

MEMORANDUM

NORTHERN ZONE

DATE: 21 November 1997

TO: Gary Davey

FROM: Kate Dallimore

RE: IDFA SELECTION STEP 6- YABBRA SF, CPTS 196 & 199
-THREATENED SPECIES RECORDS

- Threatened Fauna

Species	No. of records	Closest record	Source	Prescriptions required under Con. Protocols
<i>Litoria brevipalmata</i>	1	within 2km	NPWS	General + species-specific
Glossy Black-Cockatoo	2+	in cpt 199	NPWS / SFNSW	General + species-specific
Sooty Owl	2	in cpt 196/199	SFNSW	General + species-specific
Masked Owl	2	in 5km	SFNSW	General only (species-specific if record < 2km)
Powerful Owl	4	within 2km	NPWS	General + species-specific (300 hectares OR landscape approach)
Rose-crowned Fruit-dove	3	within 4km	NPWS	General
Wompoo Fruit-dove	2	within 4km	NPWS	General
Brush-tailed Phascogale	4	within 5km	NPWS	General only (species-specific if record < 3km)
Brush-tailed Rock Wallaby	3	within 4km	NPWS / SFNSW	General + species-specific CWR
Koala	3	in cpt 199	NPWS / SFNSW	General + species-specific (further survey required to identify potential high/intermediate use areas)
Parma Wallaby	1	within 3km	NPWS	General + species-specific CWR
Rufous Bettong	2	within 4km	NPWS/ SFNSW	General + species-specific CWR
Tiger Quoll	2	within 4km	NPWS/ SFNSW	General + species-specific CWR
Yellow-bellied Glider	11	in cpt 196/199	SFNSW	General + species-specific
<i>Miniopterus schreibersii</i>	8	in cpt 196	NPWS/ SFNSW	General + species-specific bats
<i>Miniopterus australis</i>	2	in cpt 196	SFNSW	General + species-specific bats
<i>Nyctophilus bifax</i>	2	within 4km	NPWS	General + species-specific bats

Findings of SFNSW Pre-logging Fauna Surveys: Rufous Bettong and Koala habitat exist in compartment 199; "possible" Tiger Quoll or Fox scat in cpt 199 (Trigg unable to confirm); cpt 199 "possible" Long-nosed Potoroo conical diggings & "possible" Brush-tailed Rock Wallaby on steeper rocky slopes; Ybg V-notch trees and Ybg scarred feed trees recorded, rocky outcrop in cpt 199.

It is important to note that the pre-logging & pre-roading surveys are "partially" completed. Surveys were confined to winter, between June & July 1997. SFNSW survey report states there will be a need to resurvey for bats & amphibians during spring/summer season. The report also says that the pre-harvesting surveys were conducted in accordance with the threatened species protocols.

According to NPWS database & SFNSW surveys to date, no threatened species requiring site-specific prescriptions have been recorded within 5 km of cpts 196 & 199.

