



Date: 30 June 2005

Victorian Environmental Assessment Council
6th Floor
8 Nicholson Street
East Melbourne Victoria 3002

Dear Sir/Madam,

IFA submission to VEAC Riverine Red Gum Forests Investigation.

Background:

The Institute of Foresters of Australia (IFA) is an advocate for environmentally sensitive and sustainable forest management in Australia, for the application of forest science, and for the active management of forests for the multiplicity of uses society ascribes to them.

Through its members, the IFA has considerable expertise related to forest management including; members' knowledge of and practical application of broad forest management planning for commercial and conservation purposes, fire protection, forest hydrology, salinity management and the broader integration of multiple disciplines in forested land management.

The IFA also has a long history of involvement and interest in the management of the river red gum forests of both Victoria and New South Wales for the full range of purposes including timber production and conservation. These forests are significant in their role in regional, national and international biodiversity conservation (especially for birds such as the superb parrot) and as part of an internationally recognised RAMSAR wetland. They also provide important ecosystem services such as flood mitigation, salinity mitigation, pest insect control, and are valuable for indigenous heritage, tourism and recreation.

However, in many parts of their range, these forests are under significant stress associated with three major factors: the change in natural flooding regimes; the long severe drought; and salinity impacts from surrounding agricultural land clearing. These stresses have contributed to forest health decline in many areas of the river red gum's distribution.

Recommendations and considerations:

In relation to the Investigation's terms of reference, the IFA wishes to make the following recommendation and to raise specific matters which should be considered during this study:

The VEAC study:

- ***investigates and recommends management actions to improve the health of the river red gum forests***
- ***comprehensively explores the importance of the river red gum forests from economic, social and biodiversity viewpoints and seeks appropriate professional input from recognised forest management experts.***

The IFA suggests the formation of an appropriate steering committee made up of qualified forest management experts to assist the review and decision-making processes, and receive input from a separate stakeholder group representing the main interest groups. The IFA would be able to provide a suitably qualified and experienced member to be part of that committee.

Furthermore, the IFA believes VEAC should consider the following:

1. *What was the natural structural and floristic composition of the river red gum forests and what changes to that composition have occurred post-European settlement*

It is considered that the structure and floristics of the river red gums forests resulting from past indigenous management have changed considerably in the past 200 years due to agricultural clearing, changed flood regimes, timber harvesting, salinity, cattle grazing and changes in native animal populations.

The VEAC study must identify all the key factors that have lead to these changes and their impact on forest health, including both the positive and negative impacts of human intervention in these forests. The IFA believes the VEAC study should recognise the changed structural condition and that human intervention is required to maintain forest biodiversity and health, regardless of tenure. It must also recognise the livelihoods of the indigenous and non-indigenous populations reliant upon these forests and how they can contribute to maintenance of a healthy forest ecosystem though the intimate knowledge and association gained through their work in the management of these forests.

It should also be recognised that two very distinct forest types are under consideration in this study: the floodplain forests and the river red gum woodlands –collectively the river red gum forests. The important differentiation is that the natural flooding regime required to sustain the floodplain ecosystem is very different to that of the woodland ecosystem. The change in natural flooding has considerable influence on health, distribution and structure of river red gum forests, and it should be acknowledged that they provide an important buffer for tri-State water management and flood mitigation programs.

2. *Identifying a structural composition that is ecologically appropriate given the changes from indigenous management and human influence on these forests.*

There is considerable variation in the natural structure of these forests - from woodlands to open floodplain forests. Different management approaches are required based on ecological understanding, to achieve particular management objectives. These forests are a construct of the interrelationship between events and activities such as natural fire, indigenous fire, native animal grazing and flooding. The changing nature of management following European settlement must be recognised, and that continual management input is required to maintain certain forest structures and floristics given that pre-European indigenous management is either unknown or may be impracticable to re-implement. Having said this, the IFA believes the long association of indigenous use and reliance upon these forests makes their continual involvement in river red gum forest management essential.

3. *The positive and negative influences of cattle grazing and beekeeping*

There is a long history of cattle grazing in many of these forests that forms a valuable part of the local heritage. This is an important management issue as due to its impact on

the structure and floristics of these forests. Its impacts on water, soil, flora, fauna, fire risk, cultural, recreational and landscape values should also be assessed.

The apicultural industry also relies on the river red gum forests with the honey being a highly desirable and marketable product. The interests of the apicultural industry must be assessed from an economic, social and biodiversity viewpoint.

4. The changed fire regime and impact on understorey and overstorey

River red gum is a fire-sensitive species. Fire would have been an important management tool for Aborigines to facilitate hunting, or produce a more open forest. While it may not be possible, nor necessarily appropriate to re-implement this fire regime, some consideration of appropriate fire management is important to prevent large-scale loss of these valuable forests, as well as to protect the forests and surrounding communities from wildfire. As an example, at certain sites accumulated fuel has been buried in the surface silts by repeated flooding. If ignited, this fuel can produce a situation not unlike peat fires in which the fire smoulders underground, ring-barks trees, and make extinguishing it extremely difficult.

5. The use of timber harvesting to manipulate forest structure and the adoption of appropriate silvicultural practices

Timber harvesting in the river red gum forests is described as either single-tree selection or group selection. Single-tree selection involves the removal of individual trees from a stand, while group selection comprises scattered fellings of either individual trees or small groups. This type of harvesting is made possible due to some unique characteristics of the species, and is the most visually appealing of those practised in Victoria due to the relatively unobtrusive nature of the disturbance.

