

**INQUIRY INTO MANAGEMENT OF PUBLIC LAND IN
NEW SOUTH WALES**

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Legislative Council, Parliament House,
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SYDNEY NSW 2000

RE: INQUIRY INTO THE MANAGEMENT OF PUBLIC LAND
IN NEW SOUTH WALES

Dear Sir,

Thank you for the opportunity of commenting on the creation of the Murray Valley River Red Gum National Park, carried out by the previous Government.

I grew up in Mathoura, went away to find work (eventually as a journalist and rural newspaper editor) and returned, with a passion for local history; when I became too old to be useful to employers.

I came back to Mathoura just as the resurgence of a push by environmentalists to lock up the river red gum forests along the Murray began.

Disturbed by the prospect of the loss of a local industry and a valuable resource and interested to expand the knowledge of past times, I began researching the origins of the forests.

What I discovered convinced me that the forests were an accidental result of white settlement.

Unfortunately I could not convince the Natural Resources Commission (See Appendix D) as it pursued the assessment ordered by the then Premier Nathan Rees in an effort to appease an environment lobby that appeared long on rhetoric but short on facts.

I have never been a part of the timber industry and, except for a brief post-war period when my father was gainfully employed at a local sawmill, have never received any benefit from it.

If you will pardon the pun, I have no axe to grind so I hope you will find the comments which follow of some value.

Yours faithfully

David Joss

SUMMARY

1. The national park “protects” a forest that was not here until European settlers' stock began grazing down the large, grassy plains and reed beds found along the Murray by people like Charles Sturt (in 1838) and Edward Curr (in 1841). Sturt wrote that the grass was up to the bellies of his cattle; Curr wrote that the couch grass was a foot deep. Neither mentioned red gum forests, although Curr did mention a stand of mature gums and Sturt a thicket of tall slender unidentified eucalypts. River red gum seeds cannot germinate in the shade provided by long grass. They need full sun. Aboriginal burning had limited the number of trees and promoted the growth of grass and reeds. Heavy grazing and the cessation of burning liberated the trees.
2. The Natural Resources Commission made a serious error when it disregarded the software already used by Forests NSW to forecast available timber and instead used its own spreadsheet formula. It also appears to have deliberately omitted 20,000 hectares of smaller forests from its assessment of available timber. Its spreadsheet formula resulted in errors of up to 60% of predicted available timber. The then-Premier Nathan Rees was unaware that the NRC had got its sums wrong when he announced the national park. His successor, Kristina Keneally also had no idea either when she committed the Government to backing his decision. Rees identified only the lack of water as the reason for concern over the welfare of the forests.
3. The investigation ignored the previous criteria for Regional Forestry Agreements.

The IFA [Institute of Foresters of Australia, the peak body for all foresters] has pointed out the previous RFA [Regional Forests Agreements] process is not applicable to the red gum forests because these are mostly regrowth forests in a dynamic state (also ref NRC recommendations report) with a long history of intervention by humans, including managed forest flooding and timber harvesting. IFA claims that the previous RFA principles have prevailed over any analyses of the condition and eco-history differentials pertaining to the red gum that should have lead to different outcomes. (Quote from the formal response of the Institute of Foresters of Australia to the final assessment report) [Emphasis added]

Criteria used by the NRC to underpin its assessment were flawed. It also knew the forests had been highly modified over more than 100 years of active management yet recommended the creation of national parks.

4. The NRC identified water shortage as the greatest threat to the health of the forests. Now that the drought – not the most serious in history incidentally – has broken, trees identified as being dead or

dying have mostly recovered. The NRC appears not to have been aware of an underlying cycle (roughly 17-20 years) for major floods on the Murray. The 2010-11 flood occurred 17 years after the previous major flood (1993) which in turn was 19 years after the 1974 flood that came 18 years after the 1956 flood. That pattern repeats fairly reliably back to the flood of 1853, the first big flood after white settlement in the region. Even with the major dams almost empty, these floods are never entirely held back by man-made obstacles.

5. The NRC claimed many of the trees in the forests pre-dated European settlement apparently unaware that (a) the forests did not exist prior to European settlement (point 1) and (b) trees which pre-dated the great 1870 flood were routinely culled as part of a forest improvement program which began about 1890. Almost all the trees in these forests are less than 150 years old.
6. The then-minister for environment Frank Sartor was apparently happy to trade hundreds of jobs in this remote part of the state for Green preferences in marginal city electorates. Some people would call that corrupt behaviour. He explained to us at a public meeting at Gulpa Sawmill in Deniliquin that we needed a lesson in politics; that Green preferences were the key to Labor retaining power and that the Greens wanted a substantial national park in red gum. A large number of those in attendance clearly heard what he said. Several of us signed statutory declarations that we had heard him say what he later denied saying. There is no doubt he was under threat from the environment lobby.
7. Whenever the previous NSW Government closed down a local industry to create a national park the affected communities were assured that increased tourism would replace lost jobs. If only it were true. Tourism will never compensate for loss of a core industry.
8. There is no proof that fallen timber is “natural.” In fact there is strong evidence that the reverse is true in these forests.
9. The world is looking for ways to harness solar power. So why are we locking up forests which can provide us with sustainable carbon-neutral energy made from sunlight?

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Australia's dense forests are not the remnants of two hundred years of energetic clearing, they are the product of one hundred years of energetic growth.

Eric Rolls, *A Million Wild Acres*. Nelson 1981

1. The Murray valley river red gum national park is a fraud, built on a myth

The Millewa group of forests is not the landscape the first white men in the area saw.

Believing the romantic notion that it represents ancient Australia is an entirely understandable error because the evidence, buried in history books, is still emerging. The documents and maps which support the view have however been with us for quite some time.

The Natural Resources Commission which conducted the assessment *assumed* that many of the trees in the forests had existed before Captain Cook arrived and that these pre-European trees were in imminent danger. The members of the commission were too late to save any pre-1770 trees by more than a hundred years.

A diligent study of silvicultural practices documented by Forests NSW would have told them that from about 1890 there had been a deliberate policy of felling — or killing by ringbarking — any tree that pre-dated the great 1870 flood. In fact the NRC listed in its bibliography one document that should have told them about this. In *A History of the Millewa Group of River Red Gum Forests*, commissioned and published by Forests NSW in 1997, history consultant Peter Donovan quoted forester Neville Davies describing the forest management plan in operation during the 1950s:

“All other trees above 6ft. d.b.h. (Diameter at Breast Height) not required for future crop were either felled or ringbarked in logging operations.” (Page 66)

The reason for this policy, introduced in 1890, was that the forest was being managed as a commercial resource. The removal of old, commercially useless trees made more water, nutrients and sunlight available to the younger, straighter, more vigorous trees.

Had the NRC researchers read on they would also have found this statement on page 80:

*The activities of the timber industry and the management practices of the Forestry Commission means that the forests comprising the Millewa Group are certainly younger than they were in 1750. They are **virtually all new growth forests** with stock grown since the 1870s. In the process of silvicultural management of the forests most of the old and deformed stock was removed in order to encourage healthy regrowth. This has also meant that with the culling of unhealthy trees and others unlikely to develop into merchantable timber that the forests are generally healthier than they were in the period*

before white settlement in the region, except for those parts of the forest that have been drowned by summer flooding during the past fifty years. [emphasis added]

Peter Donovan, the historian who wrote those words, had not read all the history either. He too assumed the existence of the forests before white settlement and seems confused about the date (1750?) of first white settlement. On page 14 he wrote: *Sturt was the first to record descriptions of the Millewa red gum forest.*

Well no, he was not. A careful reading of Charles Sturt's 1838 journal and of his published reports fails to reveal anything that could be construed as a description of a red gum forest.

Sturt, by 1838 a pastoralist, brought a mob of cattle down the Murray from near where Albury now stands. He was bound for Adelaide.

At the time the region between Albury and the Murrumbidgee junction was a blank space on the map. Sturt of course had seen the Murray downstream from the junction and was interested to know if the Hume river named by Hume and Hovell in 1824 was the same stream he had named the Murray in 1830.

At least three accounts of his 1838 journey were published although they are obscure. A copy of one is appended. In them Sturt writes about grassy plains running back from the river for some distance.

As he approached the off-take of the Edward river he encountered increasing evidence of frequent flooding and his progress was hampered by reed beds.