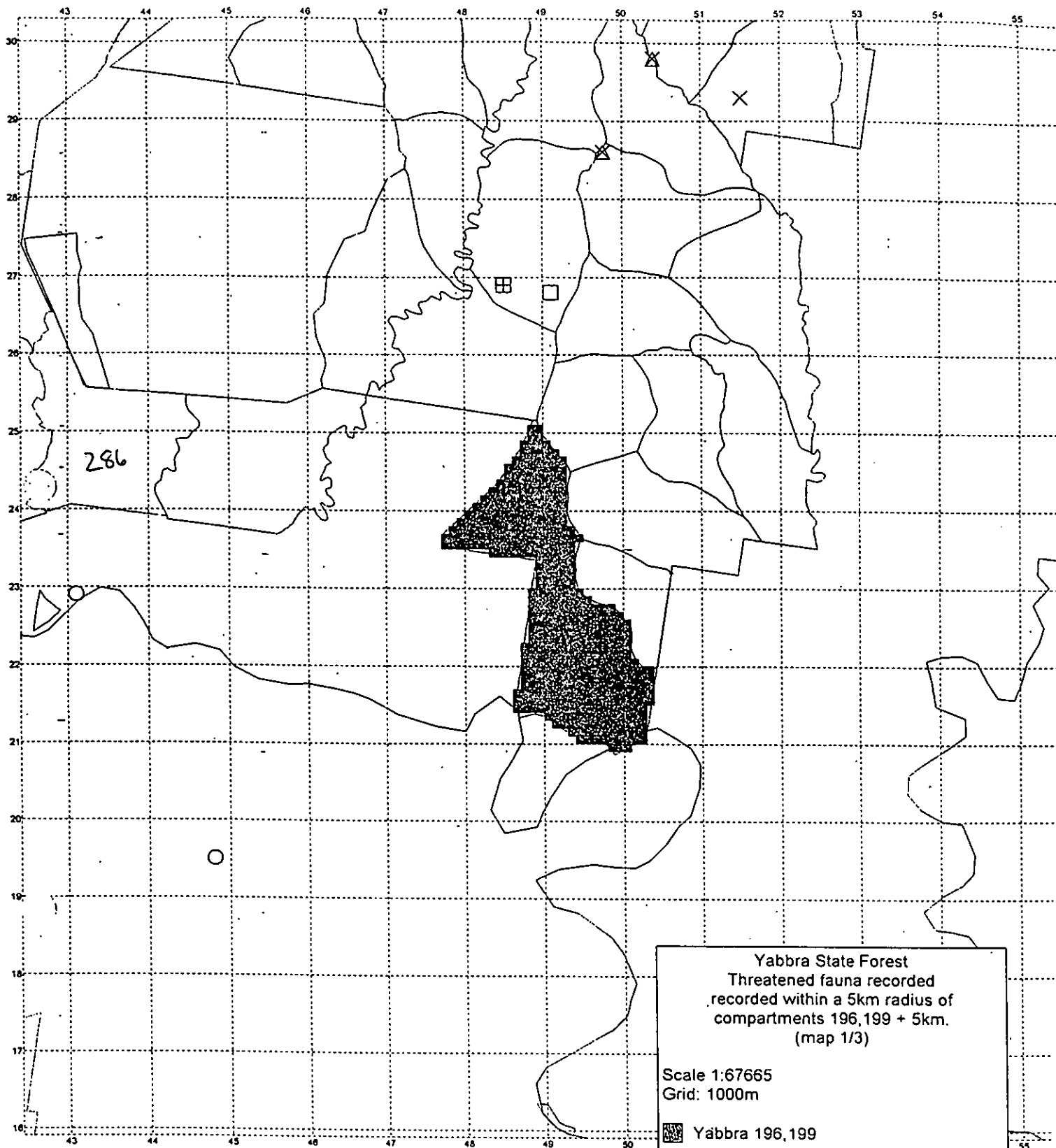
SFNSW Northern River Region (Bob Williams) advised that should the HAB approve access to cpts 196 & 199, SFNSW are keen to prepare Harvesting Plan early next year for POO commencing 1 July 1998.