It should be noted that river red gum forests form relatively even aged stands, or groups of trees, as a consequence of major flooding events coinciding with heavy seed years and suitable conditions for survival and growth of the regeneration. For this reason, the promotion of group selection, as implemented more widely in New South Wales, can be ecologically appropriate. Undertaken in conjunction with subsequent thinning, this silvicultural regime can promote growth on retained trees while still remaining consistent with the natural ecology of the forests. This form of gap harvesting, along with appropriate retention of habitat trees, provides the mosaic of age classes that is suitable for these forest types at a broader stand level.

Timber harvesting has been a part of the management of these forests for the past 150 years. Managed correctly, it can promote certain forest structures while providing employment in the rural community and producing highly valuable sawn timber for fine furniture, flooring and cabinet work as well as railway sleepers and garden timbers from parts of the tree unsuitable for sawlogs. With unsuitable residual material being utilised for firewood, this degree of utilisation is highly efficient. The value of this timber and its contribution to the furniture industry in Australia should not be understated. It is a product that cannot be grown in plantations. Continued good management will maintain both the value of the forests and their valuable financial contribution to State and regional economies.

It is recognised that some previous management, such as ring barking, has removed large veteran trees. This has impacted on forest structure; where it has been excessive, it can have negative consequences in terms of the number of habitat trees now remaining. Habitat must be catered for in both conservation and multiple use forests and it is considered that they can be retained in the landscape while maintaining both productive capacity and habitat value of the forests. The IFA asks that VEAC seek input into the best configurations of habitat tree retention in the landscape to cater for both production and conservation purposes.

The IFA has considerable experience in this area of managing both ecological and production requirements of forests and, if invited, will provide continued input to appropriate management regimes.

6. The tourism industry within and around the river red gum forests

The river red gum forests have substantial tourism value; especially for camping, walking, horse-riding, bird watching; and bike riding and form the base for fishing and boating activities. While these activities are concentrated near the water, they are also undertaken further within the forest and, just as importantly, in the surrounding region. The river red gum timber industry along the Murray River also supports a thriving tourism industry and is an integral part of it. The following examples illustrate this;

Echuca. The focus of activity is around the Port area along the Murray River. Paddle steamers and wharves are restored and maintained using traditional river red gum timbers and the lower-quality river red gum timber from harvesting operations fuels the vessels. A prominent wood-turning business is sited near the wharf and uses local timber. In addition, the gallery of Glen Gray Furniture is in the main street and displays breathtakingly beautiful furniture using local river red gum timber.

Koondrook/Barham. Arbuthnots sawmill at Koondrook has operated continuously since 1889 using local river red gum timber. The current owners of the mill have established an overhead viewing area and interpretation signage throughout the sawmill, which attracts upwards of 5000 visitors each year. In addition, they supply timber to a number of furniture makers in the town. These furniture showrooms are a significant attraction for many of the visitors to the area, with one receiving the Gannawarra Shire Tourism Award for business excellence in 2004 and runner-up in 2005.

The IFA encourages the assessment of the broader tourism potential of these forests in integrating their ecological values, indigenous heritage and European heritage (including the timber industry heritage) with that of the surrounding region.

7. The factors influencing forest health decline

Decline in forest health is the most serious issue facing the river red gum forests. This decline has been attributed to the prolonged drought, inappropriate flooding regimes and salinity from changed forest cover in adjacent agricultural land.

The IFA recommends as a matter of highest priority that the VEAC study investigate and provided recommendations that will lead to improved health of these forests. While VEAC recommendations cannot influence the drought, sound salinity management practices in the surrounding regions and the adoption of appropriate flooding regimes can have a profound influence on mitigating forest health decline within the river red gum ecosystems. We seek continued input into providing regional solutions to these complex problems through members who have an intimate understanding of these specific areas.

Some of our members have expressed their concerns that the decline in forest health is being used as a basis to seek cessation of timber harvesting in these forests. The IFA believes that simply preserving the river red gum forests will not contribute to improving forest health as the other factors of salinity, drought and flooding are tenure blind. Certain management practices, properly applied, can in fact assist in improving forest health. These practices include:

- a) the removal of certain stems by thinning to promote growth on the retained trees and produce larger trees for timber or wildlife habitat benefits
- b) integration of timber production requirements and certain conservation outcomes to benefit both the local community, forest health and forest conservation

c) thinning of the more dense regrowth in some river red gum forests has been shown to reduce the severity of the gum leaf skeletonizer outbreaks. It is important to again consider management objectives and the best way to achieve these objectives

d) removal of stressed and dying trees in forests that have been impacted by external influences such as salinity or inappropriate flooding and the additional impacts of the current severe drought, and thereby promoting the health of the remaining trees.

In implementing any silvicultural technique it is important to identify the management objectives related to achievement of the desired social, economic and environmental outcomes, and then to consider the most appropriate management regime to achieve those objectives. The IFA has considerable skill and experience in this area.

8. The appropriate management regimes for parks or reserves

It is acknowledged that there is pressure for some areas to be made parks or reserves; but the basis for declaring any new parks and reserves must be transparent. Further, the declaration of a park without sufficient resources for proper management will have dubious ecological and most likely very limited or negative economic benefits.

The greatest value this study can have is through the articulation of suitable management regimes for both park and State Forest through consultation with relevant qualified experts in forest management, the local indigenous community and the wider community that is reliant on products or experiences (eg recreation) and services from these forests. VEAC should recognise and consider adopting the detailed management regimes and policies being implemented through the relevant Forest Management Plans.

Consideration of the appropriate recommendations will require strong local input from the indigenous and non-indigenous community in recognition that it is these people who work and manage the forests that often have the greatest vested interest in their long-term sustainable management.

Yours sincerely



Ian Barnes
President
Institute of Foresters of Australia

With the input from members of the IFA and endorsement of:

Ross Penny
Chair, Victoria Division

Ron Wilson
Chair, NSW Division

Gerald Harvey
Chair, SA Division