Although Sturt in his handwritten journal—a copy of which resides in the State Library of Victoria—recorded that he had seen a new variety of eucalypt and travelled beside “a wood of tall, slender gum trees”, he wrote that the area on the western side of the Edward river was “*a broad open space covered with reeds*” as was most of the country over which he had travelled upstream from the junction. If there was a forest along the Murray between Tocumwal and the Edward, Sturt was evidently unaware of it. This is not to say there were no river red gums at all. Others have recorded their presence but they were not in such numbers as to be noteworthy.

As an explorer Sturt was aware of the need to record details of landscape including resources. Like all graziers he had a keen eye for good country. His handwritten journal says that the river flats near the Edward had “*a superabundance of pasture... Vegetation is most luxuriant upon it [the rich soil] in so much that our cattle walk through beautiful green feed up to their middles in grass...*”

Sturt crossed the Murray at that point and spent two days battling through tall reeds until he eventually came

upon the river again. He said it was flowing out of “a vast marsh.” That area is now occupied by the Barmah and Moira forests.

Several years after Sturt had passed through the area a young squatter named Edward Micklethwaite Curr settled on the Goulburn river close to the Barmah area.

He recorded his impressions of his first inspection of the Murray near present-day Barmah (and near where Sturt saw “a vast marsh”) in his book *Recollections of Squatting in Victoria*:

“Looking around, on one side of us we saw extensive reed beds intersected by the Murray, which (an unusual feature in colonial rivers) flowed here almost without banks, and on the level of the plain. The other half of the circle was occupied by open, grassy forest land, which extended we did not know how far...”

“But we were just then intent on sheep-feed and not on scenery; so, after a brief delay, we remounted and rode over a plain of couch grass of some length, and on through a narrow opening in the reeds into what proved to be a charming little savannah of perhaps half a square mile in extent...”

“The isolated meadow into which we had found our way proved, as I have said, to be of trifling extent so that in less than a mile we found ourselves confronted by a wall of old reeds.”

“Some fifty yards off, amongst the reeds, however, was a gnarled and spreading gum tree, from the branches of which a view of the neighbouring country might be obtained. To this solitary old giant we accordingly forced our horses, with considerable difficulty, and clambering up its short trunk took our seats amongst its branches some forty feet from the ground, whence we were enabled to overlook the country for a considerable distance round, and discuss its capabilities at our leisure. A sea of reeds, of several miles in extent, as far in fact as the eye could reach, met our view on two sides, flanked by some grand old trees, amongst whose branches no doubt, long generations of Blacks had hunted the opossum and flying squirrel...”

Recollections of Squatting in Victoria first published 1883. Reprinted 2001 by Campaspe Shire. Pages 168-169

Note that Curr says the Murray was flowing through a plain. On a map (Appendix C) of his Tongala run bound into his book, the open, grassy, forest land to which he refers in the first paragraph is shown as “open forest of box.” Not red gums — box trees, though there is no doubt from Curr’s writing that he knew the difference and red gum trees certainly did exist in the area. On the way to the Barmah area he found some:

“So we cantered on, crossed the Tiia Creek [Deep Creek today] at its mouth and sped along the Blacks track to Pama, [Barmah] and thence, keeping on the edge of the fine old red gums (off which we noticed many a canoe had been stripped in the old days), to the Moira itself.”

The map which is dated 1848 shows other box forests too, but none of red gum.

In 1842 another squatter, Henry Sayer Lewes, established Moira Run on the west bank of the river, opposite the pastoral leases which Edward Curr had by then taken up along the Murray. In 1883 he forwarded a submission to a NSW government enquiry into public lands, telling parliament about the conditions he found when he first occupied Moira. Of the river flats in front of his huts he wrote:

“The low tract between the plains and the river Murray, now being flooded, was mostly clear swamp, where afterwards it became covered in impenetrable reed beds. The small strips of plain near the swamp were covered with mesembryanthemum and salt-bush. The higher plains were entirely bare of any vegetation whatever but occasional salt-bushes. The box forests skirting the plains had here and there a few tufts of dry grass, which might have been in the same state for years.”

Lewes, Henry Sayer in *Report of Inquiry into the State of Public Lands and the Operation of the Land Laws. Instituted 8th January, 1883 Journal of the Legislative Council, 1883, Vol. 34, pt. 1*

The “low tract between the plains and the river” is now covered in trees — the Moira forest. Many of the box trees to which he referred are still to be seen meandering along ancient, abandoned stream beds across the plains on which only a few saltbush grew. Now there's an irony — the box trees are probably much older than the red gums that supposedly need protecting because of their alleged ancient status and imagined vulnerability to one-in-fifty year droughts. They are the real pre-1788 trees.

Curr in fact was so excited by the prospects of the grasslands now occupied by the Barmah forest that he immediately applied for and was granted extensive river frontage grazing leases.

Curr (1883) remarked that Australia had “over a great portion of its area, the inestimable advantage of being ready for immediate use without the outlay of a sixpence” He originally described ‘fire-stick farming’ (Curr, 1883) and the terminology was ‘reinvented’ by Jones (1969) a century later. Howitt (1891) noted that Aboriginal fires “tended to keep the forests open, and to prevent the open country from being overgrown, for they not only consumed much of the standing and fallen timber, but in a great measure destroyed the seedlings which had sprung up since former conflagrations”.

Aboriginal burning was very extensive. Mitchell (1839) stated: “On the highest mountains, and in places the most remote and desolate, I have always found on every dead trunk on the ground, and living tree of any magnitude also, the marks of fire”. Charles Darwin wrote “The woodland is generally so open that a person on horseback can gallop through it; . . . In the whole country I scarcely saw a place without the marks of fire;” (Darwin, 1845).

Juskis V, 2011: *Benchmarks of fallen timber and man's role in nature:*

Some evidence from eucalypt woodlands in southeastern Australia. (Elsevier)

See also *The Biggest Estate on Earth*, Bill Gammage, 2011. Allen and Unwin.

Further confirmation that there were no great forests of red gums in the area is found in another map from 1848; that of Thomas Townsend, a New South Wales government surveyor. On his map of the country between the Wanderer Inn, where Deniliquin now stand and Maiden's Punt (Moama) he carefully drew the area now occupied by the Millewa, Gulpa Island and Moira forests. The most prominent landscape features he shows are extensive sandhills (still there but now mostly hidden by trees) and extensive reed beds covering a much larger area than they do today. There is anecdotal evidence that the sandhills on Gulpa island were once clearly visible from parts of the township of Mathoura.

Near Mathoura the word “forest” appears only on the higher country west of the Gulpa creek, sometimes

preceded by the word “scrubby”. River red gums do not grow in that area. It is part of the uplifted block of land known as the Cadell Tilt. In fact Townsend's only mention of gums is in an area which is now the southern portion of the Moira forest. It is labelled “Gum Swamp”. Townsend, like Sturt, Curr and Lewes obviously saw no forests worth recording in an area today acclaimed as “the largest red gum forest in Australia”. (See attached map, Appendix B). The word “forest” does appear south of the Barmah sandhills, a lunette dune system formed by wind-blown sand from the bed of a long-vanished lake named Kanyapella. It is in the vicinity of what is known as the Bama forest. However Mathoura sawmiller Chris Crump remembers felling a large area of mature box trees near where the word is printed.

Centuries of Aboriginal burning along the Murray had kept the banks largely free of trees but there was another factor holding back the red gum invasion.

River red gums are shade intolerant. That means their seeds will not germinate unless exposed to direct sunlight. Both Sturt and Curr noted that the grass on the plains along the river was long. Curr also mentions elsewhere that kangaroos were not common around Barmah. That accounts for the long grass. No large herbivores — until Curr and assorted other squatters put their stock to work grazing the grass down. Once the grass was short enough the tiny red gum seeds were able to germinate. Red gums are thirsty trees and it did not take the newly-emerged invaders long to pump much of the water out of the wetlands, with well-documented and spectacular growth rates matched by huge rates of transpiration. This is evidenced on the Townsend map mentioned above. The reed beds occupy a much greater area than they do today.

These forests are the result of white settlement and are less than 200 years old!

Furthermore on December 2 1895 the Deniliquin *Pastoral Times*, reporting on a petition circulating in the district and calling on the Government to reserve the timber on Gulpa and Wakool islands for the future use of townspeople, said: “*We hear a strong opposition will be raised to the petition being granted, on the grounds that these two spots are the best adapted for free selection in the district.*”

If they were the best spots for free selection there were far fewer trees in those areas than there are now — even by 1895.

The research which established that red gum forests did not exist before white settlement was mentioned to members of the NRC staff during the first community consultation. They apparently chose to ignore it. It was

also raised in my original submission, with references to both Sturt and Curr. Had they properly read Sturt and Curr they could have discovered it for themselves.