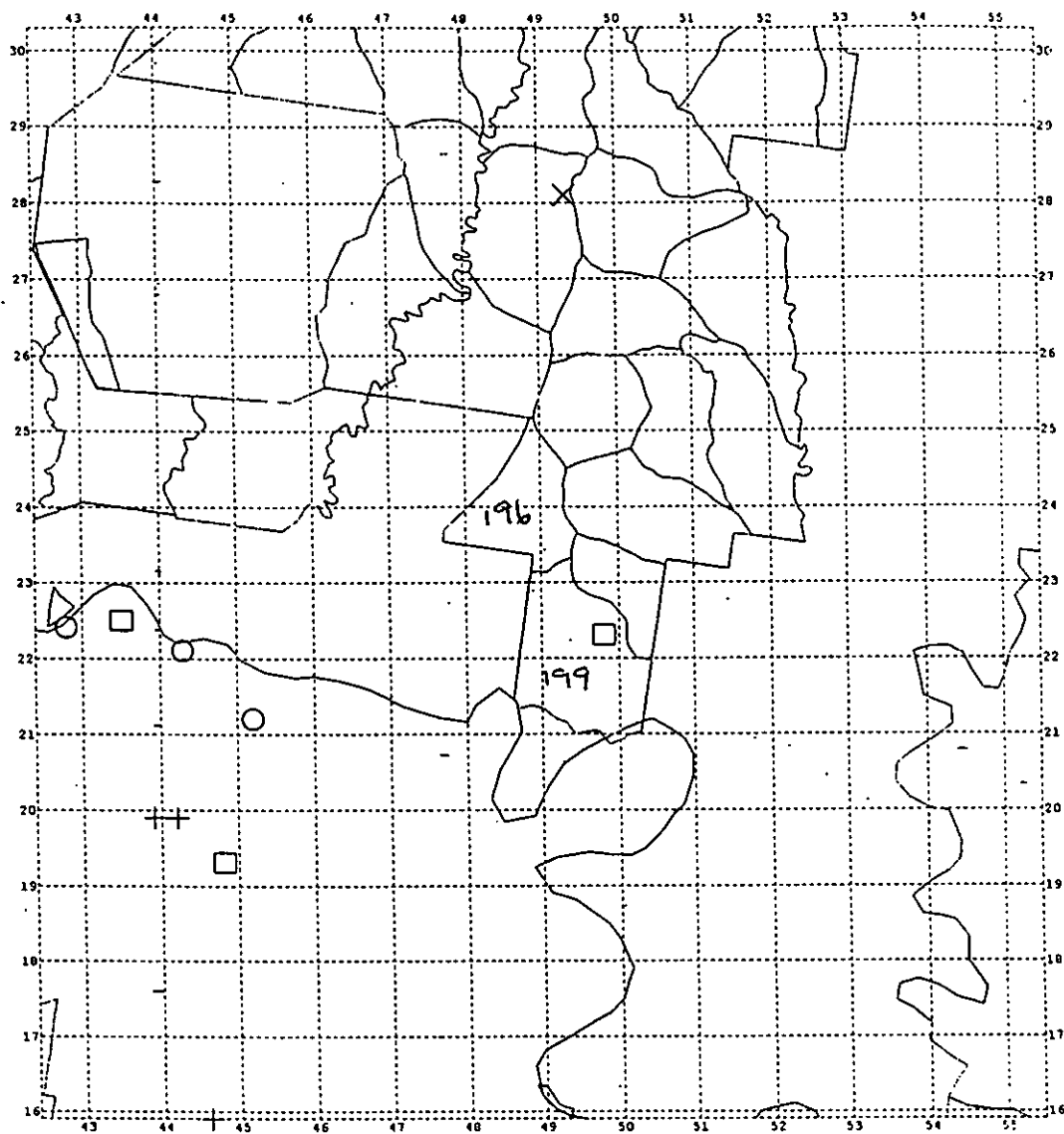
- **Threatened Flora**

According to the NPWS database and SFNSW pre-logging surveys, there are no known threatened plants within the compartments.

- **Cultural Heritage**

According to the NPWS database there are no known cultural heritage records within 5 km of the compartments. However, the NPWS Forest Archaeologist will be consulted to provide advice through RaPIC.

