

Goolengook Forest Investigation

Information Booklet
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Goolengook Forest Investigation – Information Booklet

The purpose of this information booklet is to provide background information on the Goolengook Forest Management Block. This information will assist individuals and groups to develop submissions to the Victorian Environmental Assessment Council (VEAC) investigation into future land use. VEAC has been asked to examine the potential for all or part of the Goolengook Forest Management Block to be added to the Errinundra National Park. VEAC is now calling for submissions from the public.

The Terms of Reference for the Investigation are shown in full on page 16 of this booklet and how to make a submission is shown on page 15.

What is VEAC?

The Victorian Environmental Assessment Council is an independent body that makes land use recommendations to the Victorian Government via the Minister for the Environment. It is established under the *Victorian Environmental Assessment Council Act 2001*. It consists of five council members who consider studies referred to it by the minister. The current members of VEAC are Mr Duncan Malcolm (chairman), Ms Jill McFarlane, Associate Professor David Mercer, Professor Barry Hart and Ms Jan Macpherson. A brief biography of the Council members and more information on VEAC's role is available at the website www.veac.vic.gov.au. The Goolengook project is supported by two full-time project officers with assistance from a number of other specialist staff.

Where is Goolengook?

The Goolengook Forest Management Block (FMB) is an area of almost 9,000 ha within the East Gippsland Forest Management Area. It is situated in the headwaters of the Goolengook River about 30 kilometres north-east of Orbost. The block sits to the south-east of Mt Ellery in the north and the junction of the Goolengook and Arte Rivers to the south. Elevations range from 200m to 800m above sea level. Rainfall is between 1000 and 1400 mm per year. The entire block is forested public land.



Land Use in the Goolengook Forest Management Block

History of land use decisions

Year	Land use decisions
1977	The Land Conservation Council (LCC) recommended that 2,900 ha in the upper reaches of the Goolengook River remain as uncommitted land. The LCC recommended that the whole of the land in this category be withheld from logging or new roading until 1985, when it was expected that the use of this area would be reviewed.
1986	The LCC recommended that the headwaters of the Goolengook River be included in the Errinundra National Park with the remainder to be designated State Forest.
1988	The headwaters of the Goolengook River reserved within a larger Errinundra National Park under the <i>National Parks Act 1975</i> .
1991	A further addition of 500 ha of National Estate-listed forest made to the Errinundra National Park.
1991	The LCC recommended the Goolengook and Arte Rivers become Heritage River Areas. The Heritage River Area extends to 200 m from the bank in the Errinundra National Park, and 100 m from the bank in State Forest.
1995	The East Gippsland Forest Management Plan identified 1,800 ha of State Forest in Goolengook FMB to be managed as Special Protection Zones (no timber harvesting) with further areas to be managed as Special Management Zones (restricted harvesting) and other areas excluded from harvesting under the Code of Forest Practice.
1995	A Special Management Area for the Long-footed Potoroo designated by the Department of Sustainability and Environment (DSE) over much of the Little Goolengook catchment area.
1997	The East Gippsland Regional Forest Agreement (RFA) signed between the State and Commonwealth governments resulted in the creation of the Goolengook Flora & Fauna Reserve over an existing State Forest Special Protection Zone.
1998	Another Special Management Area for the Long-footed Potoroo designated by DSE to the northeast of the Goolengook Flora & Fauna Reserve.
2002 (October)	Victorian Government placed a moratorium on logging in the Goolengook Forest Management Block pending an investigation by VEAC.
2005 (December)	VEAC received the final Terms of Reference for the study.

Current Land Use

The Goolengook FMB is currently used for a number of different activities. The Errinundra National Park and Goolengook Flora & Fauna Reserve are reserved and managed primarily for nature conservation. The remainder of the FMB is State Forest which is zoned for a range of purposes. These include Special Protection Zones (SPZs; where timber harvesting is excluded to protect defined ecological features), Special Management Zones (SMZs; where timber harvesting can occur with special consideration for particular values, e.g. large forest owls, Slender Tree-ferns, etc), Code of Forest Practice (CFP)

exclusion areas (where timber harvesting can not occur due to streamside protection buffers, steep slopes etc), and General Management Zones (GMZs) which allow timber harvesting.

Parts of the Goolengook and Arte Rivers are covered by the Bemm, Errinundra, Goolengook and Arte Heritage River Area. This area protects the natural, scenic, cultural heritage, and recreational values of the river corridor (100m either side of the bank in State Forest and 200 m either side of the bank in the National Park). Timber harvesting is not permitted within the Heritage River Area.



Special Management Areas (SMAs) for the Long-footed Potoroo occur over State Forest and the Goolengook Flora & Fauna Reserve. Timber harvesting, new roads or new recreation sites are not permitted in SMAs and fuel reduction burning is discouraged¹.

The area of the various land uses within the Goolengook FMB is presented in Table 1 and the area of land uses in the East Gippsland Forest Management Area (FMA) is presented in Table 2. The activities allowed in these areas are presented in Table 3. The distribution of land use categories in the Goolengook FMB and in the East Gippsland FMA is shown in Maps 1 and 2, respectively.

Table 1. Area of each of land use category in Goolengook FMB

Area (ha)	% of FMB	Land use category
2,225	24.9	Errinundra National Park
1,291	14.5	Goolengook Flora & Fauna Reserve
517	5.8	State Forest - Special Protection Zone
525	5.9	State Forest - Special Management Zone
987	11.0	State Forest - Code of Forest Practice exclusions (estimated area)
3,044	34.1	State Forest - General Management Zone
340	3.8	State Forest - General Management Zone covered by a Special Management Area for the Long-footed Potoroo
(478)	(5.4*)	Bemm, Goolengook, Arte and Errinundra Heritage River Area, of which 139 ha occurs within the Errinundra National Park and 339 ha within State Forest (Special Protection Zone)
8,929	100%	TOTAL

* The Heritage River exists as an 'overlay' of National Park and State Forest Special Protection Zone.

Table 2. Area of each land use category in the East Gippsland FMA

Area (ha)	% of FMA	Land use category
389,699	36.8	National/State/Coastal Parks
14,851	1.4	Nature Conservation Reserves
16,779	1.6	Natural Features Reserves
768	0.1	Regional Parks
118,940	11.2	State Forest - Special Protection Zone
34,764	3.3	State Forest - Special Management Zone
70,480	6.7	State Forest - Code of Forest Practice exclusions (estimated area)
402,838	38.1	State Forest - General Management Zone
2,680	0.2	State Forest - General Management Zone covered by a Special Management Area for the Long-footed Potoroo
6,321	0.6	Other Public Land*
1,058,120	100	TOTAL

*Other Public Land includes Education Areas, Coastal Reserves, Historic Reserves, Mineral Reserves, Recreation Areas, Services & Utilities, Township Land, Water Production Areas and uncategorised public land

¹ As outlined in the Long-footed Potoroo (*Potorous longipes*) Flora and Fauna Guarantee Action Statement #58.

Land Use in the Goolengook Forest Management Block

Table 3. Activities currently permissible in land use categories within the Goolengook FMB

Activity	National Park	Flora & Fauna Reserve	Heritage River	State Forest – SPZ	State Forest – SMZ	State Forest – CFP	State Forest – GMZ	State Forest – GMZ (Long-footed Potoroo SMA)
Recreation and tourism activities								
Nature Observation	✓	✓	✓	✓	✓	✓	✓	✓
Picnicking	✓	✓	✓	✓	✓	✓	✓	✓
Camping	✓	✓	✓	✓	✓	✓	✓	✓
Bushwalking or short walks	✓	✓	✓	✓	✓	✓	✓	✓
Car touring, four-wheel driving and trail bike riding	✓	✓	✓	✓	✓	✓	✓	✓
Dogs	X	X	✓	✓	✓	✓	✓	✓
Orienteering and rogaining	✓	✓	✓	✓	✓	✓	✓	✓
Hunting	X	X	✓	✓	✓	✓	✓	✓
Horse riding	X	X	✓	✓	✓	✓	✓	✓
Fishing	✓	✓	✓	✓	✓	✓	✓	✓
Resource Industries								
Hardwood production	X	X	X	X	✓	X	✓	X
Firewood	X	X	X	X	✓	X	✓	X
Mining	X	✓	✓	✓	✓	✓	✓	✓
Other uses								
Environmental Education	✓	✓	✓	✓	✓	✓	✓	✓
Approved research	✓	✓	✓	✓	✓	✓	✓	✓
Water production	✓	✓	✓	✓	✓	✓	✓	✓
Grazing	X	X	X	✓	✓	✓	✓	✓
Utilities/ infrastructure	X	X	X	✓	✓	✓	✓	✓

✓ - permitted, X - not permitted. This table is a summary only – it indicates the land use categories in which activities are generally permitted, and is not intended to imply that universal or unrestricted access is necessarily available. There are exceptions and conditions, including allowance for land manager's discretion, in relation to many activities.

Moratorium on Logging

In October 2002 the Victorian Government announced a moratorium on logging in the Goolengook FMB. This followed a long running blockade of the area and community campaigns. The Government has indicated the moratorium will stay in place until the VEAC investigation is completed.

Historic Use

Timber harvesting in the Goolengook FMB began in earnest in the mid 1970's. It continued throughout the 1980's, when most of the harvesting occurred, and 1990's. The last coupes were harvested in 2002 just prior to the moratorium on logging being introduced. There is evidence of some earlier harvesting within the block off Greens Road. Refer to Map 3 for logging history in the Block.



