

# LOCALITY MAP

Clyde River NP  
Compartment 187  
Mogo State Forest No.549

**Clyde River NP**  
**Comment page 187**

## Compartment 187

## Mogo State Forest No.549

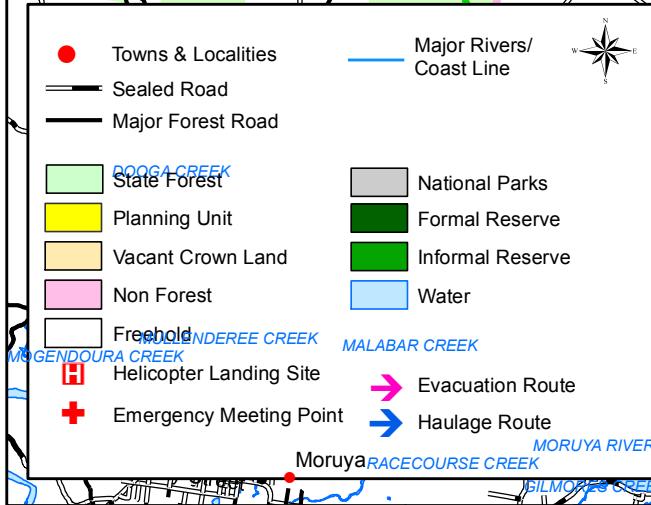
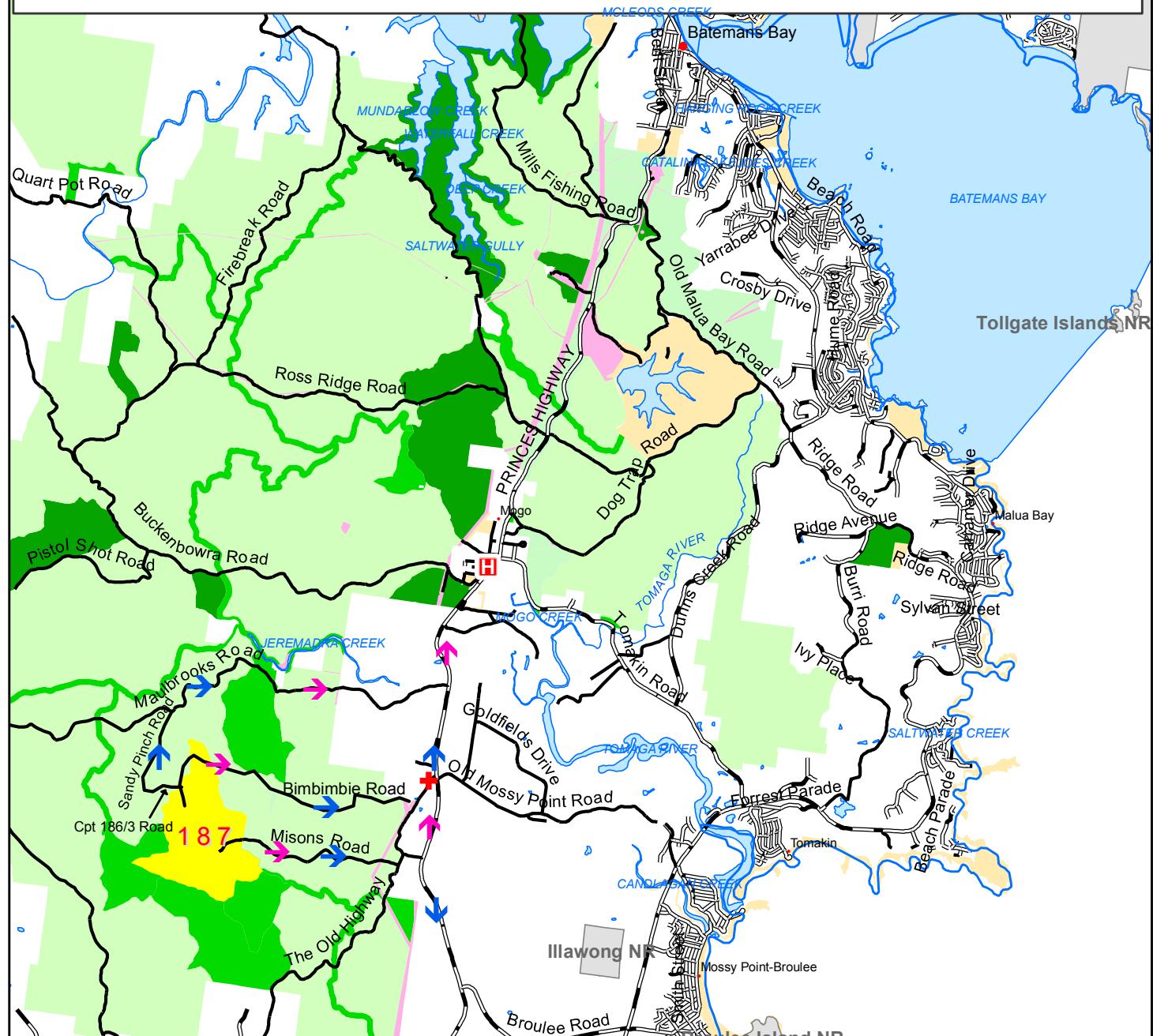
Southern IFOA - South Coast