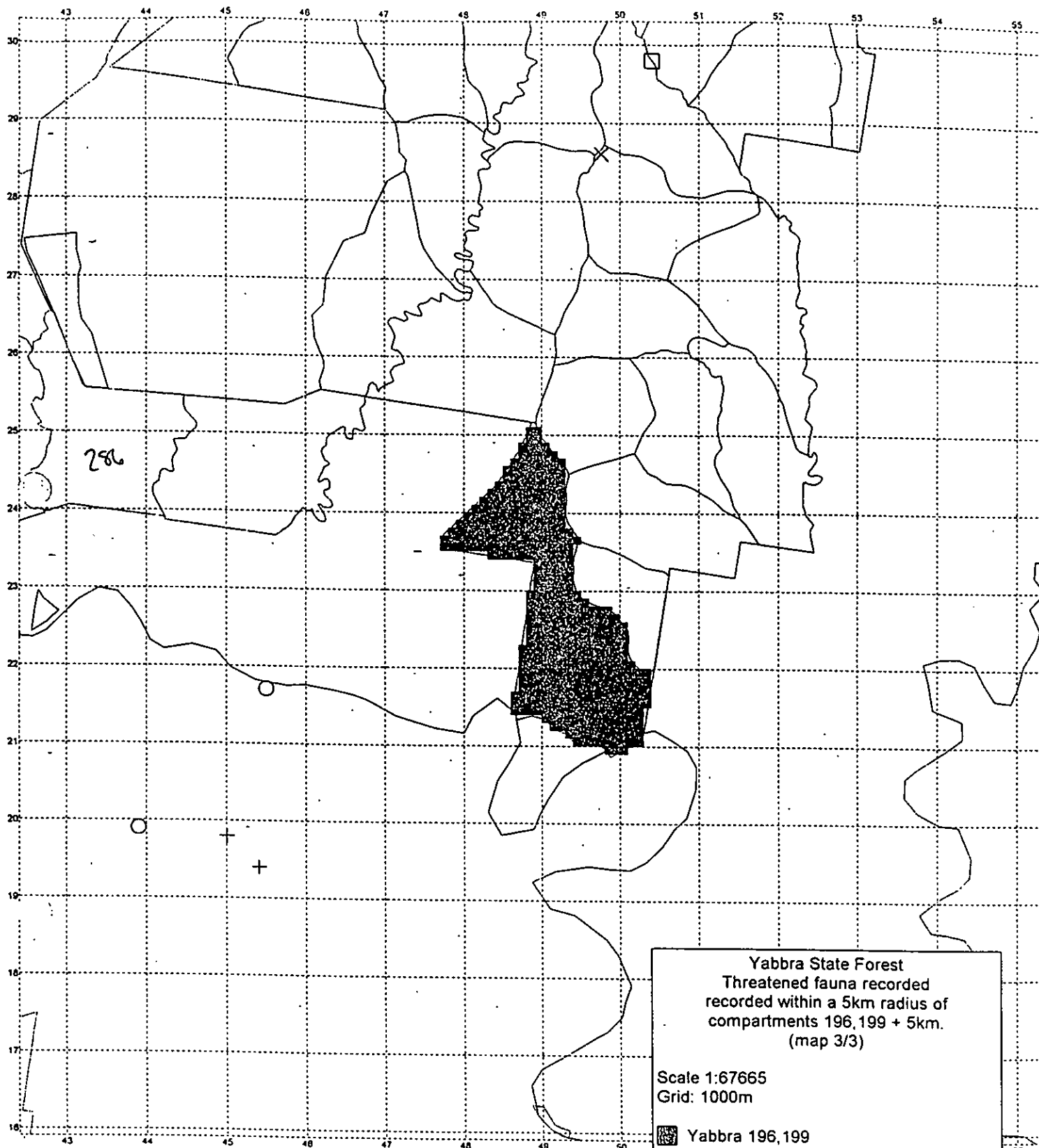




Yabba State Forest
Threatened fauna recorded
recorded within a 5km radius of
compartments 196, 199 + 5km.
(map 2/3)

Scale 1:100000
Grid: 1000m

- + Brush-tailed Phascogale 4.7km
- Brush-tailed Rock-wallaby 3.4km
- Koala within 199; <2km from 196
- X Parma Wallaby 3.0
- Negotiation Regions
- N1 Land Units
- SF NSW Estate



Yabba State Forest
Threatened fauna recorded
recorded within a 5km radius of
compartments 196, 199 + 5km.
 (map 3/3)

Scale 1:67665
 Grid: 1000m

Yabba 196, 199

- + Rufous Bettong ~~within~~ 3.5km
- Tiger Quoll ~~within~~ 3.2km
- Miniopertus schreibersii ~~within~~ 1.8km
- × Nyctophilus bifax ~~within~~ 3.5km

- Negotiation Regions
- N1 Land Units
- SF NSW Estate

Step 6 - Murwillumbah Management Area IDFA Selection Process



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SERVICE

Step 6 : NPWS / SF applies the prescriptions and conditions for the agreed compartments (could involve some field work) and circulates the maps etc. for comment.

The attached tables show the threatened fauna and flora records within a 5km radius of the following compartments:

- a) Mebbin State Forest cpts 14 and 15
- b) Mooball State Forest cpts 24, 25, 26 (IDFA) and 27 (non-IDFA)

These were the compartments selected by SFNSW out of the list prepared by NPWS Step 5 of the Murwillumbah Management Area IDFA Selection Process.

The table indicates which species require either species-specific or site-specific prescriptions. Also attached are the NPWS proposed site-specific prescriptions for these compartments.

Explanatory notes for tables:

Distances, for example 2km means the record was made within 2km of the compartment boundary:

cpt b. = recorded on compartment boundary

NI = prescription not invoked

General = species covered by General Prescriptions in the Threatened Species Protocol.

Species = species covered by Species-specific prescription in the Threatened Species Protocol.