But the whole premise that a national park was needed is founded on the belief that an ancient eco-system was under threat. As I have observed above, the idea that the forest had spent millennia evolving is completely false. The forest is in fact much younger than most Australian towns. River red gums grow all over Australia. They have evolved to survive the repetitive cycles of drought and flood. Hundreds of websites from all over Australia claim to have 300 year old red gums in their neighbourhoods. The national park “protects” a species that grows like a weed under favourable conditions and is the most widespread species of eucalypt across the continent. It is also the most widely-planted eucalypt across the world. The park “protects” a tree that you can see along almost every permanent watercourse in inland Australia and even on city golf courses.

While I was researching the origins of the forest, and completely unbeknown to me, Professor Bill Gammage was writing a book which was published late last year. *The Greatest Estate on Earth* argues that the first Australians had actually created the park-like landscape recorded by early artists, explorers and settlers all over Australia. In fact it is subtitled *How Aborigines Made Australia*.

They did it by the strategic use of fire which resulted in large areas of grasslands often edged with belts of trees which afforded shelter to the animals they wished to hunt. But they also gave the hunters opportunities for ambush while their prey fed on the grasses. That is consistent with many early accounts of plains surrounded by open woodlands yet with no differences in soil types or topography. Why did trees grow only where they did when, following the end of Aboriginal burning, forests claimed the land in many instances?

Professor Gammage gives a great many references in making his case; his list of sources occupying 37 pages. His is a very persuasive argument backed with sound reasoning and much evidence.

He writes: “We know too little about 1788 to measure these changes [to vegetation] and our attempts are disabled by contemporary preferences and assumption. For example we think trees 'green' and good, so we assume there must have been more of them.”

We are only now beginning to unlock the past and it seems to me that the decision to create the Murray Valley and other recent national parks has been very premature.

It is therefore most appropriate that your committee is now re-examining the issues.

2. The NRC was also wrong about the river red gums' vulnerability to drought

River red gums are trees that evolved in the land of droughts and flooding rains. Although vulnerable to fire, they have an inbuilt mechanism to survive drought. In dry times they conserve moisture by shedding leaves and even branches which reduces transpiration. They look deeply stressed — as though they are about to die — but when the drought breaks they start putting out new shoots and leaves.

Had the NRC examined the major flood records for the Murray they would have seen that big floods come down the river on a more or less regular cycle, mostly 17 to 20 years apart.

There have been big floods in 1852, 1870, 1889, 1916-17, 1931, 1939 (perhaps not a great flood in terms of impact as it came in the middle of the disastrous World War 2 drought when billabongs, swamps and the Hume dam were mostly empty), 1956, 1974-5, 1993 and 2010-11. The NRC was obsessed with the threat of climate change (the phrase was used more than 240 times in the body text of the 336 page final report) and overlooked the fact that river red gums survive even in central Australian desert country.

Every major drought in the region, from the one which ended in 1842 just as the first white settlers came to the mid-Murray right up to the most recent, has ended with a flood though not always a major one. The great Federation and World War 2 droughts are well documented and were of at least similar severity to the recent one. The “white settlement” drought, for which historical references are numerous, began as a series of dry years in the late 1820s, ending in 1842 and was probably the worst that white men have seen.

Henry Lewes wrote: *“Having in April 1842, collected such of the LT herd as had survived the terrible three years of drought preceding the early part of 1841, and obtained a small flock of merino sheep, I commenced my journey for the Murray...”* From observation of trees growing in the bed of Horseshoe lagoon at Moama, he also concluded that *“there can be no doubt that there had been no rise in the river sufficient to put water into the lagoon all the while those saplings had been growing, nor until the bed of the lagoon had become dry enough to receive the seed.”* He estimated that the trees, which of course subsequently drowned, were eight or nine years old, adding that the lagoon would first have had to dry out before the seeds could germinate. The obvious conclusion is that there had not been a reasonable flood down the Murray in more than ten years.

These conditions can of course occur wherever the red gums grow, even in the desert country near Alice Springs. They evolved to survive long periods of drought. Many pages in *The Biggest Estate on Earth* are devoted to this subject, including examples of the ability of river red gums to rejuvenate years after severe drought. One photograph shows a tree which had apparently died after the creek it was growing on changed course in 1937. By 1955 it appeared dead and was cut down for firewood. In 1968 the creek resumed its old course and the tree is now growing healthy bark around its old stump.

Another good example is seen at the 16 Mile Gums on the Cobb highway south of Hay. I have travelled that road about every two months over the past 9 or 10 years and observed that the group of trees, which grow along a shallow ephemeral watercourse and are apparently watered only by the occasional shower of rain, appeared almost dead during the last years of the drought. Since receiving a good watering the trees have put out fresh leaves and even new branches. They appear today to be much improved in health. No one knows how many serious droughts they have survived in this way.

Now that the most recent drought has ended it is apparent that the NRC's predictions about widespread deaths amongst the trees were greatly exaggerated. It also appears that the predictions of the dire effects of climate change may also have been quite wrong.

3. The NRC failed maths

Over a number of years Forests NSW evolved a suite of software to predict the sustainable yield for the red gum and other forests under its control. This Forest Resource Assessment and Management Evaluation System or FRAMES, had been checked by Professor Chris Brack of the Wairiki Institute of Technology in New Zealand at the specific request of the NRC. His report — never made public, nor even acknowledged by the supposedly transparent NRC — says (in a leaked copy) that FRAMES was a sound and reliable tool for predicting standing volume and although he did raise concerns about how well it would predict the effect of severe drought he was confident it could still be used.

Instead of using FRAMES however, the NRC said in its final report it had developed its own spreadsheet formula—which produced an alarming forecast for the future of the forests. The commission also failed to include in its calculations several smaller forests which had not been logged for many years and contained a

significant volume of timber. Yet Dr John Williams, in answer to a question canvassing that possibility, assured sawmill owner Chris Crump at a Mathoura community forum that all forests had been included.

Their calculations, disputed by Forests NSW and experienced loggers, were subsequently found to be deeply flawed and the NRC admitted quietly — almost secretly — that it had been wrong by as much as 60 per cent. And their revised figures still did not include the 20,000 hectares of smaller forests in the Mulwala, Wakool and Werai groups which were known to have good quantities of sawlog quality trees. Had they been included the error range would have been even greater. They posted an admission of the error on their website but did not inform the registered “interested parties” that it was there, although this had been the routine adopted during the consultation process.

Let me just repeat that another way. People with long experience in the timber industry had one set of predictions of sustainable timber volume, based as much on observation as their computer program. The NRC, with no real expertise, had another set calculated in a spreadsheet using values they had concocted. Who do you believe? And when they were found out they were wrong, did the NRC immediately withdraw their report and re-examine it for other flaws? Not at all! Dr John Williams wrote to the new Premier saying there was nothing in the new calculations to make him change his mind about his recommendations. And left it at that. In Mathoura we were only made aware of it when alerted by a member of the Shooters Party.

This briefing note, *Further advice on long term sustainable wood yields and standing stock volumes of quota sawlogs*, is dated February 10 2010.

That date of course means that when Nathan Rees announced, just before he lost his job as Premier, that he would save the red gums by putting them into national parks, he had no idea that the vital NRC figures which underpinned his claim that the trees were in danger (“*Already under attack from the drought and climate change, this habitat is fast approaching a tipping point where we risk losing it for ever.*” — (Press release Dec. 3 2009) were wrong. Furthermore he pre-empted the NRC's final report just after giving them an extension of time to complete it.

The incoming Premier, Kristina Keneally was also unaware of the errors when she committed the Government to endorsing the Rees decision. And was reassured by Dr Williams that he was not concerned by the revelation.

This serious error must raise questions of competence not only in spreadsheet calculations but in other

judgements made by the NRC although to be fair, the three months given to them under the terms of reference was totally inadequate.

As an aside, Dr Williams, defending his recommendation for greatly increased environmental water allocations, told a timber industry meeting at Gulpa Sawmills in Deniliquin that he believed a flooded forest would be a wonderful tourist attraction. He repeated the claim to *The Land* on 31 March 2011, telling a reporter: “*We feel the opportunity for a tourism industry in the flooded forests just three hours from Melbourne is quite significant*”.

When the forest did flood in 2010 the NP&WS’s first action was to close the national park and all roads under its control.