Scale 1:100,000

## *BUCKENBOWRA RIVER*

## CLYDE RIVER

## Cullendulla Creek NR



## Harvest Plan Operational Map

## Compartment: 187

State Forest: MOGO No: 549

Southern IFOA - South Coast

Map Sheet: MOGO

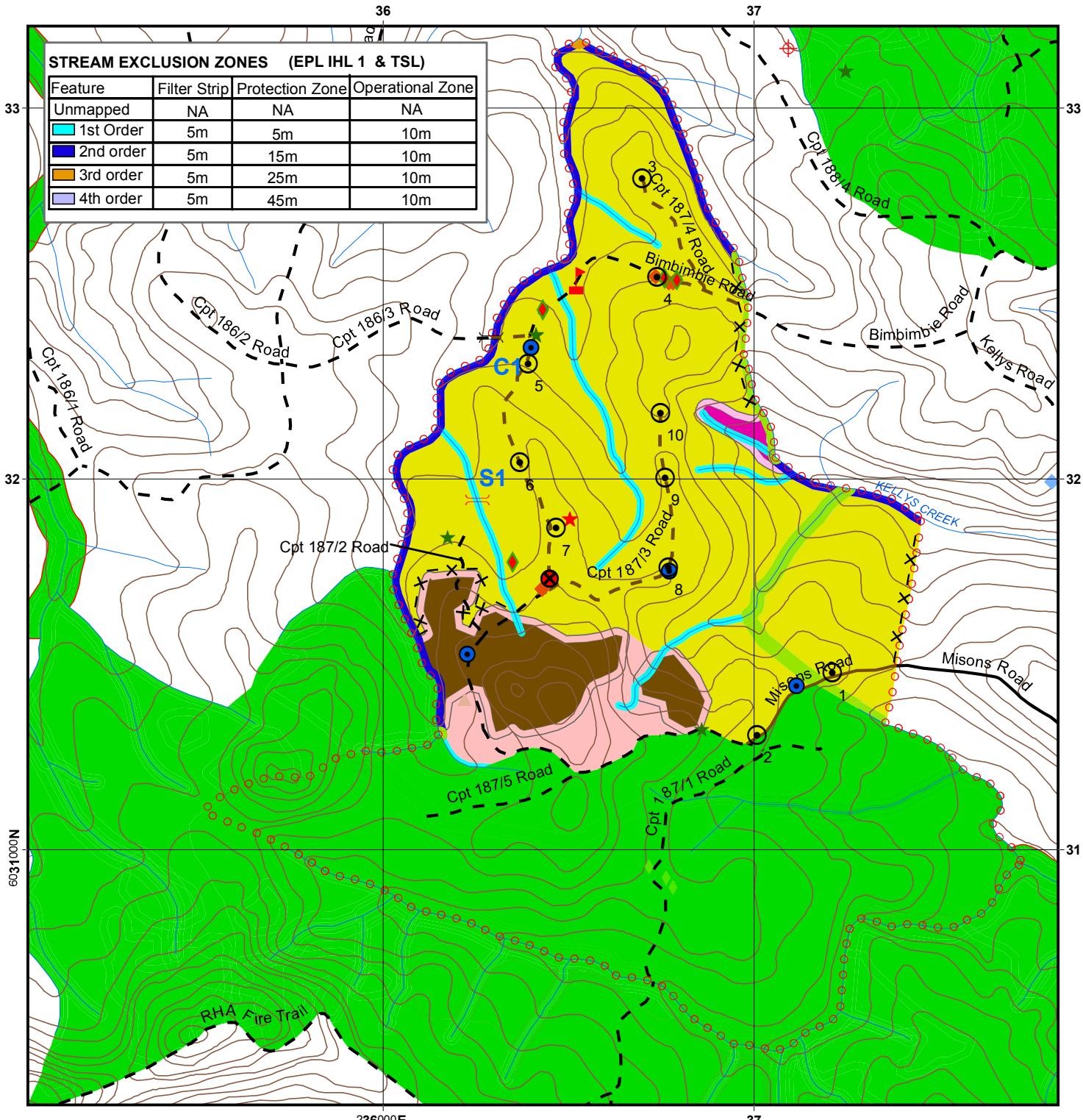
8926-3N

Version: 2

PLANNING SUPERVISOR APPROVAL

APPROVED: LEE BLESSINGTON

DATE: 17 / 7 / 2015

**LEGEND****BOUNDARIES**

○ ○ ○ Compartment Boundary

-×- Proposed Control Line

**DRAINAGE**

— Mapped LIC Drainage

**ROADS**

— Major Forest

- - Minor Forest

— EPL Standard Existing (Major)

— EPL Standard Existing (Minor)

**FAUNA FEATURES**

- ◆ Yellow-bellied Glider (Heard)
- ◆ Yellow-bellied Glider (Feed Tree)
- ★ Glossy Black-Cockatoo
- ★ Glossy Black-Cockatoo (Feed Tree)
- ◆ Grey-headed Flying-fox
- ◆ Common Bent-wing Bat
- ▲ Little Lorikeet
- ◆ Powerful Owl
- ◆ Sooty Owl

**NON HARVEST AREA**

- Harvesting Protection (FMZ 3A)
- Ridge & Headwater Habitat (40m)
- Rainforest & Exclusion (20m)
- Rock & Exclusion (20m)
- RU2 - Excluded Forest - (8 Ha)

**HARVEST AREA**

- RU1 - STS Heavy (114 Ha)

**DUMPS & CROSSINGS**

- Temporary Dry Weather
- Permanent Bee Set Down
- Existing Crossing
- New Crossing

