Submission No 63

INQUIRY INTO MANAGEMENT OF PUBLIC LAND IN NEW SOUTH WALES

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The management of public river red gum forests must involve purposeful thinning. Otherwise they will be being conserved in an unnatural environment. Any thinning should be done as a commercial operation to provide income instead of cost and to reduce the risk of excessive woody fuel on the forest floor.NPWS could do this but will need a cultural shift. Forests NSW are best set up to manage, but desperately need a reduction in external influence over their management.

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Inquiry into the Management of Public Land in New South Wales

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Author's Background: Graduated with Forestry degree 1966; worked in forest management for whole career:
1966-88 Forestry Commission of NSW: 2nd Forester Mullumbimby & Kyogle; District Forester Forbes, Glen Innes & Mildura;
1989-2010 A.B. Rowe & Son Pty Ltd: company forester whose responsibilities included providing management for the Yanga Station private forest from1989 to 2005.
A total of 28years experience in river red gum forest management

Management of Forested Public Lands

Before determining how these forests should be managed, and who should manage them, I believe it is important to consider the history of those lands.

One hundred years ago forested lands were still being "developed" for agriculture and other uses. Supervision of harvesting timber was little more than revenue collection. The advent of the Forestry Act marked the Government recognising the need to provide a regulated forest resource to supply the growing community's demand for timber at an acceptable price. State Forests were dedicated to be managed by the Forestry Commission of NSW to provide the sustainable supply to satisfy that demand.

At about that time Australia's infant State Forest Services realised their need for qualified forest managers exceeded the ability of overseas education to supply. Thus Australia established its own forestry schools to educate specialist forest managers. Unfortunately campaigners opposed to native forest utilisation have fostered a popular misconception that "foresters" are singularly focused on forest exploitation. I have always maintained that I was trained to manage forests as healthy and sustainable ecosystems regardless of the end purpose, be that pure conservation or utilisation, or the integration of the two.

Soon after the creation of the NSW Forestry Commission it was recognised that we needed to introduce fast growing conifers to meet the rapidly increasing demand for house framing. While our extensive native hardwood forests could satisfy the demand in the short term, intensive fast growing pines (softwood) plantations would be needed to meet the forecast demands.

Some may remember that only thirty years ago pine plantations were being condemned as a blight on our landscape. At about that time the NSW Forestry Commission was promoting its State Forests as attractive places to recreate. The community grasped the idea and ventured into the forests in growing numbers. It soon became obvious that current logging operations look disastrous compared to nearby forest that appeared to be undisturbed. Visitors often mistake regrowth forest as pristine. It was then that forest campaigners changed tack to promote the previously condemned plantations as the answer to all our timber needs.

I assume it was on a perception of the pristine that Premier Bob Carr presented the BGF forest at Goonengerry in NE NSW to National Parks as a "forest icon". This forest is actually the regrowth after being clear-felled to produce banana cases in the 1920s.

Thus campaigns to convert State Forests to National Parks gained popular and strong community support. Few people outside the timber industry understood that more often than not, the current "natural" appearance was because of forester management and not in spite of it.

I believe that we should really view State Forests as "tree farms". The State set these lands aside to produce timber which they have done. They have been managed with that aim. Surely the fact that they are considered to be so worthy of National Park status is a commendation for their past management. Are they really significantly different to a good grazier's sustainably managed native pasture?

In many cases the only apparent difference between well-managed native forest and pristine old growth forest is the presence of stumps in the former. In fact well managed native forests may qualify under the definition of "old growth".

River Red Gum (*Eucalyptus camaldulensis*) Forests of the Southern Riverina

So, who should manage the river red gum forests? Should they be managed as National Park under the National Parks and Wildlife Act; as State Forests under the Forestry Act; as Conservation Reserves by the Crown Lands Office; or by some other Authority under the Native Vegetation Act?

What do we want to manage for? We need to be very clear about the purpose for which we want to manage.