Timber Values

Area Currently Available for Timber Harvesting

Approximately one-third of the total block area of 9,000 ha would be available for harvesting given the current land use². This excludes areas in Errinundra National Park, Goolengook Flora & Fauna Reserve, Goolengook Heritage River, Special Management Areas for Long-footed Potoroo, Special Protection Zones and Code of Forest Practice exclusion areas. Of the 3,000 ha potentially available, 710 ha is regrowth from past logging.

Volumes

The forests available for harvesting within Goolengook are estimated to contain 92,000 cubic metres (gross) of D+ sawlog in mature forest stands³.

Sustainable Harvest Level

The current harvest level for East Gippsland FMA has been set to 121,000 cubic metres (net) per year pending a review by DSE using new Statewide Forest Resource Inventory (SFRI) data⁴. This level is based on harvesting the existing mature and older regrowth stands over the next 30-35 years while the large areas of younger regrowth grow to merchantable size. The current area of mature forest that is available for harvesting must be spread across the period from now to 2035. The removal of 92,000 cubic metres (gross) of sawlogs from the East Gippsland FMA available resource (if the entire block were reserved within the National Park) would reduce the sustainable sawlog harvest level during this 30-35 year period by approximately 3%. In the longer term it would reduce sustainable yield by approximately 1% or less as the sustainable harvest level is predicted to increase after this period.

Contribution to Economic Activity in East Gippsland

The forest and forest products industry gross turnover in the East Gippsland local government area (LGA) is \$123 million per annum (MBAC Consulting 2004). The East Gippsland LGA area covers all of the East Gippsland Forest Management Area, most of the Tambo FMA and a small portion of Wodonga FMA⁵. This would suggest the figure for the East Gippsland FMA would be approximately \$77 million per annum.

VEAC will be commissioning a socio-economic assessment of the existing industry and the impact of its recommendations once they have been developed.



² Approximately 3,000 ha of mountain mixed species forests within the Goolengook Forest Management Block.

³ D+ is the total of A, B, C & D grade sawlogs. These are all sawlogs from which sawn timber is the primary product. DSE calculations as of April 2006 are based on new forest inventory data and current forest zoning.

⁴ The Estimate of Sawlog Resources (ESR) economically accessible resource for the East Gippsland Forest Management Area (FMA) is 143,000 cubic metres per year. The Expert Data Reference Group rated the East Gippsland data as inadequate for long term timber resource commitments. The Expert Data Reference Group is an external panel of experts established by DSE to review quality of resource data and modelling as part of the *Our Forests, Our Future* project.

⁵ The Estimate of Sustainable Resource level for Tambo FMA is 71,900 cubic metres per year (NRE 2002b)

Ecological Values

Ecological Vegetation Classes

Native vegetation in Victoria has been classified according to Ecological Vegetation Classes (EVCs). An EVC consists of one or a number of floristic communities that are generally associated with a recognisable environmental niche, and which can be characterised by a number of their adaptive responses to ecological processes that operate at the landscape scale. Each ecological vegetation class is described through a combination of its floristic, life-form and reproductive strategies, and through an association with particular environmental attributes (such as aspect, elevation, geology

and soils, landform, rainfall, salinity and climatic zones). Two vegetation communities occurring in Goolengook are listed as threatened under the *Flora and Fauna Guarantee Act 1988* - 'Cool Temperate Rainforest Community' and 'Warm Temperate Rainforest (East Gippsland Alluvial Terraces) Community'.

The Goolengook FMB contains twelve different EVCs across two bioregions (East Gippsland Uplands and Highlands – Far East). These EVCs are described in Table 4 and the areas of each EVC in the study area are given in Table 5. Map 4 shows the distribution of EVCs within Goolengook.

Table 4. Descriptions of Ecological Vegetation Classes occurring in the Goolengook FMB

EVC name	Description
Cool Temperate Rainforest	Closed non-eucalypt forest to 25 m tall. Occurs in high rainfall areas above 700 m in elevation and protected from fire within Wet Forest. The understorey is characterised by tree ferns and a rich epiphytic flora (i.e. plants that grow on other plants). The ground layer is dominated by a diversity of ground ferns.
Cool Temperate Mixed Forest ¹	Mixed forest comprises a closed (>70 per cent projected foliage cover) stratum of mainly rainforest canopy species beneath a eucalypt canopy which exceeds 10 per cent crown cover. The eucalypt canopy may be of any age.
Cool/Warm Temperate Rainforest Overlap ²	Closed forest to 20m tall restricted to deeply incised river valleys of moderate gradient and associated steep gullies in rugged mountain country on a variety of southerly aspects at an elevation of 650 to 750 m. Dominated by a range of non-eucalypt canopy species above an understorey of smaller trees and shrubs and usually visually dominated by ferns and climbers.
Damp Forest	Grows on a wide range of geologies on well-developed soils on a variety of aspects, from sea level to montane elevations. Dominated by a tall eucalypt tree layer to 30 m tall over a medium to tall dense shrub layer of broadleaved species typical of wet forest mixed with elements from dry forest types. The ground layer includes herbs and grasses as well as a variety of moisture-dependent ferns including occasional tree ferns.
Gallery Rainforest ³	Closed forest to 20 m tall occurring along the fringes of substantial streams that periodically flood. The understorey comprises of a number of willow shrubs that can withstand flooding while mature woody vines are generally absent.
Lowland Forest	Eucalypt forest to 25 m tall on relatively fertile, moderately well-drained soils on ridges in areas of relatively high rainfall. Characterised by the diversity of life forms and species in the understorey including a range of shrubs, grasses and herbs.
Montane Damp Forest	Grows on a wide range of geologies on well-developed generally colluvial soils on a variety of aspects at montane elevations. Dominated by a tall eucalypt tree layer to 30 m tall over a medium to tall dense shrub layer of broad-leaved species typical of wet forest mixed with elements from dry forest types. The ground layer includes herbs and grasses as well as a variety of moisture-dependent ferns.



Table 4. Continued

EVC name	Description
Montane Wet Forest	Grows on the most sheltered wet sites such as gully heads and south-facing slopes at montane elevations in high rainfall areas. Soils are deep, fertile, well-drained and structureless and although well-drained, may remain saturated for long periods. The overstorey forms a tall open eucalypt forest to 30 m tall over a secondary tree layer with occasional tall shrubs which provide shade and protection for a fern-rich ground layer. Scattered herbs occur in gaps in the ground layer.
Riparian Forest	A tall forest along river banks and associated alluvial terraces with occasional occurrences on soaks and springs in the heads of gullies leading into creeks and rivers. The soil is fertile alluvium, regularly inundated and permanently moist. Dominated by tall eucalypts to 30 m tall, but also has an open to sparse secondary tree layer of wattles and scattered patches of shrubs (frequently disrupted by floods and less often wildfire), ferns, grasses and herbs.
Shrubby Dry Forest	Occurs on a range of geologies on exposed aspects such as ridge-lines and medium to steep upper slopes, often in high rainfall areas and on shallow infertile soils. Open forest to 25 m tall characterised by the diversity and variability of the eucalypts. The understorey often lacks a secondary tree layer but contains a well-developed medium to low shrub layer. The ground layer is often very sparse with tussock-forming grasses or grass-like plants being the dominant life form.
Warm Temperate Rainforest	Closed forest to 20m tall occurring along sheltered gullies at elevations below 700 m. Dominated by a range of non-eucalypt canopy species above an understorey of smaller trees and shrubs and usually visually dominated by ferns and climbers.
Wet Forest	Grows on fertile, well-drained loamy soils on a range of geologies and elevation levels. It is largely restricted to protected sites in gullies and on southern aspects of hills and mountains where rainfall is high and cloud cover at ground level is frequent. Characterised by a tall eucalypt overstorey to 50 m tall with scattered understorey trees over a tall broad-leaved shrubby understorey and a moist, shaded, fern-rich ground layer that is usually dominated by tree-ferns.

Note – all descriptions sourced from DSE (2005a) except for Cool Temperate Mixed Forest, which is sourced from DSE (2006)

1. Not currently mapped in DSE Corporate Geospatial Database as occurring in Forest Block but identified by Picone (2004).
2. Not currently mapped in DSE Corporate Geospatial Database as occurring in Forest Block, but identified by Lobert *et al.* (1990) and Picone (2004).
3. Not currently mapped in DSE Corporate Geospatial Database as occurring in Forest Block, but identified by Picone (2004) and David Cameron (pers. comm. 2006 in an analysis of data collected by Lobert *et al.* (1990)).