**SAFETY ALERT FEATURES**

- Dangerous Tree

0 125 250 500 750 1,000 Meters Scale: 1:15,000 Contour Interval 10m

## Harvest Plan Forest Type Map

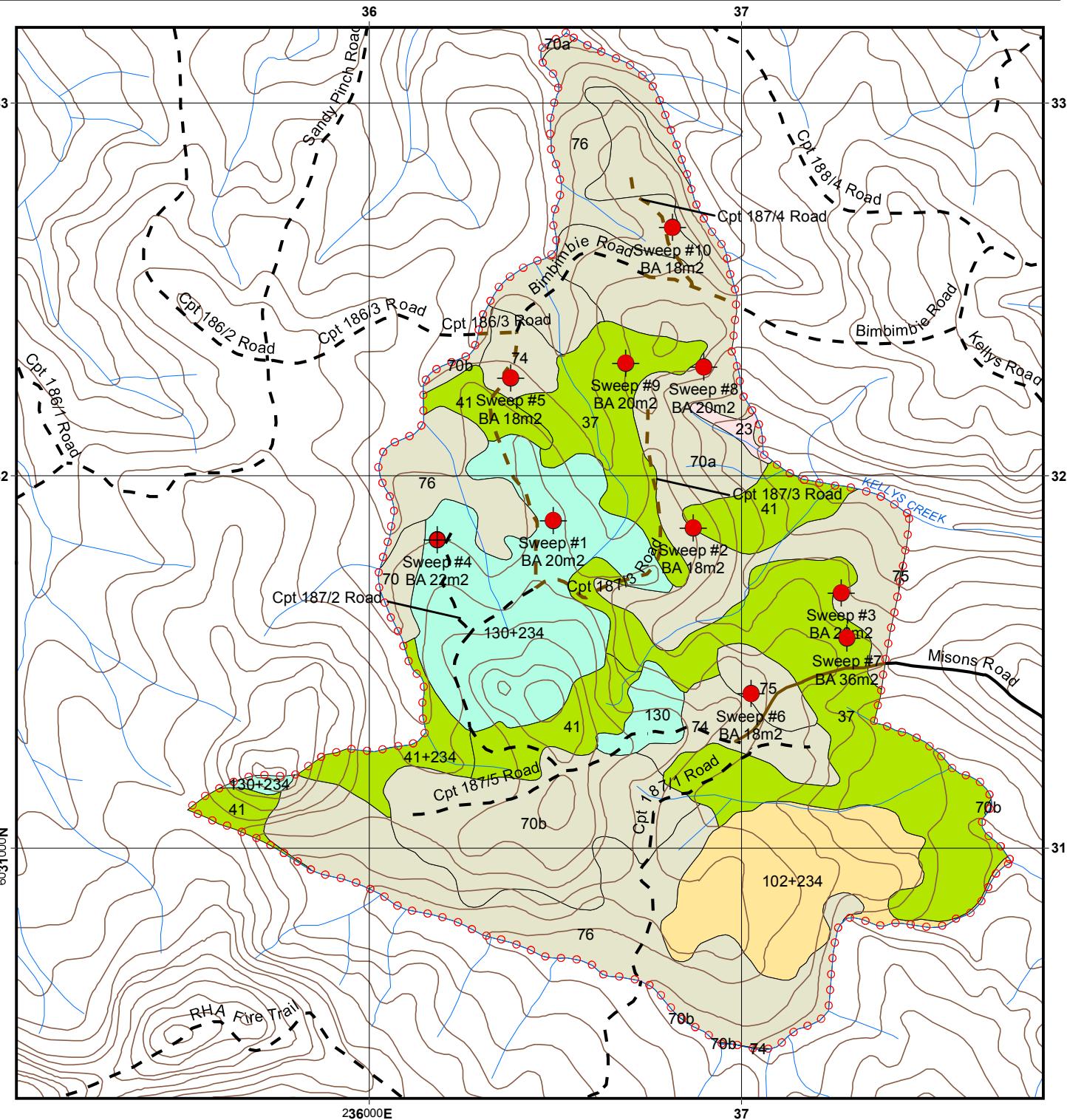
Compartment: 187

State Forest: MOGO No: 549

Southern IFOA - South Coast

Map Sheet: MOGO

8926-3N



## LEGEND

## BOUNDARIES

○ ○ ○ Compartment Boundary

## DRAINAGE

— Mapped LIC Drainage

## ROADS

— Major Forest

- - Minor Forest

— EPL Standard Existing (Major)

— EPL Standard Existing (Minor)

## OTHER FEATURES

● Basal Area Plot

## FOREST TYPE &amp; GROSS AREA (HA)

●	Type 23 Myrtle-1.0 ha
●	Type 37 Dry Blackbutt-47.9ha
●	Type 41 Blackbutt - Bloodwood / Apple -23.1 ha
●	Type 70 Spotted Gum-67.1 ha
●	Type 74 Spotted Gum - Ironbark / Grey Gum-10.3 ha
●	Type 75 Spotted Gum - Yellow / White Stringybark-3.5 ha
●	Type 76 Spotted Gum - Blackbutt-57.1ha
●	Type 102 Yertchuk-21.6ha
●	Type 130 Red Bloodwood-34.9ha

0 125 250 500 Meters

Scale: 1:15,000  
Contour Interval 10m



## HARDWOOD FORESTS- SOUTHERN IFOA SOUTH COAST HARVESTING PLAN

### Mogo State Forest - Compartment 187

#### Certification

This plan has been prepared in accordance with the Integrated Forestry Operations Approval issued under the Forestry and National Park Estate Act 1998. The Harvest Plan Standard Conditions for Hardwood Forest Operations in South Coast apply to this operation.