4. The NRC was barking up the wrong tree.

In its formal response to the NRC's final report the Institute of Foresters of Australia raised the question of the historical legitimacy of the process used by the commission:

*The NRC red gum final assessment report and recommendations are based on the principles used for the Regional Forest Agreements (RFAs) from the mid 1990s, where under the National Forestry Policy of 1992, public native forests are to be divided into protected forests (generally under National Park (NP) tenure) meeting CAR/JANIS principles and those areas not transferred are to be managed as production forests with new strict protocols under NSW Integrated Forestry Operations Approvals (NSW IFOAs). These RFAs were driven by the community’s expressed wish to cease harvesting **old growth forest** and in addition to select representative areas of high conservation forest to be managed as NP. RFA assessments were initially applied to Eden, the north coast and then southern NSW, areas which contained significant areas of forest which had not been harvested. RFAs were also established in Victoria, Tasmania and Western Australia. Queensland did not develop an RFA because that State decided to cease harvesting native forests altogether over a period and the Commonwealth did not agree to such action.*

*The IFA has pointed out the previous RFA process is not applicable to the red gum forests **because these are mostly regrowth forests in a dynamic state (also ref NRC recommendations report) with a long history of intervention by humans, including managed forest flooding and timber harvesting.** IFA claims that the previous RFA principles have prevailed over any analyses of the condition and eco-history differentials pertaining to the red gum that should have lead to different outcomes. [Emphasis added]*

In other words the NRC ignored precedent and advice from the peak body of Australian forestry experts and included the man-made river red gum forests under the same umbrella as genuine old-growth forests. As detailed in point 1 there is a considerable body of evidence that the forests only began to grow when aboriginal burning ceased and grazing began.

5. About those 300 year old trees...

During the NRC public hearings the NSW Minister for Environment, Climate Change and Water, Frank Sartor, repeatedly claimed that river red gums (*Eucalyptus camaldulensis*) with a diameter at breast height over bark (DBHOB) of one metre are more than 300 years old.

Mr Sartor's staff offered the following explanation in an email to Chris Crump of Mathoura:

"The reference in the press release to trees with a diameter at breast height of greater than 100cm being 300 years or more old is also based on information from the [1985] Murray Management Plan. The Plan estimates that to produce a merchantable sawlog tree of 100cm dbhob it takes 310 years based on an average diameter growth rate of 0.33cm/year and 10 years for regeneration to establish (page 49). This estimate is based on observed growth rates collected at inventory growth plots by Forests NSW between 1955 and 1985 (current rates are lower). The estimate is also supported by inventory growth data collected from the adjoining Barmah forest between 1961 – 2006 by the Department of Natural Resources and Environment in Victoria, which average 0.34cm/year."

The minister's office apparently missed the disclaimer on page 50 of the management plan which said:

"The above calculations can however be no more than a very broad guide to long-term sustained yields.

*"Clearly the size class distribution as shown in Appendix 7a is not balanced or 'normal' and there is a marked concentration of growing stock in the smaller classes, particularly in the 40-50 cm dbhob class, reflecting the fact that the present stand **has to a large extent developed from regeneration since 1870** which is less than the full rotation period [of 310 years]."* (Emphasis added)

Management Plan for Murray Management Area, 1985. Forestry Commission of NSW

Let's look at the dates for this study. The Hume dam was completed in 1935 but had been regulating the flow of the river for several years before that. It had been full in 1930 and 1931 when the Melbourne *Argus* reported that the water was flooding seven feet deep over the spillway. By 1944 it was apparent that the trees were at risk because, instead of one big flush from the usual annual winter flood, followed by a drying out in summer, water intended for irrigation further downstream was moving into the forest during the trees' prime growth period and drowning them. (Final report on Murray Management Survey by forester Neville Davies, October 6 1953, Forests NSW archives.)

By 1955 when the plot study began, the river was being constrained with a growing network of regulators and levies designed to keep it within its banks. So much so that in 1953 there were protests from Victoria, which until then had not carried out such work, that New South Wales was dumping its floodwaters into Victoria.

The New South Welshmen, claims Victoria, have blocked waterways on the NSW side. Those waterways would normally allow floodwaters to disperse on the NSW side equal to the dispersal into Victoria.

So when the floods come most excess water is thrust against the Victorian side..."

(The Argus, Melbourne, 23 October 1953, page 2)

The study trees were thus being deprived of much of their traditional water ration. Furthermore by 1955 there were more trees soaking up the soil moisture and nutrients than in the years before river regulation. As well the trees in the study plots were not thinned, even though it had been known for more than 60 years that this improved the rate of growth. (Personal comment, Chris Crump, Mathoura sawmiller)

Obviously the large trees in the study plots had done most of their growing during the years when they were flooded in eight winters out of ten and the study found that the larger trees increased in diameter at a greater rate than did the smaller ones. ***But nobody knows how old those trees were when the study began—so how could anyone possibly estimate their age accurately now?***

At best, extrapolations from the plot data are a worst case scenario and, as the management plan warns, are no more than a very broad guide either to sustainable yield or to tree age.

Under the new watering conditions growth rates bore no resemblance to the years of pre-dam flooding as observed in the Moira forest by the NSW Government surveyor Charles Harnett in 1914. He described one section of forest on the Gulpa Creek which he had been reliably informed was cleared of all green timber in 1895. He had found “some long-barrelled gum, five feet in girth” growing there. That equates to a diameter of about 47cms. These trees were less than 20 years old which gives a diameter growth rate of at least 2.4cms a year, depending on how long after the clearing they germinated. This means that in about 40 years they would have been a metre in diameter.

Donovan, Peter. *A History of the Millewa Group of River Red Gum Forests*. Published by State Forests NSW, 1997

There are other examples of the spectacular growth rate achieved by river red gums under conditions of frequent and deep watering which point to pre-river regulation trees growing to one metre diameter in well under 100 years.

In Pakistan the same *eucalyptus camaldulensis* is grown as an irrigated short rotation cash crop, mainly to supply domestic firewood. Scientists from the College of Agriculture and the Department of Forestry conducted a ten year study of the growth rate. In that time their trees had grown to an average of 13.2 inches diameter at breast height. That equates to about 330mm. Within 30 years those trees would be about one metre in diameter. This table is from their 2002 paper.

Table I. Growth and price trend of *Eucalyptus camaldulensis* during 10 years of its life span

Age (years)	2	3	4	5	6	7	8	9	10
Height (ft)	25	32.2	39.1	41.2	42.7	44.5	46.7	47.2	48
Relative % Ht	52.08	67.1	81.4	85.8	88.96	92.7	97.29	98.33	100
DBH (inches)	4.37	6.2	7.5	8.9	10.2	11.21	12.3	12.95	13.2
Relative % DBH	33.10	46.96	56.81	67.42	77.27	84.92	93.18	98.10	100
Price/tree (Rs.)	175.4	257.8	304.05	391.1	407.1	516.8	573.05	628.15	660.6
Price/cft (Rs.)	113.16	82.36	59.27	53.28	42.41	41.08	36.6	36.93	36.82

LSD values for Height, DBH, Price/ tree and Price /cft. = 0.97, 0.24, 0.49 and 0.45, respectively.

Muhammad Ayyoub Tanvir *et al.* INTERNATIONAL JOURNAL OF AGRICULTURE & BIOLOGY
1560-8530/2002/04-3-344-346 <http://www.ijab.org> accessed June 2 2012

Realistically the calculation quoted by the minister's office proves only that if a tree thickens at 0.33cm/year it will indeed take around 300 years to reach one metre in diameter. As discussed above, this is far from a typical growth rate for trees that had been alive when the forests were flooded on an average of eight years in every ten. Yet during the red gum inquiry we had scientists advising a minister of government that many trees in the forest were pre-European and government members using the claim to back a national park. Apart from the more rapid growth under pre-dams flooding, the pioneering silviculture practised in these forests from the late 19th century played a significant part in making a younger forest.

In *A History of the Millewa Group of River Red Gum Forests*, history consultant Peter Donovan quoted forester Neville Davies describing the forest management plan in operation during the 1950s:

"All other trees above 6ft. d.b.h. not required for future crop were either felled or ringbarked in logging operations." (Page 66.)