Ecological Values

Table 5. Area (ha) of each Ecological Vegetation Class within various land categories in the Goolengook Forest Block

Ecological Vegetation Class	Goolengook FMB Total	National Park	Flora & Fauna Reserve	State Forest				
				Special Protection Zone	Special Management Zone	Code of Forest Practice	General Management Zone (outside of Potoroo SMAs)	General Management Zone (within Potoroo Special Management Area)
Lowland Forest	126			2		19	105	
Riparian Forest	75			58	2	2	13	
Shrubby Dry Forest	1,069		62	28	136	94	743	6
Damp Forest	2,526	83	210	156	344	387	1,288	58
Wet Forest	4,611	2,015	878	198	43	306	895	276
Cool Temperate Rainforest	168	41	104	2		21		
Warm Temperate Rainforest	317	49	37	73		158		
Montane Damp Forest	3	3						
Montane Wet Forest	34	34						
Total	8,929	2,225	1,291	517	525	987	3,044	340

All areas rounded to nearest hectare. Data sourced from the Ecological Vegetation Class layer in the DSE Corporate Geospatial Data Library. Mapping of EVCs in East Gippsland has been undertaken at 1:100,000. Cool Temperate Mixed Forest, Cool/Warm Temperate Rainforest Overlap and Gallery Rainforest have not yet been mapped in the Corporate Geospatial Data Library.

Old-growth Forest

According to the Terms of Reference old-growth forest is defined as “ecologically mature forest where the effects of disturbances are now negligible” (JANIS 1997)⁶. Old-growth forests are considered to be ecologically important as some plants and animals are largely restricted to the old-growth stages or are dependent on old-growth forest for some of their habitat requirements. Some old-growth forests can

also be significant for the high-value timber they contain. Within Victoria maps of old-growth forests are produced from modelling using a combination of aerial photographic interpretation of overstorey crowns and disturbance records along with sample ground checking. Within the Goolengook FMB, 3,774 ha of old-growth forest has been modelled. The amount of old-growth forest in the various land use categories is presented in Table 6. Map 5 shows the distribution of modelled old-growth forest within the block.

⁶ For further details on the interpretation of the definition ‘old-growth forests’ see the *Nationally Agreed Criteria for the Establishment of a Comprehensive, Adequate and Representative Reserve System for Forests in Australia* available at http://www.daff.gov.au/corporate_docs/publications/pdf/forestry/rfa/national/nat_nac.pdf



Table 6. Area (ha) of Old-growth forest for each Ecological Vegetation Class within the various land categories in the Goolengook FMB

Ecological Vegetation Class	Goolengook FMB Total	National Park	Flora & Fauna Reserve	State Forest				
				Special Protection Zone	Special Management Zone	Code of Forest Practice	General Management Zone (outside of Potoroo Special Management Area)	General Management Zone (within Potoroo Special Management Area)
Lowland Forest	18					9	9	
Riparian Forest	12			12	<1			
Shrubby Dry Forest	222		58	<1		15	143	6
Damp Forest	791	46	179	58	123	106	277	2
Wet Forest	2,623	1,238	793	80	11	122	325	54
Cool Temperate Rainforest	49	9	37			3		
Warm Temperate Rainforest	33	6	15	2		10		
Montane Damp Forest	1	1						
Montane Wet Forest	25	25						
Total	3,774	1,325	1,082	152	134	265	754	62

All areas rounded to nearest hectare. Data sourced from the Ecological Vegetation Class and Old-growth Forest layers in the DSE Corporate Geospatial Data Library. Mapping of EVCs and Old-growth in East Gippsland has been undertaken at a scale of 1:100,000.

Sites of Significance for Rainforest

Sites of Significance for Rainforest have been identified by DSE throughout Victoria. They are defined geographic areas which are considered of Regional, State or National significance based on their ecological integrity and viability, richness and diversity, rarity, representation of type, and scientific and

education value (Cameron unpub 1990, Peel 1999). Within the Goolengook FMB three Sites of Significance for Rainforest have been identified – ‘Little Goolengook’ (national significance), ‘Upper Goolengook’ (state significance) and ‘Goolengook River’ (regional significance) (refer to Map 6).

Ecological Values

Rare or Threatened Species

The Goolengook FMB provides habitat for a number of rare or threatened species of flora and fauna⁷. Important populations of the vulnerable Slender Tree-fern and the natural hybrid, the Skirted Tree-fern, occur within the Block. Goolengook also contains important habitat for the endangered Long-footed

Potoroo, while Powerful Owls, Sooty Owls and the Spot-tailed Quoll are resident within the Block.

Tables 7 and 8 list the rare and threatened flora and fauna species that have been recorded within the Block, their threat status and the land use categories in which they have been recorded. Maps 7 and 8 show the distribution of records within the Goolengook FMB.

Table 7. Rare and Threatened Flora recorded within the Goolengook FMB

Species	Victorian Status	FFG Status	Tenure in which recorded					
			National Park	Flora & Fauna Reserve	State Forest SPZ	State Forest SMZ	State Forest GMZ	State Forest CFP
Blackfellow's Hemp <i>Commersonia</i> sp. aff. <i>fraseri</i>	v							
Errinundra Shining Gum <i>Eucalyptus denticulata</i>	r		X		X			
Forest Geebung <i>Persoonia silvatica</i>	r		X		X			
Hybrid Pittosporum <i>Pittosporum bicolor</i> X <i>undulatum</i>	r							
Long Clubmoss <i>Huperzia varia</i>	v							X
Oval Fork-fern <i>Tmesipteris ovata</i>	r		X		X			
Trailing Guinea-flower <i>Hibbertia dentata</i>	r				X		X	
Skirted Tree-fern <i>Cyathea</i> X <i>marcescens</i>	v		X		X	X		
Slender Tree-fern <i>Cyathea cunninghamii</i>	v	L	X	X	X	X	X	
Small Fork-fern <i>Tmesipteris parva</i>	r		X		X	X	X	X
Soft Ledge-grass <i>Poa hothamensis</i> var. <i>parviflora</i>	r				X			
River Hook-sedge <i>Uncinia nemoralis</i>	r			X	X			X
Violet Westringia <i>Westringia glabra</i>	r		X					

Source: DSE (2005b). Abbreviations: Victorian status - v (vulnerable), r (rare). FFG - L (listed as threatened under the Victorian *Flora and Fauna Guarantee Act 1988*). X - Recorded in tenure. Note none of the species are listed as threatened under the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999*. Blackfellow's Hemp and Hybrid Pittosporum are known to occur within the block but are yet to be mapped.

⁷ As defined under *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth), *Flora and Fauna Guarantee Act 1988* (Victoria) and Advisory Lists by DSE (2003, 2005b).



Table 8. Threatened Fauna recorded within the Goolengook FMB

Species name	Vic Status	EPBC status	FFG Status	Tenure in which recorded					
				National Park	Flora & Fauna Reserve	State Forest SPZ	State Forest SMZ	State Forest GMZ	State Forest CFP
Brown Treecreeper <i>Climacteris picumnus</i>	n								X
Common Bent-wing Bat (eastern subspecies) <i>Miniopterus schreibersii oceanensis</i>	v		L			X		X	
Large Brown Tree Frog <i>Litoria littlejohni</i>	d	V	L	X				X	
Long-footed Potoroo <i>Potorous longipes</i>	e	E	L	X	X			X	X
Powerful Owl <i>Ninox strenua</i>	v		L			X		X	
Sooty Owl <i>Tyto tenebricosa tenebricosa</i>	v		L		X	X		X	
Spot-tailed Quoll <i>Dasyurus maculatus maculatus</i>	e	V	L	X				X	
Spotted Quail-thrush <i>Cinlosoma punctatum</i>	n				X		X	X	
Tree Goanna <i>Varanus varius</i>	v					X		X	

Source: DSE (2003). Abbreviations: Victorian status - **e** (endangered), **v** (vulnerable), **n** (near threatened), **d** (data deficient). EPBC status - **E** (endangered), **V** (vulnerable) under the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999*. FFG status - **L** (listed as threatened under the Victorian *Flora and Fauna Guarantee Act 1988*). **X** - Recorded in tenure.



Sites of Biological Significance

An ecological survey of the Goolengook FMB in 1990 identified 7 Sites of Biological Significance (Lobert *et al.* 1990) (refer to Map 6). A summary of these attributes is presented below:

- **Site 1.** 86 ha. Area within Errinundra National Park and includes headwaters of the Goolengook River. Contains Cool Temperate Rainforest, Montane Wet Forest and Montane Damp Forest.
- **Site 2.** 1,324 ha. Partly within the National Park and partly within State Forest. Contains a variety of vegetation communities including Cool Temperate Rainforest and Warm Temperate Rainforest. Rich liane and epiphyte site. A number of significant flora species including the best developed populations of Slender Tree-fern and Skirted Tree-fern in East Gippsland. Boundary corresponds with the 'Upper Goolengook' Rainforest Site of Significance.
- **Site 3.** 32 ha. Occurrence of a restricted Lowland Forest community (currently within a State Forest SPZ).
- **Site 4.** 2,654 ha. Covers the Goolengook Flora & Fauna Reserve and State Forest. Contains several subcatchments of well developed Cool Temperate Rainforest and Warm Temperate Rainforest, often in close proximity, and including areas of overlap. Boundary incorporates the 'Little Goolengook' Rainforest Site of Significance. Contains extremely high fauna values including several populations of Sooty Owls and Long-footed Potoroos.
- **Site 5.** 336 ha. Area within the Errinundra National Park. Site is based on a record of the endangered Spot-tailed Quoll.
- **Site 6.** 520 ha. Area in which several Powerful Owls have been recorded (part of which is currently within a State forest SMZ).
- **Site 7.** 129 ha. Southern-most reaches of the Goolengook River in the block, containing stands of Warm Temperate Rainforest and Riparian Forest (currently within the Heritage River).