1. Do we want to reinstate and then maintain a condition that resembles the pre-1800 condition? or

2. Do we want to maintain productive, bio-diverse forests. or

3. Do we want these forests to revert to evolving naturally with less interference than ever before?

The first option

This requires a clear and honest perception of what that condition was.

Firstly river red gum invaded a human habitat about 6,000 years ago. These new forests were home to an indigenous human population and their practices. We can speculate about the "how, when and why" of those practices, but to reintroduce those practices, the real essence of those practices would have to be relearnt by trial and error. One of the most significant is the use of fire.

In the last 150years fire has generally been excluded. This has allowed successive floods to bury forest litter in layers of silt. If the buried litter catches alight it will smoulder and spread. This smouldering litter ringbarks each tree it encounters. So if we want to reinstate the previous fire regime we must be prepared to sacrifice a high proportion of the current tree population, large or small. The largest and oldest trees are most vulnerable because of the deep litter accumulation around their base.

The frequent fires of the past would have maintained relatively little woody debris on the forest floor. However there are those who see woody debris as wildlife habitat that should be maximised

regardless of wildfire hazard. I once referred to logging residue as an excess of habitat, and the Regional Director of the National Parks and Wildlife Service responded "you can't have an excess of habitat".

The journals of explorers such as Captain Sturt and Major Mitchell refer to vast reed swamps that are now river red gum forest. They also generally referred to open woodlands rather than closed forests. However natural regeneration of river red gum is commonly in very dense patches. The nature of river red gum is such that it is very slow to self-thin these stands.

Therefore to maintain relatively open stands the manager must either burn or selectively thin stands that are overstocked. It would appear to be quite illogical to "thin to waste" leaving felled trees where they lie as habitat and wildfire fuel.

Thinning on the scale necessary is an expensive exercise if the trees are being felled to waste. If at all possible thinning should be undertaken as a commercial operation.

I have thinned a private stand of 1940s regeneration river red gum forest. The selective thinning complied with the Private Native Forestry Code of Practice for River Red Gum. Best growing stock and habitat trees were retained. The sawlogs recovered paid for the job, the firewood salvaged from the rest of the felling was sufficient to have paid for the job four times over.

Stem volume growth is a measure of forest vigour. The common growth rate for overstocked river red gum forest is 0.5-1.0 cubic metres/ha/annum. A plantation needs to be yielding better than 20cubic metres/ha/annum to yield a profit on establishment and maintenance costs. Silvicultural thinning of natural forest should improve the growth rate to 3.0-4.0cubic metres/ha/annum

<u>The second option</u>

This is principally managing the spacing between trees. The desirable spacing is directly correlated to tree diameter. The timing of first thinning of young regeneration depends on a market for the product.

This option has the advantage that it should pay for itself.

It does not depend on attempts to match any perception of a prior or imaginary condition.

The Private Native Forestry Code of Practice for River Red Gum provides a set of prescriptions that integrates protection of habitat values with utilisation. This is a workable code despite some prescriptions being more to satisfy observers' wishes than for real ecological benefit.

<u>The third option</u>

This appears to be the current expectation for those lands that were State Forests till recently. While the report from the committee chaired by Dr John Williams recommended that the river red gum should be actively managed, that is unlikely to occur to anywhere near the extent necessary to maintain healthy bio-diverse river red gum ecosystems. Hence these forests will evolve as an ecosystem they have never previously experienced.

The recommendation was to actively thin. However the principal drive for these river red gum State Forests to become National Parks was to stop river red gum trees being cut down.

The strongest management advantage of this option is that nature will take the blame for negative outcomes. On the other hand if there are positive changes, then those who advocated the change of tenure will take credit for the improvement. However if we realise a species has disappeared, or wholesale death occurs in a drought, it will be natural and not the management's fault.

So who should manage and how?

I have no fundamental objection to the National Parks and Wildlife Service continuing to manage the land they have recently been endowed with. In theory they should be able to manage these forests with little change from the past. It is even possible that they could manage them more profitably and ecologically sensitively than we have seen in recent years, because they are less likely to experience the same interference that Forests NSW have had to endure..