Site = species requiring the development of Site-specific prescriptions by NPWS as per the Threatened Species Protocols (see attached proposed prescriptions)

Ex / Ag = those species not dealt with in the Conservation Protocols for which existing prescriptions will be applied or, where no existing prescription is available, as agreed to by NPWS and SFNSW.

Information for NEHAB members : NPWS Wildlife Atlas threatened species records

THREATENED SPECIES RECORDS	Prescrip. code	Mooball 24	Mooball 25	Mooball 26	Mooball 27
<i>Mixophyes iteratus</i>	NI	5km	5km	5km	5km
Glossy Black-cockatoo	Species	3km	2km	1km	in cpt
Masked Owl	Species	1km	cpt b.	1km	cpt b.
Red Goshawk	Site	4km	3km	2km	in cpt
Rose-crowned Fruit-dove	General	1km	cpt b.	1km	cpt b.
Sooty Owl	Species	3km	2km	1km	in cpt
White-eared Monarch	General	1km	cpt b.	1km	cpt b.
Wompoo Fruit-dove	General	1km	cpt b.	1km	cpt b.
Yellow-eyed Cuckoo-shrike	General	5km	5km	5km	5km
Koala	Species	2km	2km	4km	3km
Squirrel Glider	NI	5km	5km	5km	3km
Yellow-bellied Glider	Species	1km	in cpt	1km	1km
<i>Miniopterus australis</i>	Species	4km	4km	4km	1km
<i>Nyctimene robinsoni</i>	Ex / Ag	1km	in cpt	1km	1km
<i>Nyctophilus bifax</i>	Species	1km	in cpt	1km	1km
<i>Syconycterus australis</i>	Ex / Ag	1km	in cpt	1km	1km
<i>Angiopterus evecta</i>	General	5km	5km	5km	5km
<i>Bosistoa transversa</i>	General	5km	5km	5km	5km
<i>Davidsonia pruriens</i> var. <i>jersey</i>	General	5km	5km	5km	5km
<i>Davidsonia</i> sp. A	General	5km	5km	5km	5km
<i>Mullumbimby</i> C					
<i>Diospyros mabacea</i>	General	5km	5km	5km	5km
<i>Diploglottis campbellii</i>	General	5km	5km	5km	5km
<i>Elaeocarpus williamsianus</i>	General	5km	5km	5km	5km
<i>Endiandra hayesii</i>	C	1km	2 in cpt	1km	1km
<i>Macadamia tetraphylla</i>	NI	5km	5km	5km	5km
<i>Ochrosia moorei</i>	NI	5km	5km	5km	5km
<i>Owenia cepiodora</i>	General	5km	5km	5km	5km
<i>Randia moorei</i>	NI	5km	5km	5km	5km
<i>Syzygium hodgkinsoniae</i>	C	1km	2 in cpt	1km	1km
<i>Syzygium moorei</i>	C	1km	2 in cpt	1km	1km

THREATENED SPECIES RECORDS	Prescrip. code	Mebbin 14	Mebbin 15
<i>Assa darlingtoni</i>	General	2km	1km
<i>Mixophyes iteratus</i>	NI	1km	2km
<i>Philoria loveridgei</i>	NI	5km	5km
<i>Philoria sp.</i>	NI	5km	5km
<i>Coeranoscincus reticulatus</i>	General	5km	5km
<i>Hoplocephalus stephensii</i>	General	5km	5km
Albert's Lyrebird	Site	in cpt	0.5km
Black Bittern	General	5km	5km
Black-breasted Button-quail	Site	1km	1km
Double-eyed Fig-Parrot	Site	600m N	3km N
Glossy Black-cockatoo	Species	1km	4km
Marbled Frogmouth	Site	in cpt	1km
Masked Owl	Species	1km	2km
Powerful Owl	Species	1km	2km
Rose-crowned Fruit-dove	General	in cpt	1km
Rufous Scrub-bird	Ex / Ag	5km	5km
Sooty Owl	Species	in cpt	2km
White-eared Monarch	General	1km	1km
Wompoo Fruit-dove	General	in cpt	in cpt
Yellow-eyed Cuckoo-shrike	General	1km	4km
Koala	Species	2km	2km
Long-nosed Potoroo	Species	2km	1km
Parma Wallaby	Species	5km	5km
Tiger Quoll	Species	1km	1km
Yellow-bellied Glider	Species	1km	2km
<i>Chalinolobus dwyeri</i>	Species	in cpt	1km
<i>Chalinolobus nigrogriseus</i>	Species	2km	2km
<i>Falsistrellus tasmaniensis</i>	Species	5km	5km
<i>Kerivoula papuensis</i>	Species	in cpt	1km
<i>Miniopterus australis</i>	Species	in cpt	1km
<i>Mormopterus norfolkensis</i>	Species	in cpt	2km
<i>Myotis adversus</i>	Species	1km	2km
<i>Nyctimene robinsoni</i>	Ex / Ag	in cpt	1km
<i>Nyctophilus bifax</i>	Species	in cpt	1km
<i>Clematis fawcettii</i>	General	1km	1km
<i>Desmodium acanthocladum</i>	General	5km	5km
<i>Diospyros mabacea</i>	General	1km	1km
<i>Diploglottis campbellii</i>	General	5km	
<i>Endiandra hayesii</i>	NI	4km	
<i>Owenia cepiodora</i>	General	1km	in cpt
<i>Syzygium hodgkinsoniae</i>	NI	1km	1km

