Nomination of the Forest Red Gum Grassy Woodland of Gippsland, Victoria to be listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)

Generally accepted name (if any) of the ecological community:

The generally accepted name of the ecological community to be listed is Forest Red Gum Grassy Woodland of Gippsland, Victoria (the community).

Being a grassy woodland of Gippsland, Victoria, the community may also be referred to as "Forest Red Gum Grassy Woodland". Such a community is still distinct from the "Grassy Woodland" described by Gullen *et al* (1985), as it is usually dominated by *Eucalyptus tereticornis* (Forest Red Gum), with co-dominant *Eucalyptus polyanthemos* (Red Box). The latter consists of *Eucalyptus viminalis, E. radiata* and *E. Muelleriana*, and often has dense *Pteridium esculentum* (Austral Bracken).

This community is separate from the community nomination already pending under EPBC Act for 'Forest Red Gum (*E. tereticornis*) Dry Grass Forest' in the South East Forests region of NSW. These communities are dominated by Forest Red Gum and *Angophora floribund*a (Rough-barked Apple)

A description of the ecological community that distinguishes it from any other ecological community, including:

(i) Its biological and non-biological components:

Biological components
The forest here called "Forest Red Gum Grassy Woodland" is usually dominated by *E. tereticornis* (Forest Red Gum), often with co-dominant *E. polyanthemos* (Red Box). *Eucalyptus bosistoana* (Coast Grey Box) occurs towards the coast and *E. bridgesiana* (But But) is often co-dominant on sandy sites. Beneath the eucalypts, there are often scattered small trees of *Acacia implexa* (Lightwood), and groves of *Allocasuarina littoralis* (Black She-oak) occur in some places. The herbaceous understorey is co-dominated by a variety of species. Dominant grasses include *Microlaena stipoides* and *Danthonia racemosa*, often with *Themeda triandra* and/or *Stipa rudis*. *Gahnia radula* is common in some sites. Dominant forbs include *Dichondra repens* (Kidney-weed) and *Hydrocotyle laxiflora* (Stinking Pennywort), plus an array of perennial and annual species.

Non-biological components
The community usually occurs on loamy-sand and loam topsoils, often with gravelly sub-soils, occasionally extending to clay and shallow sandy soils ([redacted] unpubl. data).

(ii) The processes by which those components interact (if known); and
Changes in soil texture are accompanied by minor changes in floristic composition.

(iii) Its known natural distribution, including the bioregions where it occurs

Current distribution

The community occurs in the Munro Plains geomorphic region of central Gippsland (Land Conservation Council Victoria 1982, Map 3). This region stretches from Traralgon in the west to Johnsonville in the east. It occupies about 200 square kilometres, bounded to the north by the foothills of the Great Divide and to the south by the Gippsland Lakes and sandhills of the Holey Plains (Land Conservation Council Victoria, 1982; Aldrick *et al*, 1988).

As mentioned above, only 650 - 700 hectares of the community exists today. The community occurs primarily on public land on a small number of sites, not all of which are managed primarily for conservation purposes (SAC, 1992).

Known remnants of intact community are located on public land at the following locations:

Moormurng Flora and Fauna Reserve	400 ha
Briagalong Forest Reserve	95 ha
Stratford Highway Park	50 ha
Knob Recreation Reserve	45 ha
Providence Ponds Flora and Fauna Reserve	30 ha*
Blond Bay Wildlife Reserve	5 ha
Gippsland Lakes Coastal Park	small stand
Various roadsides and roadside reserves	unclear*
TOTAL	> 625 ha

* Somewhat degraded.

Please note that the areas defined here are less than the areas shown below that have been described by the SAC (1992) because these are more indicative of the continuing decrease in geographic distribution the community is experiencing (from recovery fact sheet post SAC acceptance).

Source: Victorian Conservation Trust

In addition to these reserves a number of small - and somewhat degraded - remnants occur along stream banks and Bushland Reserves throughout the region. Virtually none of these areas are actively managed for conservation purposes, however, many are used for recreational activities or are grazed by stock.

Past distribution

The community is estimated to have occupied about 1200 square kilometres (120 000 hectares) prior to European settlement.

Category for which the ecological community is nominated under the EPBC Act:

This community is being nominated as Critically Endangered

Justification for this nomination

(1) Very severe decline in geographic distribution

The community is estimated to have occupied about 1200 square kilometres (120 000 hectares) prior to European settlement. About 99.5 % of this region has, however, been modified for agricultural reasons. This has led to a severe decrease in geographic distribution of the community, as it is estimated that only 650 - 700 hectares of the community remain today.

The community is listed as threatened under the *Flora and Fauna Guarantee Act 1988*. In their Final Determination the Victorian Scientific Advisory Committee (SAC) (1992) stated:

> *"..the community is very rare in terms of the local area it covers or it has a very restricted distribution or it has been recorded from only a few localities".*

(2) Very restricted geographic distribution coupled with demonstrable threat:

Having accepted that the Forest Red Gum community was in a demonstrable state of decline and occupying a restricted distribution (above), it was also recognised by the Victorian SAC (1992) that future threats likely to lead to the extinction of the community are:

- Degradation by stock grazing (particularly in Streamside and Bushland Reserves);
- Degradation by recreational use (at Knob Recreation Reserve, Briagolong Recreation Reserve, Lindenow South Township Reserve, etc);
- Degradation by weed invasion (e.g Knob Recreation Reserve, and innumerable small remnants);
- Degradation by eucalypt dieback on many roadsides and in some small remnants; and
- Increasing isolation of remnants as roadside corridors are depleted by road-widening, die-back and weed invasion.

The SAC (1992) also concluded that the "*rarity of the community made it susceptible to environmental catastrophes*".

Summary
Due to the decline in geographic distribution and current threats, this community fulfils the criteria to be listed as critically endangered under the EPBC Act.

Furthermore, within the Gippsland grassy woodlands that contain the Forest Red Gum community many threatened species of plants and animals have, at one time, existed there. The SAC (1992) recognises that of these rare or threatened species such as *Caladenia reticulata, Caladenia patersonii sens. lat., Desmodium varians, Echinopogon caespitosus, Eragrostis leptostachya, Eragrostis trachycarpa* and *Polygala japonica* rely on the habitat afforded by the community.

References to any scientific literature that supports the other information given in the nomination:

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Frood, D. and Calder, M. (1987), *Nature Conservation in Victoria*. Study Report Volume 1. Victorian National Parks Association, Melbourne.

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[redacted] (1991). Nomination to de-list a species from Schedule 2 of the *Flora and Fauna Guarantee Act* 1988. *Eragrostis trachycarpa* (Benth.) Domin, Rough-grain Love-grass". (Unpublished nomination).

[redacted] (1992) Nomination of a Community for Listing under the Flora and Fauna Guarantee Act, 1988: Forest Red Gum Grassy Woodland.