According to Donovan the intent of the management plan was to remove all trees older than the massive germination which resulted from the great 1870 flood, one which in 2012 still holds the record as the biggest ever recorded at Echuca wharf. Trees with salvageable timber were milled. Firewood to fuel river boats, sawmills and even the local trains prior to 1923 was cut from others. Some were left where they lay. Cost cutting resulted in the plan being modified to where what were considered "useless veteran trees" were simply ringbarked to kill them. In 1959 contractors were engaged to ringbark *all commercially useless timber*. These trees were left standing and the remains of those that have escaped fire and tempest are still to be seen throughout the forest. (See Appendix D)

The 1985 Murray Region Management Plan of Forests NSW states that the practice of culling the big old trees actually started in the 1890s when large gangs of out-of-work men were recruited during the depression

years to thin the forests. This was reported frequently in the Sydney media. The 1985 plan put an end to it.

Minister Sartor's office claimed in its email that not all trees had received this treatment, and this may be so, but surveyor Harnett recorded that by 1914 most of the Millewa group of forests had been treated.

Donovan, Peter. *A History of the Millewa Group of Red Gum Forests*.

The ground-breaking forest management of the state's first forest ranger, John Manton, was followed with interest by the metropolitan press:

OFFICERS of the the Forest Department are at present actively engaged in carrying out instructions given by Mr. J. Ednie Brown, the Director General. The experiment of thinning the red gum forest on the Murray turned out so well that now fully 1,000,000 trees are making rapid growth. The work will be continued this summer, and a large staff of men will probably begin operations this week.

Sydney Morning Herald, January 26 1891.

FOREST THINNING ON THE MURRAY RIVER- In the Assembly yesterday evening Mr Sydney Smith laid on the table a copy of a report from Mr J A Manton, who was in charge of the forest-thinning operations on the Murray. The report gives a short historical sketch of the thinning operations conducted on the Murray redgum forests, and states that up to date the total area thinned on these reserves is about 50,500 acres

Sydney Morning Herald, September 5 1895

Fifty thousand acres is 20,000 hectares which represents a very large portion of the Millewa group of forests.

This means that by the beginning of the 20th century most of the very old trees had either been felled or killed and left standing. The practice of culling them continued well into the 20th century. Many ringbarked specimens still standing were killed by chainsaws introduced in the 1950s. There are undeniably some old living trees in the forest that are just possibly 300 years old but they are rare exceptions and they had long been protected under existing forestry regulations.

The point being?

The intent of the preceding five points is to bring to the committee's notice the myths and flawed judgement which led to the declaration of the Murray Valley red gum national park. In my view the NRC was given far too little time to complete an assessment which had taken several years in Victoria but was rushed through in a matter of months in this state. There is also a question of competence amongst the commissioners who seemed to take little notice of what experienced timbermen were telling them in the consultation process.

The Government was under considerable pressure too from the environment lobby and it might be argued that the national park was a foregone conclusion from the outset. The result is that the people of New South Wales have been sold a pup. They have paid about \$100 million for a phoney national park which, rather than protecting a fictional pre-European eco-system, preserves an example of post-European landscape meddling. They already had a similar park at Yanga (likewise a product of white settlement) and they have

lost a valuable commercial asset with the dismantling of the timber industry. The park managers are building a second bird hide when the existing one is under-utilised and the birds which once frequented the local wetlands have largely relocated, having discovered that irrigation farms and channels can provide all their needs. A recent study by University of Canberra estimated that, in good years, rice farms in the Riverina may support as many as five billion frogs. Those frogs in turn provide food for many birds that formerly frequented forest wetlands. (IREC Farmers' Newsletter, No. 177, Summer 2007-08 pp 48-49)

6. Sold down the river for city votes.

It is hard to see any other reason than political self-preservation for impounding the forests. While the Labor party held a comfortable majority in the lower house, it needed the votes of the four members of the Greens party in the upper house to pass any opposed legislation. Although he strenuously denied during debate on the bill that he and Minister Sartor had held discussions on preferences, the leader of the Greens, Ian Cohen, had already delivered at least one unmistakable and very public threat to the Government.

Labor could not count on Greens' support if it failed to stop unsustainable logging in the Riverina, Greens MP Ian Cohen told reporters at an environmental panel in Sydney. It would be a "crushing blow" to Labor's chances of re-election if the Greens opted to withhold preferences in more than 10 marginal seats, he said.

"This government will desperately need Greens preferences at this election," Mr Cohen said. "My position is, only if they deserve it and have earned it. The river red gums are pivotal as far as I'm concerned. We won't be giving over preferences automatically at this election. I will be recommending that we don't simply recommend preferences either way. Labor will come begging ... but if they don't deliver on these forests in a sustainable way they can go to hell."

The Australian, February 23 2010

A clear description of being held over a barrel!

Sartor was already aware of this possibility. On January 14 in the course of promoting the first Bill with its five year phase out of harvesting in Millewa forest he had told an industry meeting in Deniliquin: *"Let me give you a lesson in politics. The Greens hold 15 per cent of the vote. And if we are to stay in power, we must hold their preferences to maintain city seats. They want a significant national park in red gum."* (National Party member Andrew Fraser quoting a witness during the bill debate recorded in *Hansard*, May 20 2010.)

Sartor later denied having made this statement, prompting a number of people, myself included, who had heard it to lodge statutory declarations confirming it with the member for Murray-Darling, John Williams.

When Williams tried to have the Independent Commission Against Corruption (ICAC) investigate further he was apparently told it was "just politics." Just politics to trade jobs for votes?

Needless to say, local communities were devastated by the decision to close their timber industry.

And the Minister acknowledged that he knew very well what its decision would mean.

In words that echoed the Victorian Environment Assessment Council's admission almost two years earlier that while city dwellers would get a warm, fuzzy feeling from its recommendations, country folk would just have to bear the hardship*, Minister Sartor told the ABC's *PM* program:

"There's no doubt that the local communities are going to suffer significant dislocation but it's something that it is inevitable and by our intervention we're actually going to give people some alternatives in some cases. There will be a net loss of jobs. I don't think we can escape that."

ABC *PM* program, March 5 2010.

**"The environmental benefits therefore would accrue mostly to people outside the investigation area... Accordingly large centres including Melbourne and regional cities inside and outside the investigation area receive major environmental benefits. The costs would be largely borne within the investigation area particularly in areas where public land timber harvesting and grazing are focussed."*

VEAC *Final Report* July 18 2008.

In the meantime the Greens MLCs announced that they would oppose the legislation unless the five year phase-out was dropped. This gave the timber communities a glimmer of hope and Minister Sartor a problem.

Following a period of negotiation the bill suddenly surfaced again on May 20 (it had not even been listed on the morning's business paper which was hastily revised several hours later). John Aquilina, acting on the minister's behalf, moved that the bill be withdrawn.

If anyone thought that meant the Government had given up, they were soon disappointed. After two unrelated items were rapidly disposed of Aquilina moved *"that standing orders be suspended to permit the introduction without notice and passage through all stages at the current sitting of the National Park Estate (Riverina Red Gum Reservations) Bill (No. 2)."*

Hansard, Legislative Assembly, May 19 2010

The revised bill withdrew the phase-out period, declaring that all logging in the Millewa forests would end on June 30 2010. It increased the redundancy package by \$17 million and the total outlay, including park establishment and operating costs from \$80 million to \$97 million. The minister argued the increase was in response to indications that the timber industry was prepared to forego the five year phase-out in return for more money. This neatly shifted the blame for the sudden change of direction to some members of the timber industry who had apparently discussed the issue with the minister (emphasis added):

*"The House will recall that on 22 April this year I introduced a previous version of this bill, which we have now withdrawn. The Government has undertaken this unusual step because, **after talking further***

with the timber industry, local government and conservation groups, we saw an opportunity for a bigger, better and fairer outcome in the river red gum forests.”

Minister for Environment, Climate Change and Water, Franks Sartor quoted during the debate. *Hansard*, May 19 2010.

“We have listened to industry who have told us that they are prepared to cease logging provided they have access to additional compensation.”

Press release issued by Premier Keneally and Minister Sartor, May 19 2010

After a strenuous debate the bill passed the lower house 46 votes to 34.

It then went immediately to the Legislative Council where it again passed, the Greens and the Reverend Dr Gordon Moyes (Family First party) voting with the Government.

In a press release issued within hours of the Bill being passed Environment minister Frank Sartor claimed:

“Today’s legislation will ensure internationally significant wetlands and forests are protected for future generations, with logging in these areas to cease on 1 July 2010

“These forests have been here for generations, with many trees over 300 years old, predating Captain Cook’s arrival and white settlement.”

The minister’s claim about the exit agreement was, like his claim about the 300-year-old trees, not quite true.

The negotiations he said had taken place with members of the industry did not include input from the Mathoura timber workers, a group of about 50 (greater than the staff of any of the big mills involved), most of whom were keen to carry on for the five year period. They had received no communication from the Government and most learned only from media reports that their days of working in the forest — and a productive and economically viable era — were about to end.

