



The Wilderness Society Sydney  
Submission to the Natural Resources  
Commission

River Red Gum Investigation

October 2009

This submission was prepared by Peter Cooper, NSW Campaigner for The Wilderness Society Sydney.

The Wilderness Society is a national, community-based, environmental advocacy organisation whose purpose is protecting, promoting and restoring wilderness and natural processes across Australia for the survival and ongoing evolution of life on Earth.

The Wilderness Society would like to thank the NSW Government and the Natural Resources Commission for the opportunity to make this submission.

The Wilderness Society also draws the Commission's attention to our original submission to the assessment and asks that the points raised there be taken into account.

The Wilderness Society agrees with a number of the findings of the Preliminary Assessment of the River Red Gum Forests. In particular

- That the crisis facing the forests from river regulation and climate change is drastic and immediate, with vast areas of River Red Gum predicted to die.
- The relationship between water stress and the decline in the timber industry – even if no National Parks are created, the volume of timber available will continue to reduce.
- The true number of jobs supported by the logging industry which has finally been revealed to be substantially smaller than previously claimed by opponents of National Parks.

However, we hold serious concerns around a number of aspects of the assessment. The document fails to address the impacts of logging on forest ecology or to analyse the environmental significance of the forests against nationally agreed conservation criteria. It is our view that the assessment does not constitute a Forest Assessment under the *Forests and National Parks Estate Act 1998* as it fails to adequately address these issues.

Major concerns that we have regarding the assessment include:

- The lack or mention of either the precautionary principle or the conservation benefits of National Parks.
- The lack of review of national reserve criteria (CAR), outline how these will be met or provision for systematic conservation planning. The assessment quotes the CSIRO (2008) work on reserve design under changed climatic conditions, but fails to include the key finding of this – that large protected areas are vital to conserving viability in a warming world.

- The apparent pro-logging bias when discussing forestry matters. It implies that logging is good for forest health, but fails to provide any supporting data and disregards the significant bodies of work refuting this.
- The assessment fails to identify refugia, corridors and ecological linkages in the region.
- The assessment does not explore the economic benefits flowing from the creation of National Parks.
- The assessment fails to properly explore biodiversity in the forests, instead focusing on a small number of threatened species.
- Despite recognising the extreme water stress the area is under, the Commission implies that a ‘sustainable’ timber harvest can continue.
- The Commission appears to follow the assumption that consumptive patterns will not change and that it will be environmental flows that will suffer from climate change.

These issues are explored in more detail below.

### **No mention of either the precautionary principle or the conservation benefits of National Parks**

The report on the Directions for the National Reserves System states that “*The absence of scientific certainty is not a reason to postpone measures to establish protected areas that contribute to a comprehensive, adequate and representative national reserve system*”. The same principle is set down in the NSW Biodiversity Strategy and the National Forest Policy Statement.

The NRC must also take into account the results from biodiversity surveys undertaken over the past two years. These have repeatedly recorded species that have never been recorded in the River Red Gum Forests before, and have shown a different distribution for a number of species than previously thought.

Given the rapid nature of the NRC’s assessment of the forests, a very precautionary approach must be taken if it is to have any scientific soundness.

### **Conservation Benefits of National Parks**

Since the formal establishment of Government-led conservation initiatives, National Parks have been the flagship model for protecting natural areas, with some of the world’s first National Parks being established in Australia. Since this time the establishment and management of protected areas has evolved to be more systematic and consistent. In particular, the establishment of standards by the IUCN has led to increased consistency regarding the role of protected area types.

The Convention on Biological Diversity, to which Australia is a party, includes a requirement for parties to establish and appropriately manage “a system of protected

areas or areas where special measures need to be taken to conserve biological diversity” Article 8 (a) (Convention on Biological Diversity 1992).