Fire History

The fire history of Goolengook is not well documented. Much of the higher and wetter areas do not appear to have sustained serious fire damage within at least the last 100 years. Fire records indicate that large areas of the lower and drier forest, around the Houston Track/Blackwatch Creek area, were burnt in 1959.

Controlled burning has been carried out within the block since the 1970's. This has been mostly within the lower and drier forests at the southern end of the block (see Map 9 for fire type and history).

Recreation and Tourism

Current usage of the Goolengook FMB for recreation and tourism is generally low. The potential benefits from this type of use are yet to be quantified.





Options for Land Use Allocation

VEAC has been asked to “Examine the Goolengook Forest Management Block for its potential for all or part to be added to the Errinundra National Park”, with particular reference to the need to protect old growth forest.

VEAC must “Ensure that there is no net deterioration in timber production capacity”. VEAC has taken this to mean within the East Gippsland Forest Management Area (FMA) (see Map 2).

VEAC will be considering a number of factors in determining whether all or part of the Goolengook FMB should be added to the Errinundra National Park. These include:

- Scientific criteria relating to the comprehensiveness, representativeness and adequacy of the existing reserve system
- Presence and type of old growth forest
- Variety and level of significance of rainforest areas
- The presence and conservation needs of threatened species
- The presence and importance of identified Sites of Biological Significance
- National Estate Listing
- Catchment integrity
- Geomorphological significance
- Relative security of current protection mechanisms
- Reserve design issues
- Other matters that may arise during the investigation

The costs, benefits and implications of these issues will then be weighed against all other values including resource use and particularly timber.

The Terms of Reference for the investigation commit VEAC to ensuring “no net deterioration of timber production capacity”. If all or part of the Goolengook Forest Block is to be added to the Park, a timber ‘offset’ effectively has to be found elsewhere. Some potential examples of these are summarised below (in no particular order):

- Finding it within the existing dedicated reserve system (i.e. trading protection of Goolengook with the revocation of an area of national park or other reserve elsewhere).
- ‘Swapping’ informal reserves (i.e. Special Protection Zones) elsewhere in the East Gippsland FMA.
- More intensive harvesting of Special Management Zones in State Forest.
- Considering the timber harvesting potential of public land previously recommended for alienation to private land by the Land Conservation Council. Although the total area of this land is relatively small, it could contribute to the overall ‘offset’.
- Review the status of land previously recommended as Education Areas within State forest.
- Intensification of timber harvesting practices in existing hardwood production areas. There has been considerable research into the possibilities of this.
- Improvement in harvesting techniques or supervision to increase sawlog percentage of harvest compared with pulpwood.
- Consider the purchase of vegetated freehold land for incorporation into the State forest estate. VEAC would have to be sure such areas were not currently managed (or legally protected) specifically for biodiversity conservation or for private forestry purposes.
- Substitute volume in the long term by supporting plantation development (either hardwood or softwood) on private land in the East Gippsland FMA.
- A combination of some or all of the above.

Call for Submissions

Submissions are now being sought from interested individuals and groups about the future land use in the Goolengook Forest Management Block.

VEAC would like you to consider the following questions that you may wish to address in your submissions:

- Should all or part of Goolengook Forest Block be added to the Errinundra National Park and why?
- If only part of Goolengook should be added to the Errinundra National Park, which parts and why?
- If all or part of Goolengook is added to the Errinundra National Park, where are there alternative areas or alternative harvesting practices that could be utilised to ensure no net deterioration of timber production capacity?
- Are there additional ecological values that have not been published or not are widely known? If so, what are they?
- What are the recreational activities or other uses currently undertaken in the Goolengook FMB? How might these activities or uses be affected by a decision to add all or part of Goolengook to the Errinundra National Park? To what extent would they be affected?
- Would there be any social impacts or benefits if all or part of Goolengook was added to Errinundra National Park (assuming no net deterioration of timber production capacity is achieved)? If so, what would they be?

Timelines

- Submissions will be accepted until the close of business on 4 August 2006.
- A Draft Proposals Paper will be developed and released in December 2006.
- A further submission period will occur during January and February 2007 when you can comment on the proposed recommendations.
- The final recommendations report will be sent to the Minister by July 2007.

Consultation

- The VEAC councillors and staff will be available for consultation during the submission period.
- A Community Reference Group has been established for this investigation. The VEAC Act specifies the composition of the Community Reference Group. The VEAC council will be meeting with the Goolengook Community Reference Group on several occasions throughout the course of the investigation.
- Community Forums will be held in the local area and will be attended by VEAC councillors and staff.

	2005	2006	2007
Minister's Request		● 12 December 2005	
Publication of Notice of Investigation & Informational Booklet Formal Consultation and Submissions on Notice of Investigation Closing Date for Submissions on Notice of Investigation		● 1 June 2006 min. 60 days	
Publication of Draft Proposals Paper Formal Consultation and Submission on Draft Proposals Paper		● 4 August 2006	● December 2006 min. 60 days
Presentation of Final Report to Minister			July 2007 ●



How to lodge a submission

Submissions close on 4 August 2006. Submissions can be made either by mail, email or fax.

Mail

All mail submissions should be addressed as follows:

Goolengook Investigation Submission
Victorian Environmental Assessment Council
1/8 Nicholson Street
East Melbourne VIC 3002

All mail submissions will be acknowledged by return mail.

Email

All email submissions should be addressed as follows:

To: **VEAC@dse.vic.gov.au**

Subject: **Goolengook Submission**

All email submissions will be acknowledged via email to the sending address. If you would like acknowledgements to be sent to another email address(es) please include these in the CC: field of your email.

Fax

All faxed submissions should be sent to the following number
(03) 9637 8024

All faxed submissions will be acknowledged by return mail.

Other important information

Unless specifically requested otherwise, all submissions to the Council will become public documents. If you wish your submission to be considered confidential, a written request with justification must accompany the submission. If the confidentiality request is not accepted, your submission will be returned to you. Information contained in all submissions may also be stored and used by VEAC or the Department of Sustainability and Environment, for purposes relating to this investigation and subsequent Government considerations of matters related to the Investigation. Note that submissions to the Government's proposed Terms of Reference (which were advertised on 2 November 2002) are not considered as part of VEAC's Investigation.

Victorian Environmental Assessment Council
1/8 Nicholson Street, East Melbourne VIC 3002
Phone: (03) 9637 9902 Toll Free: 1800 134 803
Fax: (03) 9637 8024
Email: veac@dse.vic.gov.au Website: www.veac.vic.gov.au





Terms of Reference for VEAC Goolengook Forest Investigation

Pursuant to Section 15 of the *Victorian Environmental Assessment Council Act 2001*, the Minister for Environment hereby requests the Victorian Environmental Assessment Council (VEAC) to carry out an investigation of public land within the Goolengook Forest Management Block in East Gippsland.

The purposes of the investigation are to:

1. Examine the Goolengook Forest Management Block for its potential for all or part to be added to the Errinundra National Park, with particular reference to the need to protect old growth forest*.
2. Provide advice on the costs, benefits and implications, in terms of biodiversity, timber resource and other values, of options under 1 above.
3. Ensure that there is no net deterioration in timber production capacity.
4. Recommend preferred options and advise on implementation requirements to achieve the preferred option.

Note: *Old growth, for the purposes of this investigation, is forest that meets the definition specified in the Nationally Agreed Criteria for the Establishment of a Comprehensive, Adequate and Representative Reserve System for Forests in Australia.

In addition to the considerations specified in Section 18 of the *Victorian Environmental Assessment Council Act 2001*, the Council must also take into consideration the following matters:

- Policies, programs and reports, as well as obligations, resulting from International, Commonwealth-State agreements or arrangements, as they relate to the investigation;
- Existing State Government policies, programs, strategies and Ministerial Statements, as they relate to the investigation; and
- Regional programs, strategies and plans, as they relate to the investigation.

The Council is required to prepare a Draft Proposals Paper and must submit a Final Report on the results of its investigation within 18 months of the request.

There must be submission periods before the preparation of the Draft Proposals Paper and after its release, and each submission period is to be a minimum of 60 days.