The Institute of Australian Foresters denounced the decision, saying in a press release that was largely ignored by the media, that the Government’s claims were misleading.

“The NSW Government decision to effectively shut down the Red gum timber industry may be seen as good for the environment by people in urban NSW, particularly those who are trying to be environmentally responsible.

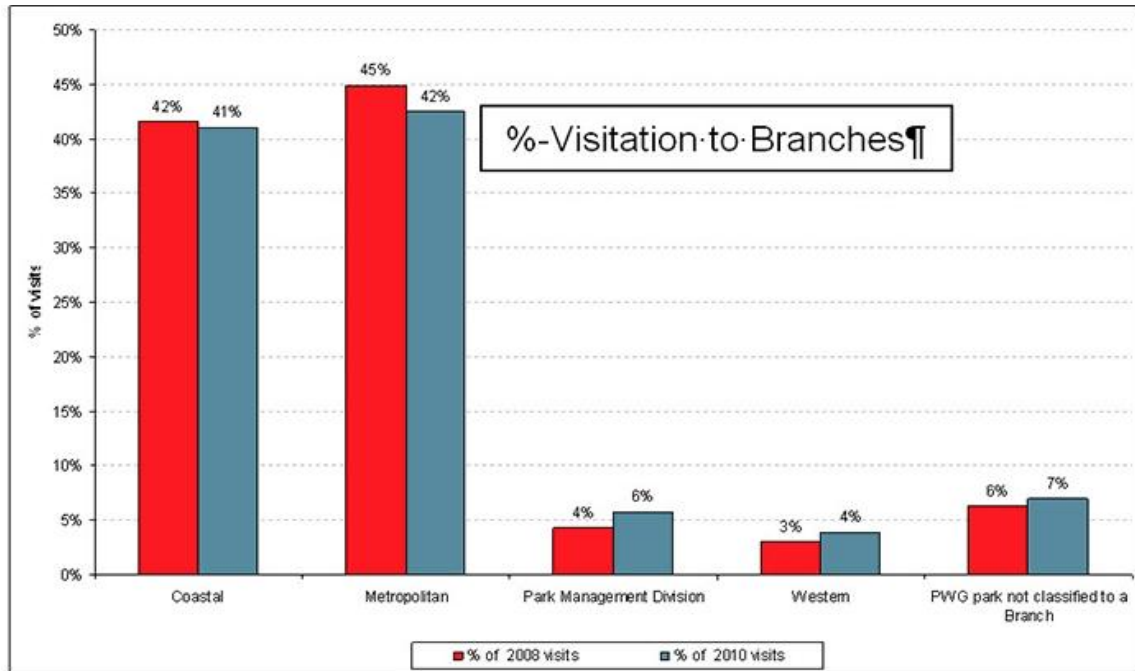
“The Institute of Foresters of Australia (IFA) is however extremely disappointed by this decision and believes the people of NSW are being seriously misled as to benefits that it will deliver.

“This decision transfers over 100,000 hectares of regrowth forest from State forest to National Park and commits \$97 million taxpayer dollars compensation to close a vibrant and sustainable industry that is producing around \$72 million per year in economic activity as well as committing millions of dollars each year for the administration of the new National Parks. An estimated 550 workers will lose their jobs comprising 250 direct losses, including forest management, and 300 indirect losses.”

Press release May 24 2010 under the signature of Peter Volker, IFA president.

7. Tourism cannot replace the timber industry

Tourism, despite assurances from the former NSW Government and the Natural Resources Commission, will



SOURCE: <http://www.environment.nsw.gov.au/research/NSWparkspopularity.htm> accessed April 26 2012

Visitation figures for NSW national parks are often quoted in tens of millions per year. The latest, attributed to Minister for Environment and Heritage Robyn Parker, is 35.6 million. That may be true but the qualifying fact that almost all of those visits are to parks within or close to the Sydney region is rarely revealed.

In fact the majority of visits in NSW are to just five parks. Four of these are metropolitan – Blue Mountains, Ku-ring-gai, Lane Cove and Royal – while the fifth, Kosciuszko, contains all of the state's major ski resorts.

When quoting the above visitor figure to the Deniliquin *Pastoral Times* (April 17 2012) Minister Parker conceded that tourism could never replace the \$70 million annual contribution previously made by the timber industry to the region's economy. From the above graph it is evident that even high profile western region parks like Hill End, Warrumbungles, Mungo, Sturt and Kinchega combined cannot be making that sort of contribution either. How can they when the entire western region attracts only three or four percent of the total market? The Murray Valley park at Mathoura competes directly with Yanga (now part of the enlarged Murrumbidgee park) and with Barmah, Gunbower, Lower Goulburn and Hattah-Kulkyne in Victoria.

Millewa forest is practically surrounded by reserves with similar landscapes. Why would tourists travel past

them to visit Murray Valley park when these alternatives are available?

And to return to the first point – why would tourists flock to see a forest of gum trees that has been in existence for less than 200 years and has been harvested for most of that period?

Whatever advantages may accrue from destroying a viable industry and impounding the red gums in a national park, increased tourism is not one of them. Yet from Bob Carr's 1993 claim that the people of Coolah would see 35,000 tourists a year to the prediction that Yanga would attract 50,000 a year to Balranald we have been misled by government ministers. This must never be allowed to happen again.

8. Keeping the home fires burning

When the National Parks and Wildlife Service took over administration of the Millewa group of forests one of their first actions was to ban firewood collection in most areas.

The reason given to the Deniliquin *Pastoral Times* was that it was necessary to build up the level of fallen timber for environmental reasons.

Where did this reasoning come from? Certainly not from the writings of early explorers and settlers whose accounts were mostly of open, grassy forests through which it was possible to gallop a horse.

The Victorian Environment Advisory Council in its river red gum assessment in 2007 referenced the work of Professor Ralph MacNally as justification for its recommendation that woody debris levels be increased.

The estimated current level of coarse woody debris in river red gum forests is approximately 20 tonnes per hectare, reduced from a pre-European level of about 125 tonnes per hectare. The main cause of this reduction is firewood collection. Animals dependent on coarse woody debris such as the yellow-footed antechinus only occur at sites with around 45 tonnes per hectare.

Victorian Environment Assessment Council *Draft Proposals* July 2007 page 21

From where did MacNally get his information about pre-European levels? A paper from CSIRO scientists

Don A. Driscoll, George Milkovits, David Freudenberger, *Impact and Use of Firewood in Australia*. (2000)

offers an explanation:

After exhaustively searching historic records, MacNally et al. (2000b) conclude that records are inadequate to estimate the amount of coarse woody debris in River Red Gum (E. camaldulensis) communities. Therefore they have used an estimate of coarse woody debris from undisturbed forest (125 tonnes/ hectare) as the best indication of natural quantities of coarse woody debris. (Robinson 1997; MacNally et al. 2000b).

But there were no “undisturbed forests” here before white settlement; not river red gum forests anyhow. In a subsequent paper MacNally makes the following claim:

The forests also have been much diminished in total area owing to the fertility and moisture of the floodplains, which attracted agricultural exploitation (PARKINSON & MAC NALLY, 2000). These are the main reasons for the great changes in habitats of the floodplains of the Murray–Darling Basin since European settlement.

The average current fallen–timber load is just 20 t/ha in lowland floodplains of the Murray River and its major tributaries, perhaps just 10–15% of pre–settlement loads (MAC NALLY R & HORROCKS G. in Animal Biodiversity and Conservation 25.1 (2002)

).

As I have shown above, there were no forests here before white settlement. As Bill Gammage pointed out aboriginal burning and firewood collection kept forest floors clean. As Eric Rolls pointed out in 1981 (*A Million Wild Acres*), the forests are the result of over one hundred years of forest expansion. Curr wrote that squatters were attracted to the river flood plain because it offered “over a great portion of its area, the inestimable advantage of being ready for immediate use without the outlay of a sixpence.”

MacNally *assumes* white settlers cleared forested land but offers no proof. He based his entire argument on a false premise.

Overland expeditions almost always had drays or wagons to carry provisions, tents etc. I have found no record of difficulties in transit caused by fallen timber in the written reports of any early explorers of this region.

Henry Sayer Lewes, en route to Moira in 1842, did have problems and had to unload a dray and leave its contents at Aimee Huon's station near present day Barooga but that was due to boggy conditions; “...even the saddle horses could not carry their riders,” he wrote. Lewes had followed the Murray from Albury but in a submission to a NSW government inquiry into public lands made no mention of forests of river red gums or of fallen timber.