However, the National Parks and Wildlife Service will have to undergo a cultural shift if they are to embrace "active management". Their Act precludes commercial operations from their management **unless there is an environmental benefit**. A precedent has been set in a case where, if Oolambeyan National Park's grasslands aren't grazed, the "plains wanderer" will abandon the habitat purposely bought for it. Since the NPWS aren't in the business of becoming graziers, the necessary grazing is a commercial operation.

Unless NPWS acknowledge that there is an environmental advantage in thinning river red gum forests without substantially increasing the wildfire risk, there is very little chance that thinning will ever occur to the extent necessary. Nor will thinning occur at a level that will sustain a viable industry.

I could also say that without grazing the risk of wildfire damage will increase. It may be argued that grazing does not reduce the fuel load significantly. However grazing provides an additional presence in the forest. Graziers care for their stock and hence are alert to the risk of fire, and prompt in their action to extinguish it when it occurs. Little fires are less likely to become big fires. Grazing is not an acceptable activity in a National Park, therefore management must avail itself of any other opportunity to minimise fire risk and severity.

A problem I have encountered with the NPWS is that either through arrogance or ignorance they appear to lack interest in data and experience gathered before their ownership. This attitude provides a justification for managerial procrastination. "We want to take action but we need more and better science to justify it, and to get the method right." Unfortunately too often research scientists seem to fear reaching a conclusion lest they become redundant.

In the early 1990s a red gum conference was held at Nathalia on the topic *"A forest dying for a drink"*. The resolution after two days of presentations and discussion was the need to do more research, meanwhile the unfortunate forest continued to die for the want of a drink.

My management lecturer at the Australian Forestry School/ANU once said "make every use of available research to form your decisions, but do not wait for researchers to reach a definitive conclusion". After 46 years practicing forest management I regard that as a wise observation.

Forests NSW have the legal capacity and expertise to manage native forests sustainably and commercially. Their biggest problem these days is to satisfy critics and still make a profit. Today they incur massive costs in pre-planning and documentation before undertaking harvesting or forest

treatment. This is principally to satisfy critics that due care has been taken, rather than actually improving the management practice that would have occurred anyway.

I would go so far as to say the field staff of Forests NSW are shell shocked from the attacks they have weathered in the last 30 years. It was about 25 years ago that the Hon, Jack Hallam, Minister for Agriculture said to me "You (the then Forestry Commission) must be doing something right to be surviving, because Premier Wrann has been intent on closing you down." Later the Minister for Forests was sacked for defending the Forestry Commission. The relentless pressure has had a detrimental effect on the morale and outlook of the staff. Voluntary redundancies have often been taken by the more skilled staff. I sometimes wonder whether they are more interested now in preserving their jobs than achieving the best result for the forests.

Another current management option is by the Crown Lands Office. It would appear to me that their role and expertise is limited to that of a caretaker of reserves rather than as an active land manager.

A final option may be for the public river red gum forested lands to be managed in accord with the Private Native Forestry Code of Practice for River Red Gum. At least that might reduce the massive costs and delays involved in harvest planning. It would also provide a consistent approach in both Crown and private forests.

In conclusion, after my 28 years among the river red gums, they are still revealing secrets to me. When you have a forest in semi-arid lands where rainfall is less than 300mm/annum, you may not experience the full range of circumstances in the course of your career. Hence it is vital that managers take every opportunity to make your own observations of the trees, the forests, and the rivers they depend on. Foresters tend to arrive in the river red gum forests and transpose their understanding of managing coastal and/or mountain forests without ever fully appreciating the differences between those forests and these.

The river red gum forests deserve to be managed well by sufficient professional staff to maintain continuity of knowledge and its application. One or two foresters with two or three field staff cannot adequately manage a resource spread from Mulwala to the SA Border on the Murray and up the Darling to Menindee.

V.I.P. Eddy
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