Proposed Site-specific Prescriptions for Mebbin State Forest IDFA compartments 14 and 15

Rainforest

- a) A 20m wide buffer must be established around all areas of category A rainforest.
- b) Category A rainforest is defined in the Rainforest Protocol as forest types 1 to 26 as defined and mapped by Research Note 17.
- c) Specified forestry activities must be excluded from rainforest and rainforest buffers.
- d) Trees must not be felled into rainforest buffers.
- e) Rainforest and rainforest buffers must be clearly mapped on the Harvesting Plan Operational Map as excluded from specified forestry activities.

Pre-logging and pre-roading flora and fauna surveys

- a) Pre-logging surveys must be conducted as per the requirements in the 24 December 1997 s120 licence variation TS0042.
- b) As a minimum, targeted pre-logging surveys must be conducted for the following species as per the requirements in the 24 December 1997 s120 licence variation TS0042: Black-breasted Button-quail and Double-eyed Fig Parrot. Other species may require targeted survey depending on the presence of potential habitat.
- c) In addition to these requirements, the following surveys must be conducted:
 - a) Albert's Lyrebird male calling sites must be searched for in the net logging area and in areas beyond 50m of the boundary of the net logging area. Any calling sites found, either during pre-logging surveys or harvesting operations, must be clearly mapped on a forest type map. Pre-logging surveys for calling sites can be combined with the Compartment Traverse.
 - b) *Nyctimene robinsonii* Queensland Tube-nosed Bat roost sites must be searched for in the net logging area and in areas beyond 50m of the boundary of the net logging area. Any roost sites that are found during pre-logging surveys, compartment mark-up or specified forestry activities, must be clearly mapped on a forest type map.
 - c) The results of the surveys conducted under a) and b) above must be included in the Survey Report.

Riparian Buffers

The General Riparian Buffers prescription has been amended for this licence to provide protection for the following species: Albert's Lyrebird (recorded within compartment 14), Marbled Frogmouth (recorded within compartment 14) and Double-eyed Fig Parrot (recorded approximately 600m to the north of compartment 14). This does not preclude the requirement for additional prescriptions for these species.

- a) For all first order streams, riparian buffers at least 20m wide on both sides of the stream must be established.
- b) For all second order streams, riparian buffers at least 30m wide on both sides of the stream must be established.

- c) For all third and greater order streams, riparian buffers at least 50m wide on both sides of the stream must be established.
- d) These buffers must be mapped on the Harvesting Plan Operational Map and clearly recorded in the Harvesting Plan. The buffer widths must be clearly indicated on the Harvesting Plan Operational Map.
- e) Specified forestry activities, with the exception of road construction and road maintenance where there is no other practical means of access, must be excluded from riparian buffers. Road construction and road maintenance through riparian buffers should avoid sites where threatened species have been recorded.
- f) Trees must not be felled into riparian buffers.