Prepared By: Harvest Planner	Mark Jones	Approved By: Planning Supervisor	Lee Blessington
Signature	Mark Jones	Signature	Lee Blessington
Date	17/07/2015	Date	17/07/2015

Note: Approval includes the Harvest Plan Operational Map (HPOM) with the corresponding approval date displayed on the map, verifying final approved version. Other maps included with this plan are Locality, Forest Type, Roading and Cultural Heritage (limited distribution).

#### Description of Proposal

##### Harvesting of Hardwood forest

Harvesting of Hardwood forest using Single Tree Selection Silviculture subject to the Southern IFOA requirements will be undertaken within this planning unit. **Timber harvesting and road construction will not be licensed under the EPL.**

The primary product of the harvesting is high quality large sawlogs (quota logs), small high quality sawlogs, veneer logs, girders, poles & piles where timber markets are available. Parts of felled logs that do not meet high quality log specifications are segregated and graded into other classifications such as salvage sawlogs, pulp logs & miscellaneous timbers e.g. split & round posts, firewood, mining timbers & craftwood. The availability of miscellaneous timbers depends mainly on forest types, log defectiveness & market conditions at the time of harvesting.

##### Clause 22 – Integrated Forestry Operations Approval (IFOA) Consideration

All relevant factors have been reviewed taking into account the volume and monetary value of each forest product to supply Term Agreement Holders. The harvesting operation also complies with Clause 22 of the IFOA.

**Attachment 1:** Site Safety Plan prescribes safety requirements and Medical Emergency Evacuation Plan for this harvesting operation.

**Attachment 2:** Roading plan prescribes roading requirements for this harvesting operation.

#### Abbreviations used in this plan

FT = Forest Technician, HC= Harvesting Coordinator, PtS= Protection Supervisor, HS = Harvesting Supervisor, RC = Roading Coordinator, IFOA = Integrated Forestry Operations Approval.

#### Area Identification and Yield Estimates

State Forest	Compartment/s	IFOA Region	Management Area	Certification
Mogo	187	Southern	Batemans Bay	AS4708:2007 ISO 14001

Cpt 187	
Plan Compartment ID	<b>22126</b>
Gross Area (ha)	267
Net Harvestable Area (ha)	121.44
Harvest Area (ha)	113.96
Poles, Piles, Veneer & Girders	30m <sup>3</sup>
Quota Logs (HQL)	1500m <sup>3</sup>
High Quality Small	500m <sup>3</sup>
Salvage	700m <sup>3</sup>
Pulp E1	2800t
Firewood/Misc	1600t

**Note: The yield estimates in the table above are derived from the Plan of Operations.**

#### Slope Classes (percent of harvest area)

Cpt 187	
Slope Class	% of harvest area
0-20°	100
20-25 °	0
25-30 °	0



## ATTACHMENT 1: SITE SAFETY PLAN

<b>Worksite Information</b>		
Is this Declared Hunting Area: Yes	Comments: Permanent Hunting Exclusion	
Have Exclusion Zone signs been erected or checked prior to starting work daily.	N/A	
Comments:		
Description of Work to be undertaken on site: - Refer to description of proposal above.		
<b>Site Supervisor</b>		
Name:	Contact number:	
<b>Communication</b>		
Radio channel number	VHF:	UHF
Other (e.g. hand signals):		
<b>Traffic management (describe) e.g. Signage, Road closure, Traffic control</b>		
This plan identifies haulage from the north eastern section of the compartment as east via Bimbimbie Road (FCNSW owned, becoming Shire owned where State Forests ends) then turning left or right onto the Princes Highway (RMS road).		
This plan identifies haulage from the north western section of the compartment as west via Cpt 186/3 Road (FCNSW owned), turning right onto Sandy Pinch Road (FCNSW owned), turning right onto Maulbrooks Road (FCNSW owned, becoming Shire owned where State Forests ends) then turning left or right onto the Princes Highway (RMS road).		
This plan identifies haulage from the southern half of the compartment will be east via Misons Road (FCNSW owned, becoming Shire owned where State Forests ends) then turning left or right onto the Princes Highway (RMS road).		
Road intersections outside the control of FCNSW are not covered by this plan or any FCNSW Traffic Control Plan. Haulage contractors must abide by NSW road laws and standard operating procedures in relation to haulage routes outside the control of FCNSW.		
<b>Dust, noise and school bus routes</b>		
<b>Dust and noise</b> – Where log haulage routes pass close to rural housing along natural surface/gravel roads dust and noise must be minimised to the greatest extent practicable. Trucks should reduce speed, restrict use to daylight hours and minimise the use of engine brakes through these areas.		
<b>Name of on site safety first aider/s</b>		
<b>Location of first aid kit</b>		

