above sustained yield, but further quotas were allocated without regard to the forestry data on mean annual increment. This explains why Gunnedah Timbers is now running out of timber, and seeking access to the SCAs to obtain cypress logs to maintain operations for a few more years (about 8 years, according to press reports).

It is facile and misleading to claim that this proposal is sustainable and justified as part of “ecological thinning” needed in the SCAs.

A quick scan of the NRC maps indicates that there are severe discrepancies in the data on the density and distribution of cypress pine in the Pilliga SCAs which are purported to justify the NRC findings and recommendations. (see Table 1, p 10). The reported occurrence and extent of dense stands of cypress pine in the SCAs does not match the claimed need for adaptive management by ecological thinning, and does not justify commercial logging. The NRC Report has provided little evidence that logging or grazing

or firewood harvesting will provide ecological benefits or maintain or improve conservation values in the Brigalow/Nandewar SCAs.

Given the lack of clear and certain ecological benefits of ecological thinning in the SCAs, the interventions proposed could very well lead to reduced biodiversity. They should be rejected.

**Justification:** The NRC justifies its recommendations by saying that United States uses adaptive management by “ecological thinning” to manage reserves, but this is not completely true. It is NOT employed in the US National Park system, but within US Forest Reserves, which are managed for timber production.

The NRC report also refers to the current River Red Gum grazing and thinning trials in the Riverina area as a justification, but this is misleading, since these trials are only now being implemented by DPI (see Table 1 p10), and there is no data on the effects of early thinning, nor evidence of its value for biodiversity. It is premature in the extreme to use River Red Gum thinning trials as in any way justifying an extension of “ecological thinning” to cypress pine stands in the Brigalow/Nandewar SCAs.

The proposal *to implement active management such as ecological thinning and targeted grazing in combination with controlled burning and pest control in the State Conservation Areas* is, in effect, to transform state conservation areas into reserves for multiple forms of resource exploitation.

The proposals are likely to contravene the National Parks & Wildlife Act and set a dangerous precedent for commercial exploitation of conservation areas. This is acknowledged by the NRC’s recommendations to *“prioritise active management... develop and implement an adaptive management plan for SCAs and make the plan a requirement under the legislation...review governance arrangements..”*.

This amounts to explicit advice for the Government to change the law to allow logging, grazing and biomass supply for energy production to occur in the Brigalow/Nandewar SCAs in order *\*to avoid challenges\** – a disgraceful failure of the NRC to adhere to its charter.

State Conservation Areas were specifically excluded from logging and grazing activities to protect their natural values. They provide essential habitat for native wildlife in a highly modified and cleared landscape. Opening these important areas to commercial logging and grazing under a regime of “adaptive management” is likely to cause significant environmental damage and degrade their conservation value. It also ignores the likely cumulative impacts of logging plus expansion of the Gunnedah Basin coal seam gas industry on the reserves. The Brigalow SCAs are already fragments of ecosystems in widely cleared farming and agricultural land across the Central Division. Further fragmentation is promised by expansion of the Coal Seam Gas Industry and Santos’ plans for 850 wells in the Pilliga forests, which will impact on water resources of both the rivers and of ground water on which the forest ecosystems depend.

The Brigalow has been identified by the federal government as one of Australia’s 15 national biodiversity hotspots and by the state government as a biodiversity icon that cannot withstand further clearing. It is a vital part of the landscape that should be protected and treated with respect, not sacrificed for political expediency.

NSW taxpayers paid \$51 million in restructuring relief in 2005 for these areas to compensate for the loss of areas now protected from logging and grazing. Gunnedah Timbers had its share of this, so it is double dipping to now seek short-term log supplies from SCAs, possibly at a discounted royalty, and without contribution to adaptive management goals such as *\*ecological thinning trials\** funded by the taxpayer to protect biodiversity. Mr Paul, from Gunnedah Timbers, has stated in the media that he only wants larger-sized trees, and that nobody wants the small timber from thinnings. TV images from his interviews show that his current log supplies are already small-sized and probably uneconomic to process.

The NRC report says the proposed adaptive management plans may cost \$320 to \$575 per ha over 7 years, and the recommended cost recovery from commercial use of ecological thinning residues may provide 30% to 40% of this (p11, document No D14/0463). So the taxpayer pays again!

Armidale Branch of the National Parks Association of NSW calls on the NRC to withdraw this draft report. We reject all six of its recommendations, and we ask that Ministers and Government reject the recommendations, and ask the NRC to re-evaluate the data and rework the draft report to recommend truly ecologically sustainable management for state conservation areas.

Beth Williams, Hon. Secretary,  
Armidale Branch National Parks Association of NSW

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