Species-specific Prescriptions

- a) The following species-specific prescriptions as set out in the 24 November 1997 s120 licence TS0042 variation must be applied in these compartments:
 - Glossy Black-cockatoo
 - Masked Owl
 - Powerful Owl
 - Sooty Owl
 - Koala
 - Critical Weight Range Vertebrates: Long-nosed Potoroo, Parma Wallaby and Tiger Quoll
 - Yellow-bellied Glider
 - Threatened Bats: *Chalinolobus dwyeri*, *Chalinolobus nigrogriseus*, *Falsistrellus tasmaniensis*, *Kerivoula papuensis*, *Miniopterus australis*, *Mormopterus norfolkensis*, *Myotis adversus*, and *Nyctophilus bifax*.
- b) This list is indicative only and reflects records held in the NPWS Wildlife Atlas. Additional species-specific prescriptions may be required subsequent to the pre-logging survey.

Albert's Lyrebird

Albert's Lyrebird has been recorded within Mebbin State Forest compartment 14.

- a) If any male Albert's Lyrebird calling sites are identified during pre-logging surveys, compartment mark-up or specified forestry activities, a 20m radius exclusion zone must be immediately established around the site.
- b) Specified forestry activities must be excluded from exclusion zones established under a) above.
- c) Riparian buffers must be established as per Prescription X.

Black-breasted Button-quail

Black-breasted Button-quail (TSC Act Schedule 1) has been recorded approximately 300m west of compartment 14.

- a) If Black-breasted Button-quail is found or Black-breasted Button-quail feeding scrapes are identified *during pre-logging surveys*, the NPWS must be notified in order to develop an appropriate site-specific prescription prior to the commencement of specified forestry activities.

- b) If Black-breasted Button-quail is found or Black-breasted Button-quail feeding scrapes are identified *during compartment mark-up or specified forestry activities*, a 100m buffer must be immediately established around the site and the NPWS must be notified within 24 hours in order to develop an appropriate site-specific prescription. Specified forestry activities must be excluded from the 100m buffer pending resolution of the prescription.
- c) The prescription is likely to be based on retention and buffering of identified Black-breasted Button-quail habitat and / or protection of feeding areas.

Double-eyed Fig Parrot

Double-eyed Fig Parrot (TSC Act Schedule 1) has been recorded approximately 600m north of compartment 14.

- a) SFNSW must provide NPWS with a map showing the distribution of individual and clusters of fig trees *Ficus spp.* in Mebbin State Forest compartments 14 and 15. The mapping should involve examination of relevant air photos as well as on-site inspections.
- b) An appropriate site-specific prescription will be developed. The site-specific prescription may be based on the protection of potential riparian nesting habitat if this habitat is not already protected under the Riparian Buffer prescription.

Marbled Frogmouth

Marble Frogmouth has been recorded within compartment 14.

- a) Riparian buffers must be established as per Prescription X.

***Nyctimene robinsoni* Queensland Tube-nosed Bat**

Nyctimene robinsoni has been recorded within compartment 14.

- a) If any *Nyctimene robinsoni* roost sites / trees are identified during pre-logging surveys, compartment mark-up or specified forestry activities, a 100m radius exclusion zone must be established around the site.
- b) Specified forestry activities must be excluded from exclusion zones established under a) above.

JUSTIFICATION FOR THESE PRESCRIPTIONS:

Riparian Buffer Prescription

The Riparian Buffers general prescription has been amended to cater for Albert's Lyrebird and Marbled Frogmouth (and in part Double-eyed Fig Parrot). The harvestable area which will be affected by this is relatively minor in the south of the compartments as most riparian buffers are within typed rainforest, and as such excluded from harvesting already. In the northern section of compartment 14 there is a section of third order stream approximately 1km long.

The third order stream buffer has been increased by 10m, to 50m. In effect this increase will probably only effect the western side of the stream as the eastern section appears to be inaccessible. The increase in buffer width for the larger order streams is to specifically cater for Marbled Frogmouth which has been recorded where Lemon Tree Road crosses the section of third

order stream referred to. The IAP identified this species as requiring the 'moistest gullies'. Forest type 48 flooded gum was also identified as optimal habitat for this species. This forest type runs along the section of third order stream.

There is a large area of predicted Albert's Lyrebird habitat in these compartments which coincides with forest type 48. SFNSW has previously advised NPWS that the main timber species sought for meeting commitments in Murwillumbah Management Area are blackbutt and flooded gum. This was taken into account by NPWS when working through the IDFA selection process. These Mebbin compartments were seen as appropriate because of the areas of forest type 48 flooded gum. In order to allow industry maximum access to the required forest type in these compartments, the NPWS proposes that rather than retain areas of flooded gum, the riparian buffers be increased as detailed above.