Sturt crossed the Murray because he was advised “...it would be idle to attempt a passage with drays, for that [the country ahead] was traversed by deep creeks full of dead timber and masked by reeds, and that the further he proceeded, the softer did the ground become under his horse’s feet.” It was the hidden creeks and boggy ground rather than timber on the forest floor that persuaded him.

In *Forest Ecology and Management* 261 (2011) 2149–2156, Vic Jurskis concludes [emphasis mine]:

*Quantitative data are not available for natural loads of fallen timber and undisturbed stands are not a suitable reference. Qualitative historical information on fallen timber and Aboriginal economies indicates that **human intervention including broadcast burning and firewood collection can restore more natural***

*conditions and favour habitat features such as large old spreading trees and diverse ground layers including bare ground that are associated with open grassy ecosystems and rare biota. **This analysis supports a general principle that human intervention is necessary to maintain ecosystems that evolved under human influence.** Thus the concept of wilderness has little application outside Antarctica.*

It was the previous government's clearly stated intention that communities reliant on firewood from the forests for winter heating should not be disadvantaged by the change of land management.

The removal of the Millewa transitional logging arrangements will remove another potential source of domestic firewood collection. As a result the Government has decided to extend the provision in the former bill covering domestic firewood collection within regional parks to national parks as well. The bill will permit firewood to be collected by individuals or not-for-profit organisations that have been issued with annual licences by the department. Firewood can only be collected from off the ground in zones within regional and national parks that have been determined by the department. This measure is intended for locals of the Riverina only. Also, this measure will not permit anyone to cut down any trees for any reason. Wood will only be able to be cut if it is on the ground. The department will ensure sufficient supplies are available and may use wood obtained from ecological thinning undertaken elsewhere and brought into the firewood zones for this purpose.

Then Minister for Environment, Frank Sartor, introducing the Bill, May 19, 2010

It is therefore unrealistic and unnecessary for NP&WS to impose limits on firewood collection, an activity which is sanctioned, indeed directed, in the Bill creating the national park. If the national park is to continue there must be legally-binding guarantees that firewood collection will continue to be allowed, at least until natural gas is made available to the affected communities.

9. The world's best solar energy

Finally I would like to point out that, while governments have been spending enormous sums trying to persuade people to install solar collectors, they have been actively shutting down the world's best solar factories. Trees do a far better job of harnessing the power of the sun than all of our best scientists and engineers have been able to manage with mechanical means.

The Australian Office of Greenhouse recognised that fact when it endorsed firewood as the best fuel for domestic heating with which to combat the increase in greenhouse gases. This is because wood is practically carbon-neutral. All of the carbon dioxide released when burning it has been absorbed by the tree during its

life. And once a tree is removed from a forest, another grows in its place, taking over the role of harvesting the sun's energy. It is folly to lock up such a useful natural resource while expensive subsidies are required to promote other methods of solar energy conversion..

While the previous Government clearly intended that firewood should be available to communities in the region – because they built instructions for its provision into the Bill which set up the park – it appears the National Parks and Wildlife Service may have a different agenda. They want to keep a high level of woody debris on the ground for environmental purposes. But this is not how the landscape appeared to the early explorers. Sturt had drays with him. Yet he only had concerns about getting them further into what is now the Millewa forest when he reached the Edward and found extensive wetlands interlaced with creeks. Had the forest been there and the fallen timber as dense as it is today, Sturt, the explorer, would surely have mentioned the difficulty of travelling through it.

Throughout the documentation of early Australian explorers much mention is made of the open, park-like appearance of forest which was quite rightly put down to Aboriginal burning. The argument in favour of high levels of course woody debris is that it is needed for habitat. This begs the question of how the animals that are thought to require it today managed to survive the several thousand years of Aboriginal occupation.

Conclusion

Despite hearing from several sources that there is no possibility of having the national park decision overturned, I am hopeful the legislation can be repealed because this national park was established under false pretences. The forests which it encompasses only grew when aboriginal burning ceased. Therefore this is not the original landscape. To return it to what people like Sturt, Curr, Lewes, Townsend and the other early white settlers saw when they came here would require the destruction of all but a few small groups of river red gums and vigilant management to ensure they do not return. Clearly that is out of the question.

The decision to create the national park was a bad one, driven not by concern for the environment but by the desire for a politically expedient outcome. The national park is a fake and as such will never be any sort of tourist destination. It does not protect an ancient landscape and there is no hope of ever returning to such a landscape unless by catastrophic wildfire intervention.

The previous Government, its supposedly independent advisor—the NRC— and the environmental lobby, through sheer ignorance, destroyed a viable industry, caused considerable and ongoing hardship to several small rural communities and perpetrated a costly fraud on the people of this state.

The question of the Natural Resources Commission's competence to conduct an assessment in just three months when the Victorian Environment Assessment Council took almost three years must be examined.

The competence of the former Premier to make his decision without all the facts, under considerable duress and without a Caucus decision must be examined. There was no need to include most of the state's best river red gum forest resources in new national park reserves when Yanga and Kinchega national parks already contained significant specimens of the same species, the most widely distributed eucalypt in Australia.

The government's flawed decision was driven by unelected non-government organisations, particularly the National Parks Association and the Wilderness Society, which wanted to shut down the timber industry.

There was no justification for most of their claims. The forests were already adequately protected by regulations. Old trees with hollows were not felled. Trees with a diameter of 1.2 metres (reduced during the campaign to one metre) were protected. The Superb parrot was not in danger from logging and was barely mentioned in the NRC report. Minister Sartor did not mention it at all when speaking to the Bill.

The wetlands were already protected. The Ramsar listing was actually proposed by Forests NSW which placed them in logging-free exclusion zones.

The water shortage, identified by the NRC as the main cause of concern, was at least partly due to there being too many trees for the available moisture.

This was a bad decision by a government which knew the voters were losing patience and imagined it had community support if it continued to declare national parks.

It should be overturned and the man-made forests returned to timber production.

David Joss

MATHOURA

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APPENDIX A.

Charles Sturt's account of the Murray River between the Albury region and the junction of the Murrumbidgee

In 1838 two men, Joseph Hawdon and Charles Sturt, acting separately, drove mobs of cattle along the Murray river from the Albury district to Adelaide. Hawdon's account is in in *Journal of a Journey from New South Wales to Adelaide Performed in 1838*. The following is one of several versions of Sturt's journey.

IX.--Course of the Hume River, from the Hilly Districts to the Junction of the Murrumbidgee. By Captain Charles Sturt. Communicated by Lord Stanley.

Transcribed from *The Journal of the Royal Geographical Society of London*, Volume 35. Pp 141-144 by David Joss, 29 August 2009.

When, in the year 1838, I made up my mind to conduct a party overland from New South Wales to South Australia, I determined on making my private interest as much as possible subservient to geographical research, by tracing the Hume, downwards from where it crosses the main road to Port Phillip, to the mouth of the Murrumbidgee, at which point it loses the above name and becomes the Murray. The distance being about 260 miles, I was anxious to ascertain the nature of the country along this its unknown course, and by fixing the points of junction of its several tributaries, to complete the survey of the streams falling into the interior from the S.E. angle of the continent.

I accordingly assembled my party at the lowest (highest?) station on the Hume in the month of April 1838, and commenced my journey by moving along its right bank and following it in a westerly direction into the low and depressed interior. In latitude 34° 48' S., and in longitude 146° 3' E., we passed the junction of the Ovens, a small river coming from the S.E., and consequently falling into the Hume on the opposite bank to that along which we were travelling. We had already cleared the hilly country, and now found the river flats backed by extensive plains, traversed by belts of trees, and covered with salsolaceous vegetation. The river held a course rather to the northward of west, the descent being still considerable. About 25 miles below the junction of the Ovens, however, the current in the river became feebler, its waters were turbid, the flats along its banks expanded, and appeared subject to inundation, and detached masses of reeds were scattered over them: these, at length, almost covered the primary levels, and, by the increasing height of the rings upon the trees, we judged that we were pressing into a region subject at times to deep and extensive floods.

Accordingly, as we advanced, the reeds closed in upon us, and we moved through them along narrow lanes or openings which the natives had burnt, the reeds forming an arch over our heads, and growing to the height of 18 or 20 feet. Our progress was impeded by hollows, and the flats were intersected by channels for carrying off the back waters from the extremity of the alluvial flats.