Relevant Reading

- Backhouse, G. (2003) Spot-tailed Quoll *Dasyurus maculatus*. Flora and Fauna Guarantee Action Statement. Revised edition No. 15. Department of Sustainability & Environment, Melbourne.
- Burgman, M.A. & Ferguson, I.S. (1995) *Rainforest in Victoria: A Review of the Scientific Basis of Current and Proposed Protection Measures*. Forests Service Technical Reports 95-4. Report to the Victorian Department of Conservation and Natural Resources, Melbourne.
- Cameron, D. (unpub. 1990) *Proposed Sites of Significance for Rainforest*. Unpublished report for the Victorian Government, Melbourne.
- Cameron, D.G. (1987) Temperate rainforests of East Gippsland. In: Werren G.L. & Kershaw A.P. (eds) *The Rainforest Legacy, Vol. 1, The Nature, Distribution and Status of Rainforest Types*. pp. 33-46. Australian Government Publishing Service, Canberra.
- Cameron, D. (1992) A portrait of Victoria's rainforests: distribution, diversity and definition. In: Gell, P. & Mercer, D. (eds) *Victoria's Rainforests: Perspectives on Definition, Classification and Management*. Monash Publications in Geography No. 41. pp. 13-96, Monash University, Melbourne.
- Commonwealth of Australia (1992) *National Forest Policy Statement - A New Focus for Australia's Forests*. Commonwealth of Australia, Canberra.
- Commonwealth of Australia & State of Victoria (1997) *East Gippsland Regional Forest Agreement*. Commonwealth of Australia & State of Victoria.
- DCNR (1995) *Forest Management Plan for the East Gippsland Forest Management Area*. Department of Conservation and Natural Resources, Melbourne (with amendments following the RFA).
- DSE (2003) *Advisory list of threatened vertebrate fauna in Victoria – 2003*. Department of Sustainability and Environment, Melbourne.
- DSE (2005a) EVC Benchmarks for East Gippsland Upland bioregion and Highlands – Far East bioregion. Available: www.dse.vic.gov.au > conservation and environment > EVC Benchmarks
- DSE (2005b) *Advisory list of rare or threatened plants in Victoria – 2005*. Department of Sustainability and Environment, Melbourne.
- DSE (2006) *Code of Practice for Timber Production. Draft for Public Comment*. Department of Sustainability & Environment, Melbourne.
- GHD Pty Ltd (2006) *Review of the Code of Practice for Timber Production 'Background Paper'*. GHD Pty Ltd, Melbourne.
- JANIS (1997) *Nationally Agreed Criteria for the Establishment of a Comprehensive, Adequate and Representative Reserve System for Forests in Australia*. Joint ANZECC/MCFFA NFPS Implementation Subcommittee, Canberra.
- LCC (1974) *East Gippsland Area Descriptive Report*. Land Conservation Council, Melbourne.
- LCC (1977) *East Gippsland Area Final Recommendations*. Land Conservation Council, Melbourne.
- LCC (1985) *Report on the East Gippsland Area Review*. Land Conservation Council, Melbourne.
- LCC (1986) *East Gippsland Area Review Final Recommendations*. Land Conservation Council, Melbourne.
- LCC (1991) *Rivers and Streams Special Investigation Final Recommendations*. Land Conservation Council, Melbourne.
- Lugg, A., Marsh, P. & Bartlett, A. (1993) *Statement of Resources, Uses and Values for the East Gippsland Forest Management Area*. Department of Conservation & Natural Resources, Melbourne.
- Lobert, B.O., Gillespe, G.R., Lunt, I.D. Peacock, R.J. & Robinson, D. (1991) *Flora and Fauna of the Goolengook Forest Block East Gippsland, Victoria*. Ecological Survey Report No. 35. Department of Conservation & Environment, Melbourne.
- MBAC Consulting (2004) *The Timber Industry in Gippsland: a socio-economic assessment*. Gippsland Private Forestry Inc., Bairnsdale. Available: <http://timber.gippsland.com/>
- Muir, A. & Moorrees, A. (2005) *Rainforests and Cool Temperate Mixed Forests of Victoria*. Draft Flora and Fauna Guarantee Action Statement. Department of Sustainability and Environment, Melbourne.
- Murphy, A.H. & Moorrees A. (2005) Slender Tree-fern *Cyathea cunninghamii* (Including references to the Skirted Tree-fern *Cyathea X marcescens*). Draft Flora and Fauna Guarantee Action Statement. Department of Sustainability & Environment, Melbourne.



Relevant Reading

Nelson, A. (2005) Stakeholders contest the future of Goolengook. In: Calver, M., Bigler-Cole, H., Bolton, G., Dargavel, J., Gaynor, A., Horwitz, P., Mills, J. & Wardell-Johnson, G. (eds), *Forest Consciousness: Proceedings of the 6th National Conference of the Australian Forest History Society Inc, 12-17 September 2004, Augusta, Western Australia*. Millpress, Rotterdam.

NPS (1996) *Errinundra National Park Management Plan*. National Parks Service, Department of Natural Resources & Environment, Melbourne.

NRE (2002a) *Estimate of Sawlog Resources East Gippsland Forest Management Area*. Department of Natural Resources & Environment, Melbourne

NRE (2002b) *Estimate of Sawlog Resources Tambo Forest Management Area (Plus 11 Wodonga Blocks)*. Department of Natural Resources & Environment, Melbourne.

Peel, B. (1999) *Rainforests and Cool Temperate Mixed Forests of Victoria*. Flora and Fauna Program, Department of Natural Resources and Environment, Melbourne.

Picone, A. (2004) *Goolengook National Park Proposal: Review of Existing Information, Report on New Biological Information and Recommendations for Conservation*. Environment East Gippsland, Orbost and Save Goolengook (Melbourne Desk), Melbourne. Available: http://www.eastgippsland.net.au/articles/goolengook/Amended_GoolengookNatP78D.pdf

Picone, A. & McCaffrey, N. (2004) Unique overlap rainforest in the Upper Goolengook catchment. *The Victorian Naturalist* 121: 206-209.

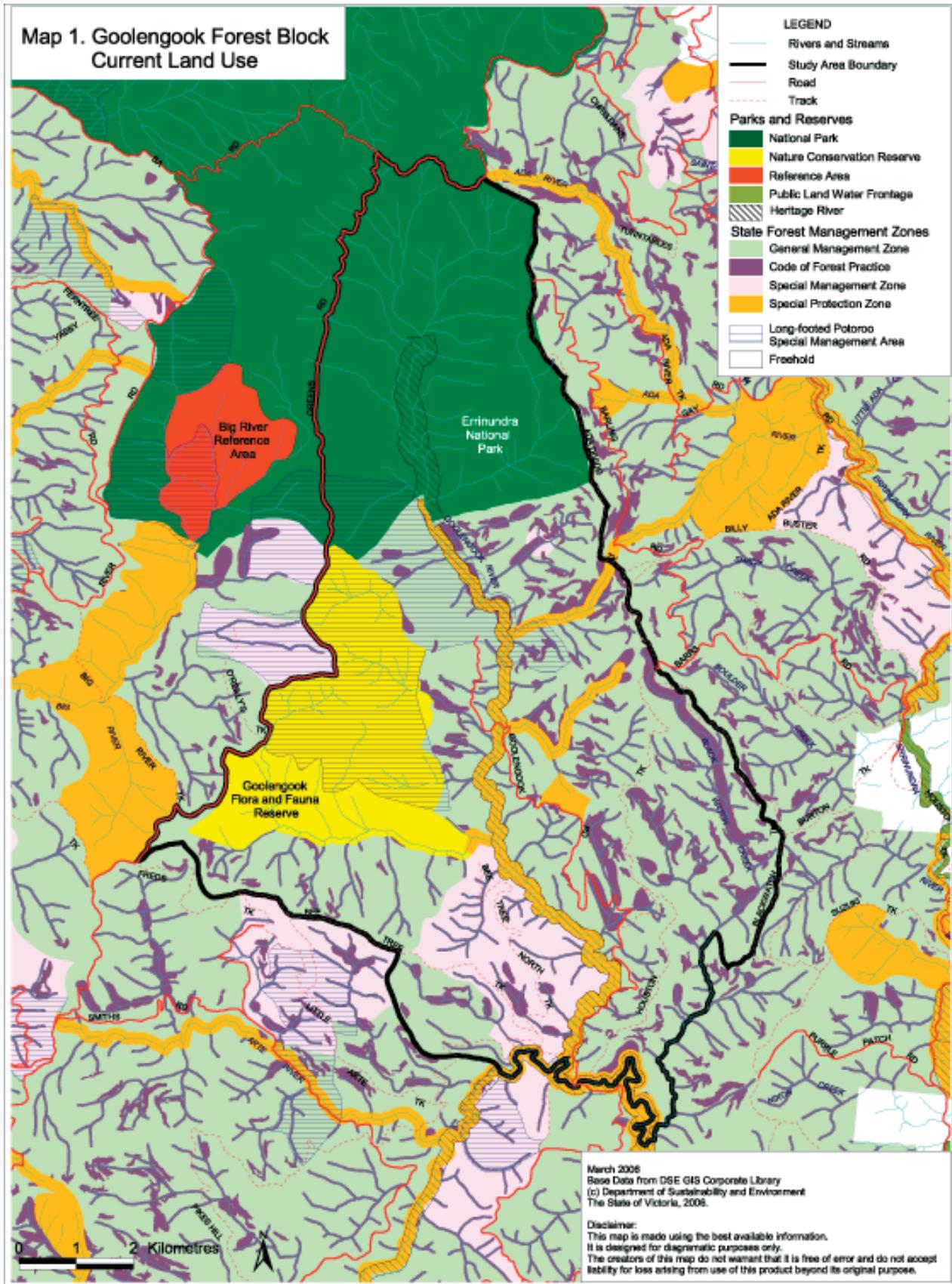
Saxon, M.J., Henry, S.R. & Seebeck, J.H. (1994) *Management Strategy for the Conservation of the Long-footed Potoroo (Potorous longipes) in Victoria*. Technical Report Series No. 127. Department of Conservation & Natural Resources, Melbourne.

State of Victoria (2002) *Our Forests Our Future - Balancing Communities, Jobs and the Environment*. Victorian Government Policy Statement on Forests. Department of Natural Resources & Environment, Melbourne.

Thomas, V.C., Henry, S.R. & Baker-Gabb, D.J. (1994) Long-footed Potoroo (*Potorous longipes*). Flora and Fauna Guarantee Action Statement No. 58. Department of Natural Resources & Environment, Melbourne.