Australia has further supported the concept that a well designed reserve system can form the basis of the nation’s conservation infrastructure, with the establishment of the Comprehensive, Adequate and Representative criteria for reserve selection, with national commitments being made accordingly (Commonwealth of Australia 1996; Gilligan 2006). The 2009 Consultation Draft Australia’s Strategy for the National Reserve System 2008-2030 recently described reserves as ‘the cornerstone’ of biodiversity conservation efforts.

It is worth noting that concurrent with the development of reservation targets, there has been increased recognition that to secure the effectiveness of these conservation investments, it is critically important to manage ecological processes across entire landscapes. This includes such measures as ensuring that activities on land adjacent to parks are compatible with park objectives, or more broadly through means such as ensuring adequate water supply to support ecological communities.

Thus, The Wilderness Society is strongly supportive of measures to involve a wide range of parties in cross tenure efforts to secure the ecological processes that underpin communities such as River Red Gum Forests. Nevertheless large and well managed National Parks provide one of the best opportunities to protect endangered communities. This is particularly the case where somewhat intact systems remain in public ownership, such as in State Forests, providing an unequalled opportunity to secure these areas for conservation purposes. We note that according to the Draft Assessment, only 4.1% of pre-European extent of all red gum forest types is currently reserved in NSW.

While the National Reserve System offers a range protected area types, not all of these are appropriate for addressing the threats facing the River Red Gum Forests, which are both of high ecological value and under threat. Due to their long history of exploitation, the forests in question would not qualify for the highest IUCN protected area categories. However, category II, National Park seems the most appropriate. These are protected areas “managed mainly for ecosystem protection and recreation” (IUCN 1994). It is noted that the effectiveness of a National Park is directly dependent on its management. Many National Parks in Australia are not managed consistently with IUCN standards and allow exploitative activities such as logging and mining (Watson et al 2009). It is clear that this type of management would not be acceptable for the Red Gum forests and thus we call for the areas to be managed as a National Park sensu IUCN definition, which would exclude activities such as logging and require adequate commitment to supporting ecological processes such as river flooding.

While the most persuasive reason for creating National Parks to protect River Red Gum communities is the long term ecological security of those areas, there are also potential financial benefits.

Given that the costs of ecosystem restoration are considerably higher than protection and management (Morton et al. 2002), there are great financial, as well as ecological savings to be made by acting before ecosystems enter a steep decline. Furthermore,

iconic natural areas underpin nature based tourism which is second only to mining in terms of contribution to Australia's GDP, while the financial value of carbon in undisturbed natural areas is only fully being realised (Mackey et al. 2008).

### **National Reserve Criteria**

The terms of reference to the assessment explicitly state that the Commission should have regard to nationally agreed criteria for a comprehensive, adequate and representative reserve system (JANIS criteria). These criteria are neither listed nor addressed in the report. In highly threatened landscapes, the full application of JANIS is even more crucial than elsewhere. While the assessment does take landscape scale considerations into account, this does not mean that baseline conservation requirements should be ignored.

While there are clear limitations in the unquestioning use of criteria designed for wet coastal forests, if modified for the Red Gum forest ecosystem the JANIS principles would nevertheless form a basis by which a minimum standard of reservation may be judged.

The Australian Terrestrial Biodiversity Assessment carried out by the National Land and Water Resource Audit (NLWRA) in 2002 found the Riverina bioregion to have:

- The highest measures of landscape stress in the country (including parameters such as habitat fragmentation, altered hydrology, dryland salinity, over-grazing and other land use pressures).
- The poorest levels of river catchment condition in the country.
- The highest numbers of threatened species.
- The highest proportions of threatened ecosystems.
- The widest ranges of threatening processes (e.g. pests and weeds, clearing, salinity, grazing pressure, changed fire regimes).
- The largest on-going decreases in ground bird species.
- The lowest proportion of ecosystems protected in formal national parks and reserves, and highest levels of risk of irreversible loss of those ecosystems.

The Preliminary Assessment recognises the extremely high levels of stress and decline of the forests and consequently, because it is subject to continuing and significant threatening processes such as inadequate water availability, River Red Gum must be considered to be a vulnerable ecosystem.