On the 23rd of May, in latitude 35° 52', we were suddenly stopped by a small junction from the N.E., which the natives (numerous hereabouts), called the "Delangen." They informed us that the country to the N. was under water, as indeed its appearance indicated, and that the country in front of us was impassable. It was in truth an open expanse of reeds, into which the Hume directly led. In the event, therefore, of our being unable to proceed to the N.W., it would here become necessary for us to cross the river; but, as I wished to ascertain the nature of the country upon my right before I determined on this step, I sent my old follower Frazer into it, who reported to me that it would be idle to attempt a passage with drays, for that it was traversed by deep creeks full of dead timber and masked by reeds, and that the further he proceeded, the softer did the ground become under his horse's feet. We were therefore obliged to cross the Hume a little above the junction of the small stream which had stopped us. On the left bank, however, we were still in the midst of reeds, through which we could not have pushed but for the narrow lanes made in them by the natives. We could not, however, approach the river for two days, and when we again came across it, it was just issuing from a vast marsh; its waters were muddy and its channel considerably diminished. Instead, however, of holding a course to the westward, the Hume at this point suddenly changed it to the eastwards of S., flowing through a barren country of white tenacious clay, above the reach of flood, but of the most gloomy character. It had just been fired by the natives: the trees were scathed to their very summits, and the trunks of those which had fallen were smoking on the ground.

On the 20th of June, the river still running to the eastward of S., we suddenly found ourselves stopped by a deep river of some size, most beautifully fringed with acacia of a dark green hue. This was the Goulburn, which we had struck about a mile above its junction with the Hume in latitude 36° 3', and in longitude 144° 58'*. On crossing the Goulburn, I found that some other over-land party had been here before me, and at the junction saw that Mr Bonney had cut his name on one of the trees. It appeared therefore that he and Mr. Hawden had taken the line of the Goulburn on their way to South Australia: instead, however, of keeping the banks of the Hume, these gentlemen crossed the hard and extensive plains which surround the hollow through which the Hume flows. On the other hand, I kept to the river, encamping on its banks every night, sometimes without firewood, the weather being cold and frosty. We traversed a country subject to flood, of a blistered soil, and heavy for the teams to drag through, and we at length once more got into the region of reeds.

On the 30th of June we sighted Mount Hope, of Sir Thomas Mitchell, bearing S.W., distant about 14 miles; and lost site of it on the 15th of July, bearing S.S.E., distant about 18 miles. At this point we could see some lofty trees to our left: but we were in the midst of reeds, which extended over an immense flat, bounded in the distance by a dark belt of Eucalypti, the intervening space being one entire marsh. On the 9th of July we came upon a small river, with steep earthy banks, which I presume to be the Whimera of Sir Thomas Mitchell, on whose tracks we got the following day, about 2 miles to the westward of its junction with the Hume. I could not observe any impression of horses or cattle to indicate that any one had been there, but discovered the marks of horses' hooves lower down the Hume, at a division of its channel where it forms several flat and reedy islands.

I made a report of this journey to Sir George Gipps, on my return to Sydney, but I did not at that time forward any chart; I have now, however, the honour of enclosing one.

I should state that the river is navigable along its whole course. The flats, which extend to some distance on either side of it on its upper branches, are rich in soil and are better adapted for cattle than for sheep. Many fine stations might indeed be formed even to the junction of the Delangen; and, as in the cases of the Morumbidgee and the Macquarrie, I have no doubt the settlers, as they want pasturage, will push down to them. I do not, however, think that any of the country from the Goulburn to the junction of the Morumbidgee is available for any purpose. The only object gained by me in pursuing the river was the survey of it, and the connexion of its higher branches with its lower ones, as adding more correct data for a chart.

*The MS has 146° 59', evidently a clerical error.--Ed.

Source: <http://books.google.com.au/books?id=0-kRAAAAYAAJ&pg=PA142&dq=Sturt+hume+delangen+london+geographic&ei=00bJSobILpHOkwS62fG7Aw#v=onepage&q=&f=false>

APPENDIX B

Portion, Townsend's map of 1848 showing extensive sand dunes but with no mention of red gum forests

In 1848 the government surveyor Thomas Townsend mapped parts of the Riverina. The section shown is centred on the Mathoura district (town site circled). The most distinctive items in the landscape are reed beds and sandhills. There is no mention of forests where they now stand.

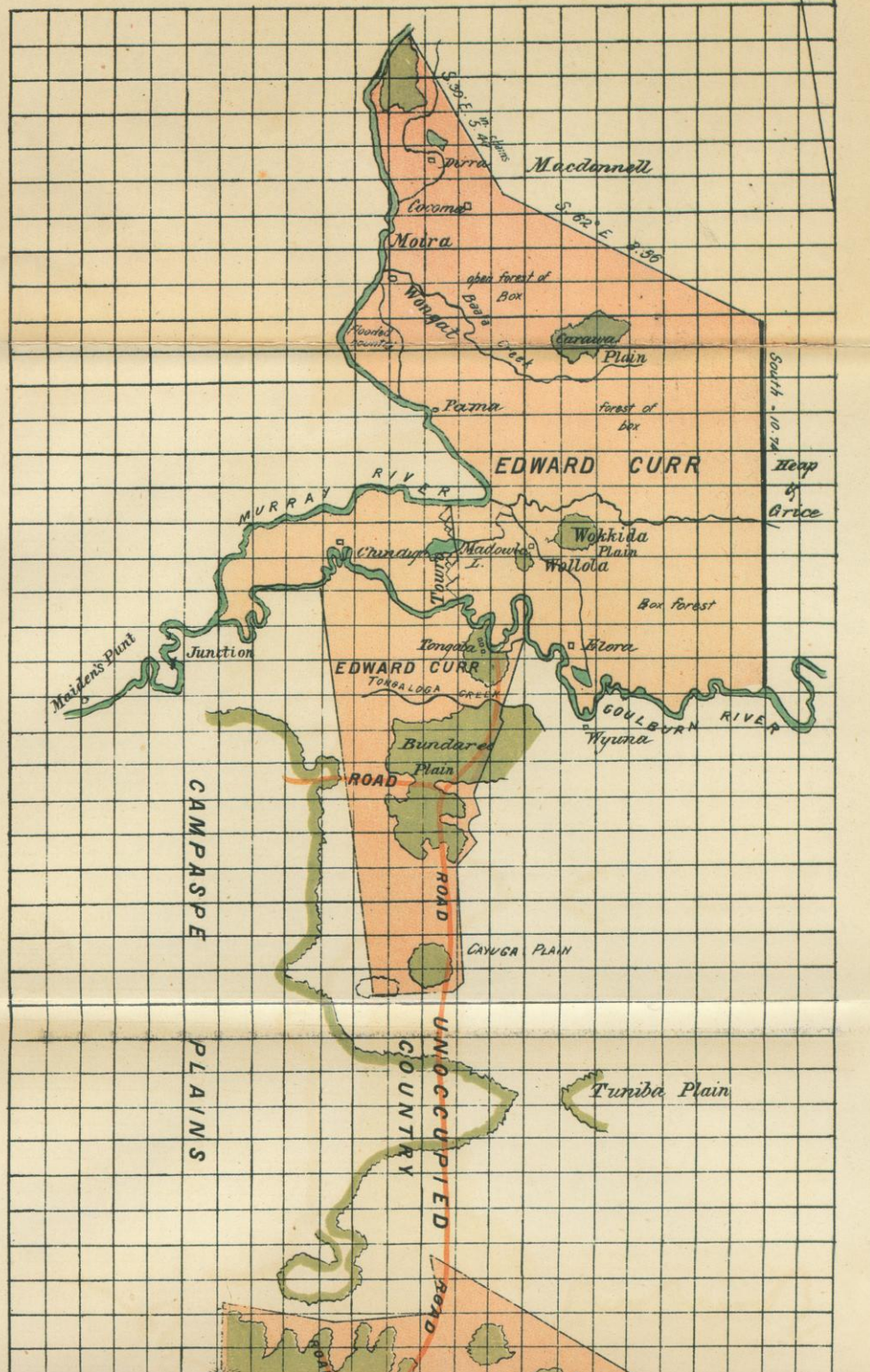
APPENDIX C



MAP OF THE RUNS

OF THE LATE

EDWARD CURR, of St. Heliers.



Ringbarked tree



The big tree in the centre was photographed in the Millewa forest about five years ago. It has been ringbarked with a chainsaw so was probably alive in 1950. Note the short trunk and wide-spreading branches. This tree did not grow up in a forest but is now surrounded by young trees.