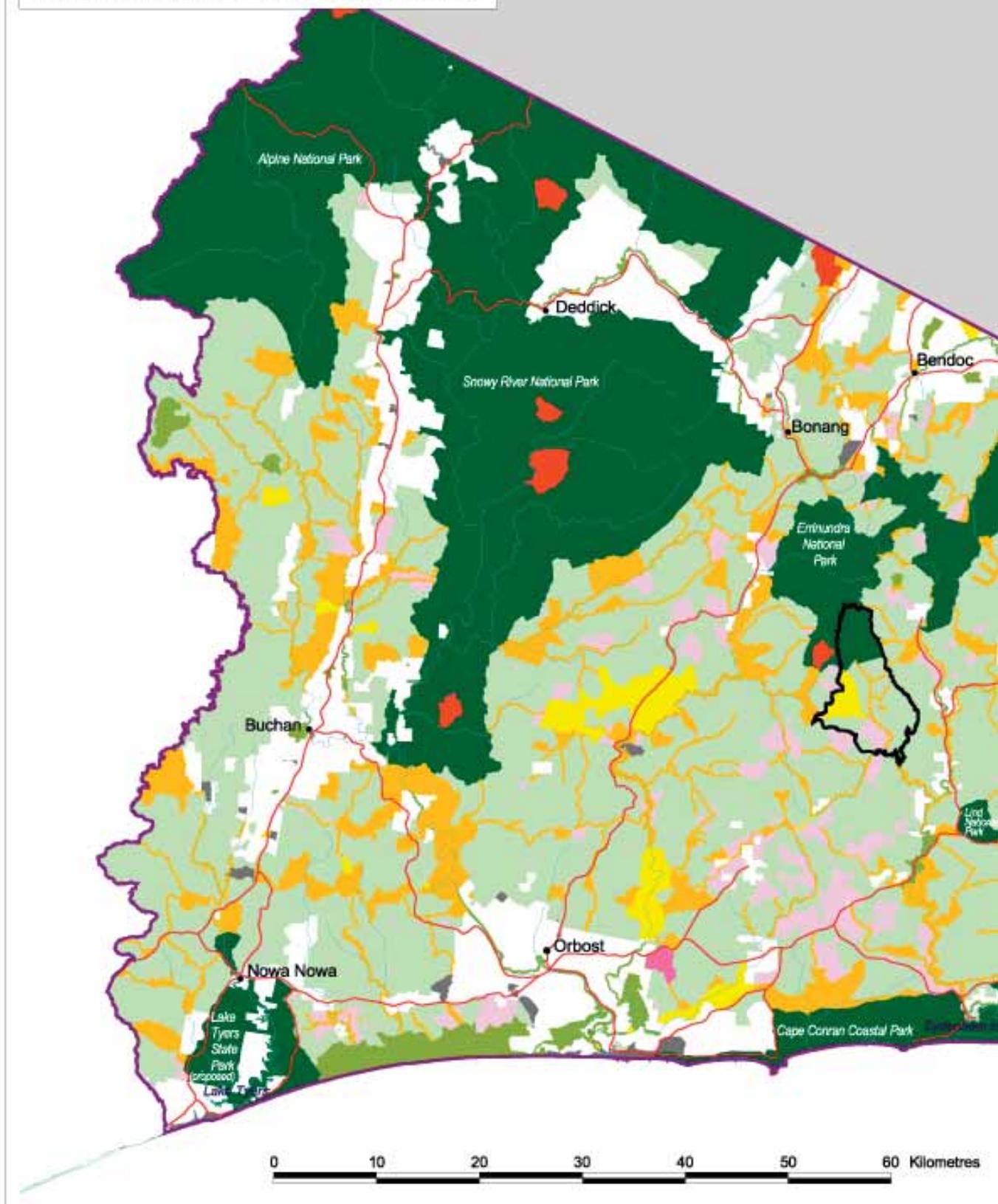
Woodgate, P.W., Peel, W.D., Ritman, K.T., Coram, J.E., Brady, A., Rule, A.J., & Banks, J.C.G. (1994) *A Study of Old-Growth Forests of East Gippsland*. Department of Conservation and Natural Resources, Melbourne.