The region has been identified as one of the most highly threatened bioregions in the country by the National Land and Water Resources Audit (NHT 2002), with more than 80% of the subregion along the Murray River having been cleared of native vegetation since 1788 (NSW SOE 2006). It also has been recognised as one of the

highest priority bioregions for new conservation reserves in Australia by both the National Land and Water Resources Audit and the National Reserve System Directions report (NHT 2002, NRMCC 2005).

**The Wilderness Society sees the most appropriate means of working towards the reservation of the remaining cover, as required for vulnerable ecosystems, to be conversion of the entirety of the region's State Forests to National Park.**

Large new National Parks should form the basis, or 'skeleton', of a new reserve system. Other forms of reservation should complement, not replace, these. Indeed, the CSIRO (2008) research cited in the assessment acknowledges that challenges in reserve design do not "decrease the importance of protected areas in conservation" and that "the greater the area of protected habitat, the greater the likelihood of populations of species persisting." This report also finds of the NRS that "no other practical planning framework could reasonably be expected to provide better protection".

We also note that NSW has State CAR reserve targets. As such, current reserves in Victoria, which fall outside of the study area, should not affect the scale of National Parks created in NSW.

While it is recommended that reservation as National Parks form the basis of a conservation strategy, further steps will clearly be needed to protect the forests in the long term.

**The assessment shows an apparent pro-logging bias when discussing forestry matters. It implies that logging is good for forest health, but fails to provide any supporting data and disregards the significant bodies of work refuting this.**

The full report must recognise key threats, including, but not restricted to forestry. Measures to ensure that water regimes are suitable for the range of organisms present in the River Red Gum Forests must go far beyond the boundaries of any protected areas created.

The assessment does not refer to the 9 month investigation by the Federal Environment Department, which concluded that "...clear felling in patches destroys the continuity of the tree canopy and that is having a very significant impact on the ecological character... ...it is having a significant impact on the habitat of nationally listed threatened species." (Federal Hansard, 28 May 2009, Budget estimates, Environment, Communications and The Arts References Committee).

In its final report, VEAC "*identified that past and current uses and management are seriously affecting the long-term viability of the River Red Gum forests and wetlands*" (VEAC 2008) – this is also not referenced within the NRC assessment.

A previous scientific report prepared for the NSW Government on the impact of patch-clearfelling in northern NSW found that creation of gaps greater than 40m in diameter lead to the decline of hollow dependent fauna and declines in overall species richness (Attiwill *et al.* 1996). Within the River Red Gum Forests, patch clear fells are created that are up to 80m in diameter.

Fallen timber, removed for firewood, is also recognised as being crucial to biodiversity (Mac Nally *et al.* 2002). The removal of fallen timber for firewood impacts greatly on many species and is one of the major threatening processes for threatened carpet pythons and grey-crowned babbler (Davidson & Robinson 1992; Heard *et al.* 2004).

Logging has occurred in the forests for over 120 years and, along with other factors, has led to a serious decline in forest health. An effort to manage the forests for conservation now will be an ‘eleventh hour’ effort, given the extreme stress that the region faces from a lack of water.

**As such, this effort should be as comprehensive as possible and not have dual, but competing goals. As such, The Wilderness Society supports the removal of logging from the entirety of the State Forests of the region.**

We do not support the use of ‘ecological thinning’ in managing the forests. Use of this technique in River Red Gum Forests is not supported by any scientific data and should not be included within the recommendations made to government by the NRC.

**The assessment fails to identify refugia, corridors and linkages in the region.**

The forests represent a vital drought refuge for animal species as moist riverine forests in a predominantly semi-arid environment and, as such, considerations must therefore be placed on the forests' values as their role as ecological refugia.

This is inline with VEAC’s findings, which explicitly recognised that “[t]he relatively small and fragmented remaining area of these ecosystems is a last refuge for many of the 350 threatened and near threatened plants and animals”.