However, it is suggested that the area of forest type 48 and 60 to the east of the main third order stream referred to above be excluded from harvesting as an additional measure for Albert's Lyrebird and Marbled Frogmouth. It appears unlikely that this area will be available for harvesting due to lack of access.

For these compartments, the prescription has been amended to state that trees must not be felled into buffers. During Protocol negotiations, SFNSW indicated that such wording in a general prescription would cause problems when trees accidentally fell into buffers. The wording was changed to "all practical precautions...." However, it was understood that this would cater for exceptions and that the intent of the prescription would be the general rule (that is, trees would not be felled into buffers). Given the problems in implementing this prescription in Whian Whian 68, NPWS feels it is necessary that the prescription state that trees "must not be felled into buffers".

Proposed Site-specific Prescriptions for Mooball State Forest IDFA compartments 24, 25, and 26

Rainforest

- a) A 20m wide buffer must be established around all areas of category A rainforest.
- b) Category A rainforest is defined in the Rainforest Protocol as forest types 1 to 26 as defined and mapped by Research Note 17.
- c) Specified forestry activities must be excluded from rainforest and rainforest buffers.
- d) Trees must not be felled into rainforest buffers.
- e) Rainforest and rainforest buffers must be clearly mapped on the Harvesting Plan Operational Map as excluded from specified forestry activities.

Pre-logging and pre-roading flora and fauna surveys

- a) Pre-logging surveys must be conducted as per the requirements in the 24 December 1997 s120 licence variation TS0042.
- b) As a minimum, targeted pre-logging surveys must be conducted for the following species as per the requirements in the 24 December 1997 s120 licence variation TS0042: Red Goshawk *Endiandra hayesii*, *Syzygium hodgkinsoniae* and *Syzygium moorei*. Other species may require targeted survey depending on the presence of potential habitat.
- c) In addition to these requirements, the following surveys must be conducted:
 - a) *Nyctimene robinsonii* Queensland Tube-nosed Bat and *Syconycteris australis* Queensland Blossom Bat roost sites must be searched for in the net logging area and in areas beyond 50m of the boundary of the net logging area. Any roost sites that are found, either during pre-logging surveys or harvesting operations, must be clearly mapped on a forest type map.
 - b) The results of the surveys conducted under a) above must be included in the Survey Report.

Species-specific Prescriptions

- a) The following species-specific prescriptions as set out in the 24 November 1997 s120 licence TS0042 variation must be applied in these compartments:
 - Masked Owl
 - Sooty Owl
 - Glossy Black-cockatoo
 - Koala
 - Yellow-bellied Glider
 - Threatened Bats: *Miniopterus australis* and *Nyctophilus bifax*.
 - *Endiandra hayesii*, *Syzygium hodgkinsoniae*, *Syzygium moorei*
- b) This list is indicative only and reflects records held in the NPWS Wildlife Atlas. Additional species-specific prescriptions may be required subsequent to the pre-logging survey.

Red Goshawk

Red Goshawk (TSC Act Schedule 1) has been recorded in compartment 27.

- a) If a Red Goshawk is recorded during pre-logging surveys, the NPWS must be notified within 24 hours.
- b) If any potential Red Goshawk or large raptor nest is sighted during pre-logging surveys, compartment mark-up or specified forestry activities, the nest tree must be buffered by a 100m radius exclusion zone. The NPWS must be notified within 24 hours to develop appropriate protection measures.

***Syconycteris australis* Queensland Blossom Bat**

Syconycteris australis has been recorded within compartment 25.

- a) If any *Syconycteris australis* roost sites / trees are identified during pre-logging surveys, compartment mark-up or specified forestry activities, a 100m radius exclusion zone must be established around the site.
- b) Specified forestry activities must be excluded from exclusion zones established under a) above.
- c) Damage to mature *Banksia* spp. greater than 10cm dbh must be avoided during forestry operations.

***Nyctimene robinsoni* Queensland Tube-nosed Bat**

Nyctimene robinsoni has been recorded within compartment 25.

- a) If any *Nyctimene robinsoni* roost sites / trees are identified during pre-logging surveys or in the course of harvesting operations, a 100m radius exclusion zone must be established around the site.
- b) Specified forestry activities must be excluded from exclusion zones established under a) above.