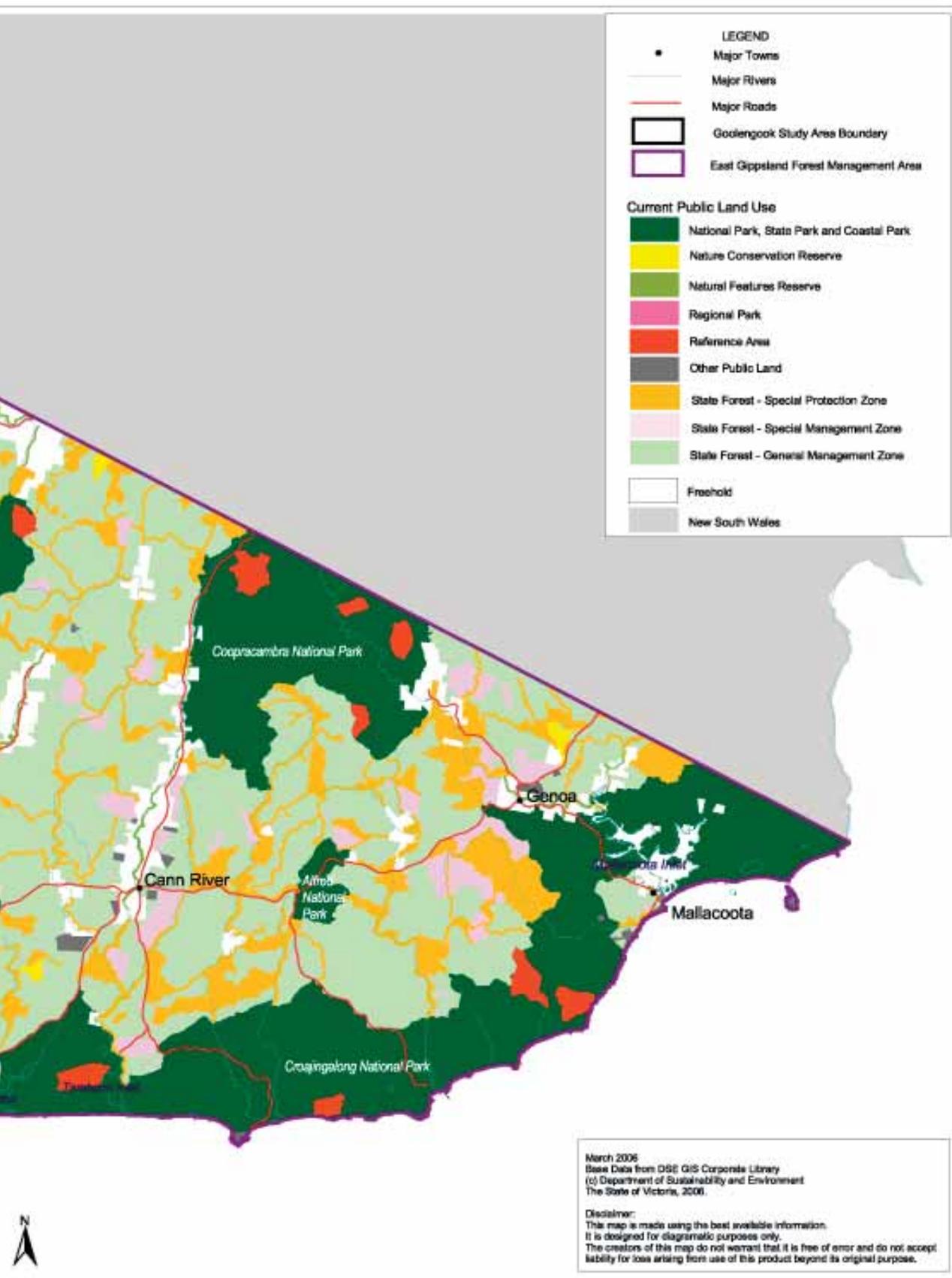






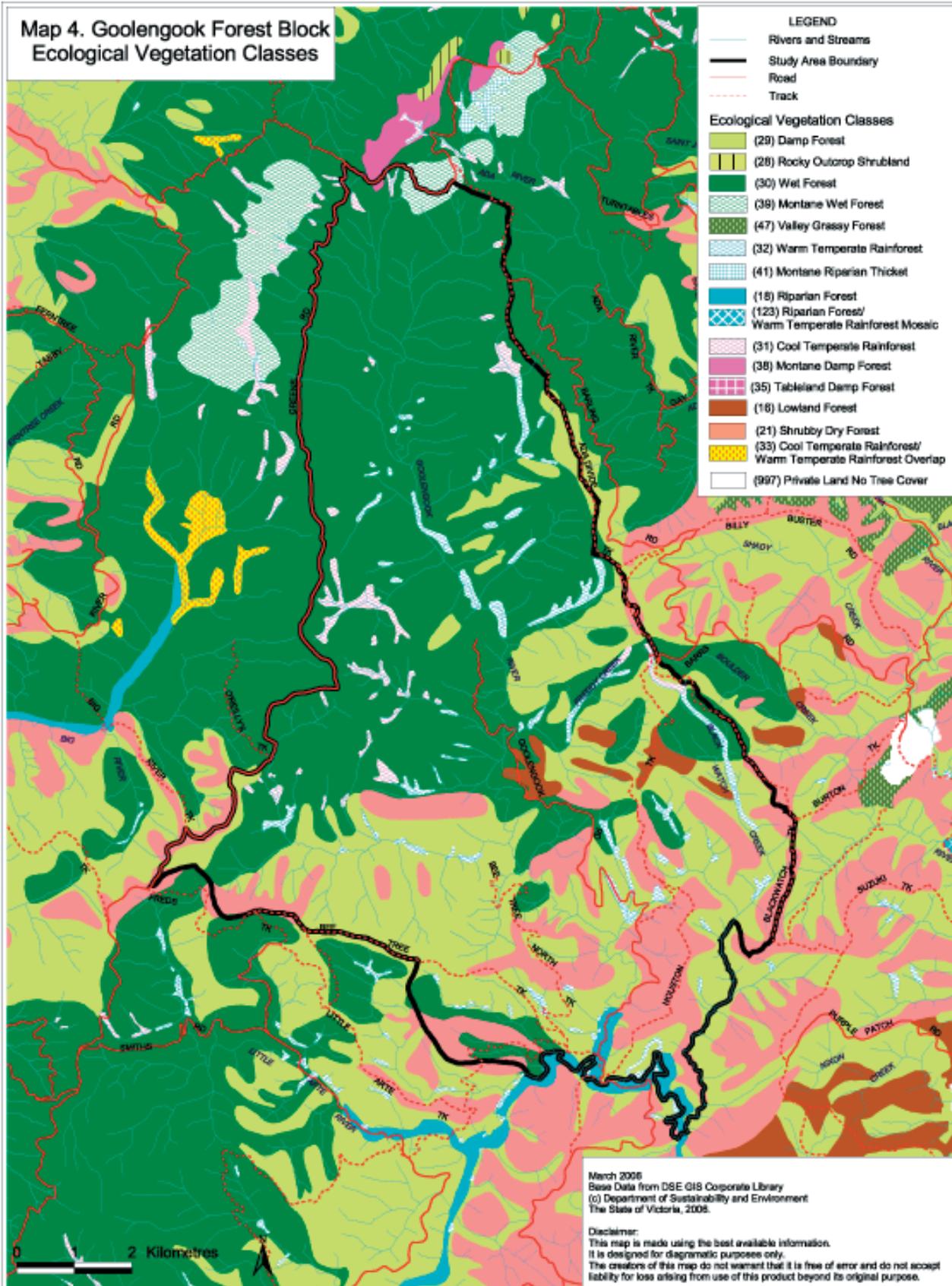
Map 2. East Gippsland Current Public Land Use