**The assessment does not explore the economic benefits flowing from the creation of National Parks.**

The NRC should also be aware of the economic benefits predicted by independent consultants Economists at Large in their report ‘Seeing the Value for the Trees’ (already provided).

The NRC should also examine the Victorian experience, where the creation of new National Parks has led to a net gain in employment for the region. Following the Victorian decision, while 34 people sought industry assistance, 40 direct jobs were created through new ranger and forest management positions. PriceWaterhouseCoopers have further predicted that 23 jobs will be created in the tourism sector as a result of the decision.

It is inappropriate to rely upon anecdotal evidence as to what people believe may happen with visitor numbers to Yanga National Park – the NRC should instead look to DECCW’s projected visitor numbers.

## **Water availability and ‘sustainable harvest’**

The Assessment states that “Since regulation of the Murray River, the natural hydrologic regime has been considerably altered. For example, under natural conditions, 70 percent of the forest would be flooded for an average of 2.9 months in 78 percent of years. Since regulation, this level of flooding is only experienced for an average of 1.3 months in 37 percent of years. Overall the flood return frequency and inundation duration to the major vegetation communities has been significantly reduced.”

In this context it is incongruous to make any claims that 'ecologically sustainable harvesting regimes' are possible. If the systems are in decline, as has been noted, any additional pressure is clearly not sustainable and can only speed the degradation of ecosystem condition.

## **Water allocation, climate change and consumptive use**

The Commission appears to follow the assumption that consumptive patterns will not change and that it will be environmental flows that will suffer from climate change. The current disparity between historical flows, to which the River Red Gum Forest ecosystems are adapted, and current flows is largely due to extraction, not global climate change. This change has led to severe decline in health of the River Red Gum Forest ecosystems. While it is prudent to be mindful of likely changes in precipitation with climate change, it is more relevant and urgent to address immediate issues of over-allocation of river flows and groundwater.

The Commission should not compromise its recommendations regarding the minimum flows that should be allocated to the forests and associated wetlands in anticipation of political resistance to this. These ecosystems have been poorly treated for over a century and now need strong advocates for their survival rather than being abandoned to a fate of dying due to their low priority in water allocation.

## **Recommendations:**

- That the forests are recognised as vulnerable ecosystems subject to key threatening processes and a target of reservation of 60% of their remaining NSW cover in National Parks is set. **The NRC should make the reservation of the entirety of the region’s State Forests in National Parks the core recommendation of their final report.**
- Nationally agreed conservation criteria need to be addressed and a plan put forward for achieving these.
- That, given the rapid nature of the assessment, a very precautionary approach is taken. Assumptions that downstream areas are in poor health and will not survive climate change are inappropriate and should be removed.
- The impacts of logging and other uses are properly assessed.

- The use of ‘ecological thinning’ should be excluded from future forest management.
- The positive conservation benefits of National Parks need to be addressed and ‘adaptive management’ over the broader region should complement, not replace, large protected areas (National Parks).
- The positive economic benefits of National Parks should be addressed.
- Refugia and linkages need to be mapped.
- Regionally significant species should be listed and analysed.
- Indigenous Traditional Owners need to be properly and fully consulted and negotiated with.

### **Conclusion:**

The preliminary assessment has highlighted the severe stress that these internationally significant areas are currently facing. The report paints a bleak future for these forests, predicting that vast areas may not survive if current watering regimes continue.

However, the report focuses on water and socio-economic issues, and while it produces some very important information on these matters, it largely overlooks issues of forest ecology and conservation significance. It is these latter two matters that have been consistently overlooked over the last 150 years and that most urgently need attention.

The full assessment must give an unbiased analysis of the impacts of logging and address nationally agreed conservation criteria. Due to the extreme water stress that the region is facing, the forests must be recognised as a threatened ecological class, sensu JANIS, and, as such, the entirety of the region’s State Forests must be reserved.

The creation of large new National Parks, in negotiation with the forests’ Indigenous Traditional Owners, represents the best manner to achieve conservation goals and must form the basis of reserve system design.