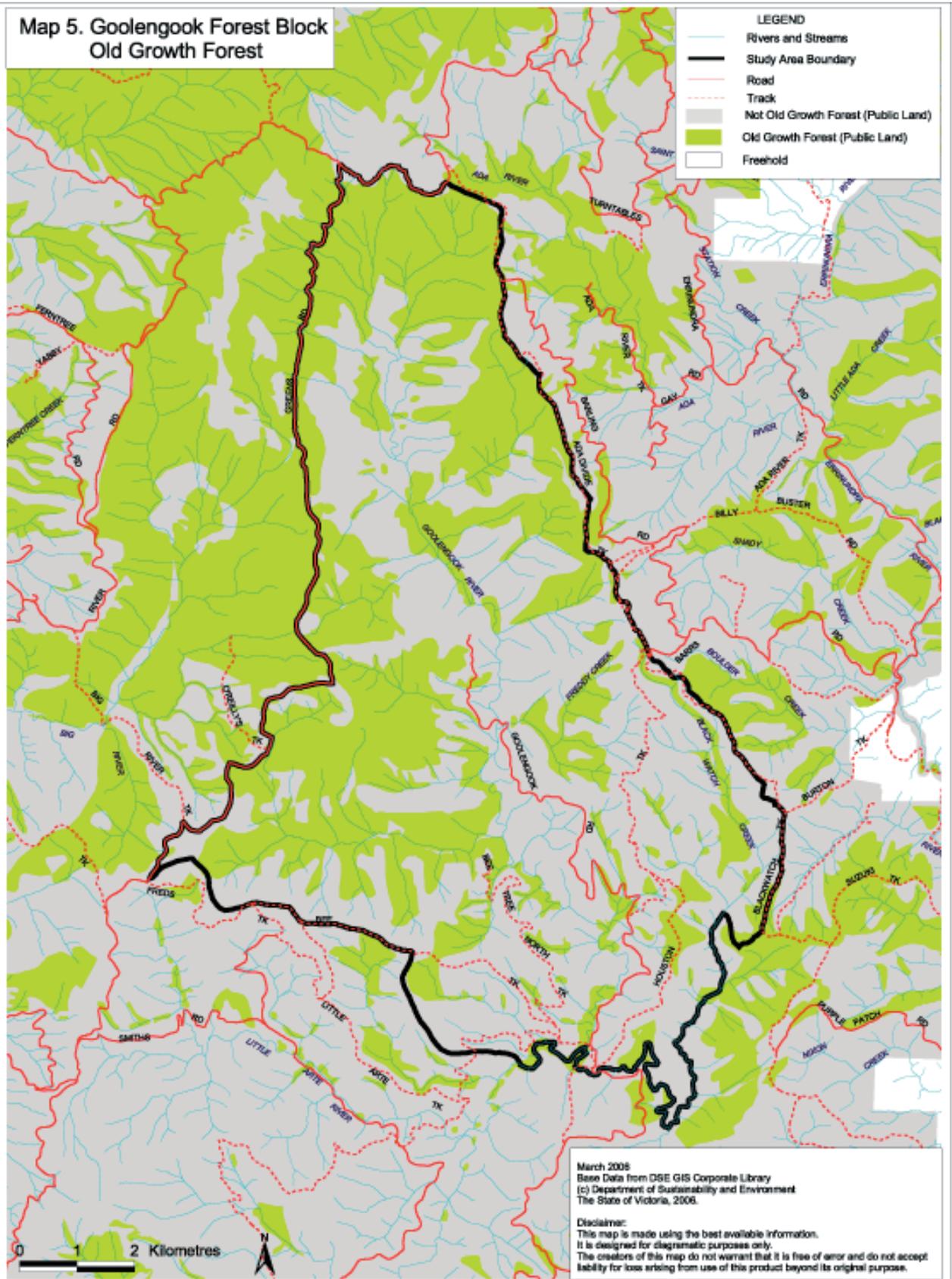


Map 4. Goolengook Forest Block Ecological Vegetation Classes



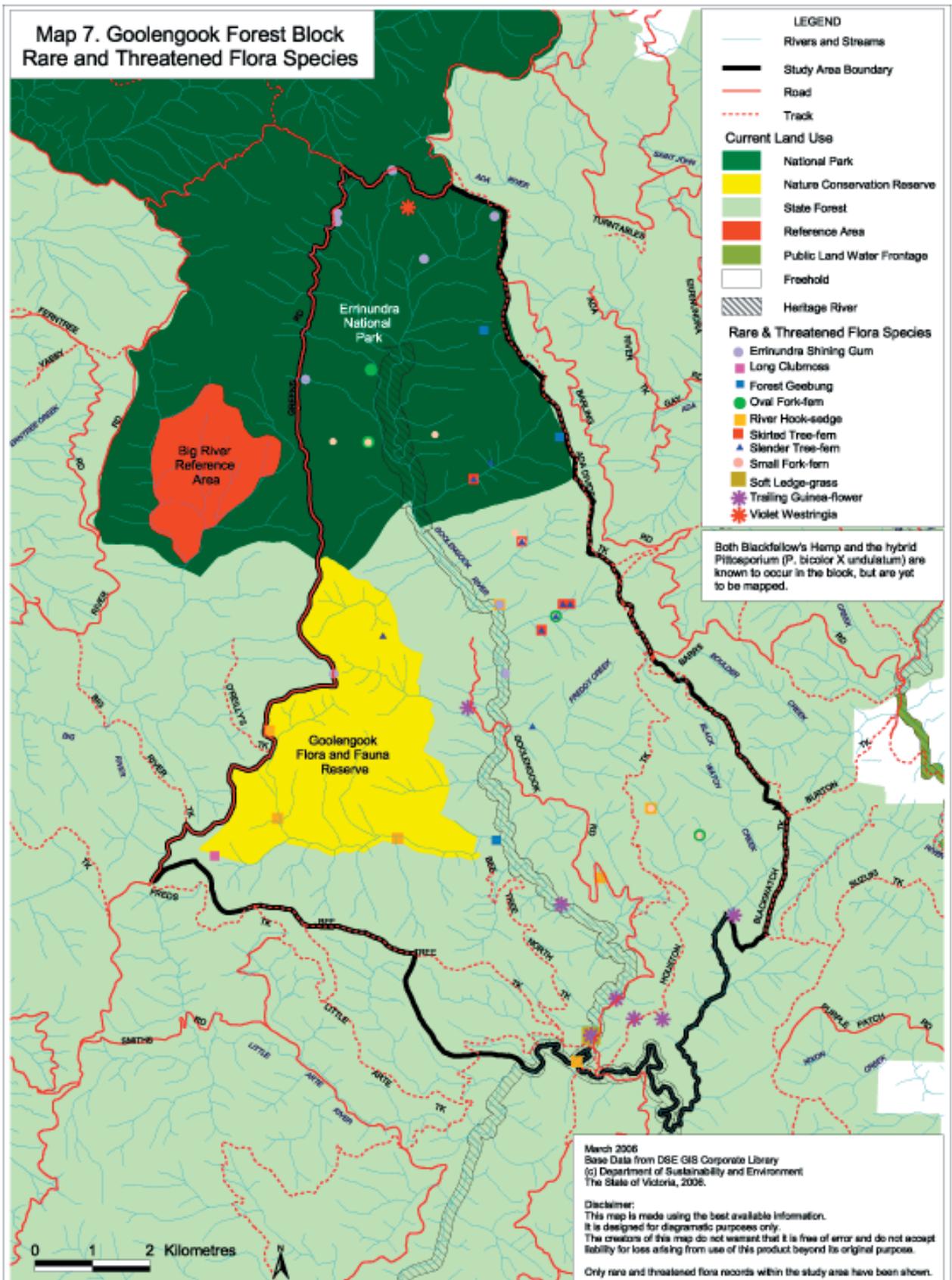


**Map 5. Goolengook Forest Block
Old Growth Forest**



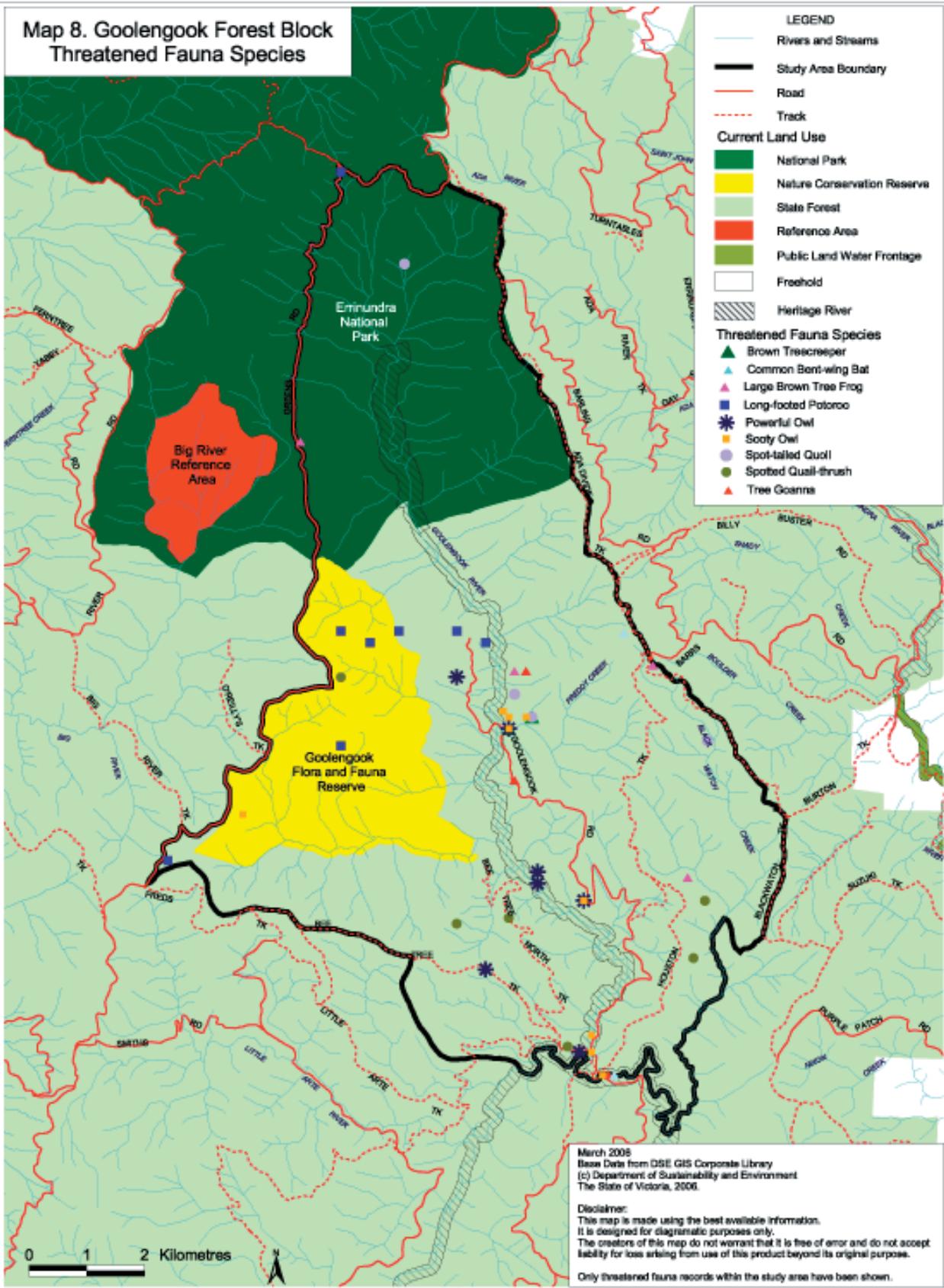


**Map 7. Goolengook Forest Block
Rare and Threatened Flora Species**



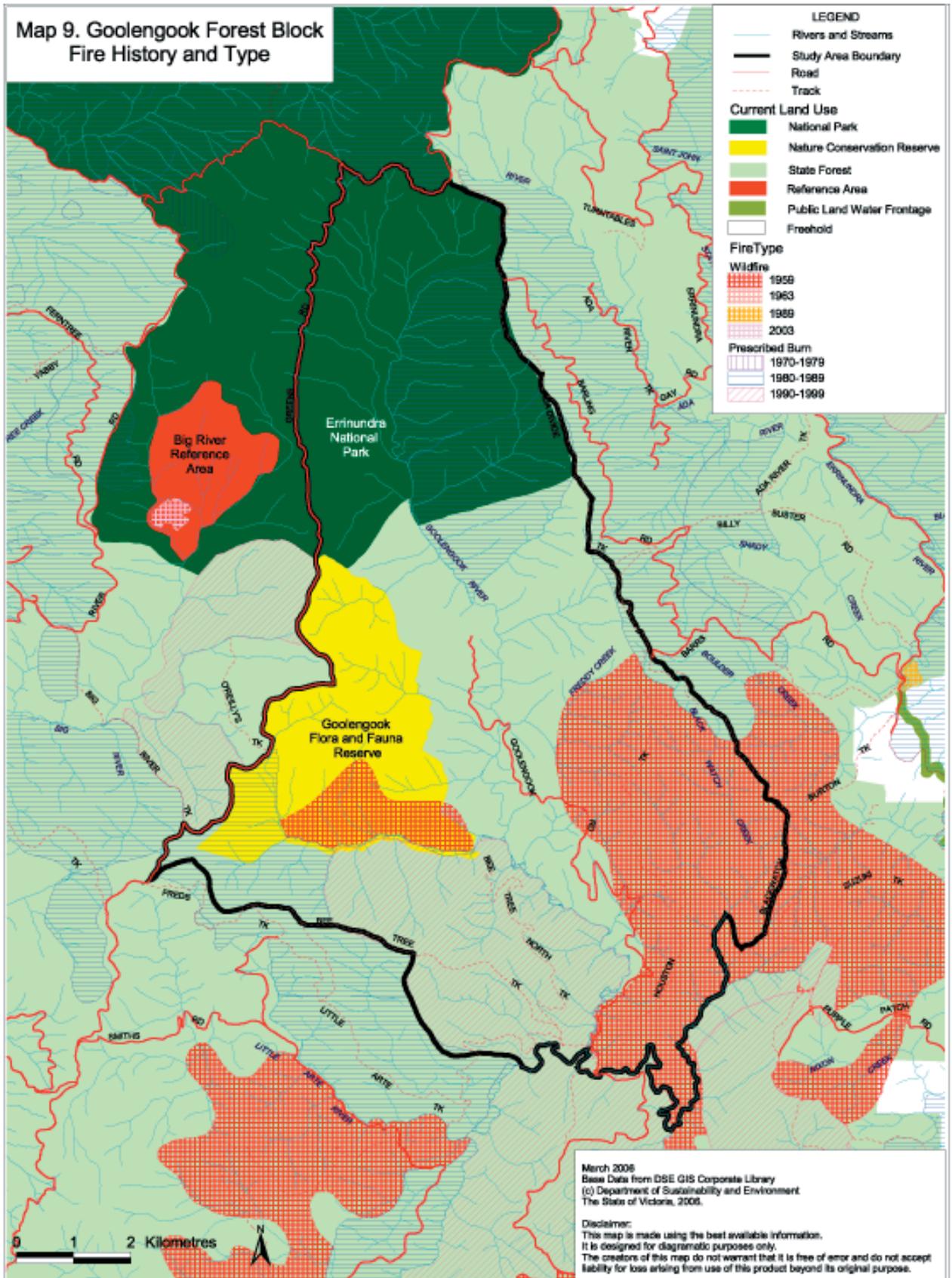


**Map 8. Goolengook Forest Block
Threatened Fauna Species**





**Map 9. Goolengook Forest Block
Fire History and Type**





SUBMISSIONS

Tell us what you want to happen in Goolengook
Submissions will be accepted until close of business on Friday 4th August 2006
See the How to Lodge a Submission section on page 15 for details.