SITE HAZARD & RISK ASSESSMENT NO.	CONTROL	WHO	IMPLEMENTED
1. Vehicle collision at adjoining roads of various traffic levels	Warning signs at FCNSW intersections, road closure on FCNSW roads. Implement Traffic Control plans (where specified in this harvest plan). 60km/hr speed limit on all State Forest gravel roads unless otherwise signposted. Compliance with FCNSW lights on policy.		
2. Mine shafts/quarries	Compartment 187 is considered a Potential Mine Shaft Area. Assess snig track routes and tree felling paths prior to operating. Identify and mark site accordingly.		
3. Hazardous or dead trees	<b>Refer to FCNSW operational safety standard OSS010.</b> Assess area within two tree lengths of work site. Assess risk, mark any Distinctly Dangerous Trees with the symbol Ø & if necessary remove hazard or move work site. Use machinery to assist with hazard removal if possible. <b>Contractor is responsible for implementing control strategies during harvesting.</b> Note: a dangerous tree hanging over Bimbimbie Road has been marked with paint and danger tape – see HPOM for location.		
4. Overhead hazards associated with dumps	<b>Refer to FCNSW operational safety standard OSS010.</b> Assess overhead hazard within two tree lengths of the dump. Assess risk, & if necessary remove hazard or relocate dump site. <b>Contractor is responsible for implementing control strategies during harvesting.</b>		
5. Dust from passing vehicles along dirt haulage routes	Restrict speed to minimise dust generation, slow down when passing vehicles. Turn on driving and hazard lights to increase visibility.		
6.			

- All visitors, contractors and employees **must** be fully **inducted** onto the worksite by the workplace supervisor e.g. the Principal Contractor or the Forestry Corporation supervisor. This must be recorded on the attached induction sheet.
- Relevant **Safe Work Procedures** are available and understood for the type of work to be undertaken.
- A **Risk and Hazard Assessment Worksheet** must be completed if site specific hazards are identified that are not covered by a **Safe Work Procedure**. The top (pink sheet) is to be attached to this site safety plan.
- Operators in training must be supervised by the site supervisor.
- All appropriate Personal Protective Equipment (PPE) must be worn on the worksite at all times



# MEDICAL EMERGENCY EVACUATION PLAN

Nearest reliable mobile phone reception (describe location)			
Next G Network: Good	GSM: N/A	Satellite: N/A	
GPS Lat/Long: 35° 49' 2.30" S / 150° 4' 56.38" E	MGA: 236396E 6032385N	Datum: GDA 94	Zone: 56
Location description: Intersection of Bimbimbie Road and Cpt 186/3 road			
Emergency meeting point for ambulance / police (refer to attached locality map)			
GPS Lat/Long: 35° 48' 40.02" S / 150° 7' 46.60" E	MGA: 240649E 6033198N	Datum: GDA 94	Zone: 56
Location description: Intersection of Bimbimbie Road and Princes Highway.			
Helicopter landing place (refer to attached locality map)			
GPS Lat/Long: 35° 47' 14" S 150° 08' 11" E			
Location description: Mogo Football ground.			
Procedures to obtain ambulance assistance			
1. Dial 000 2. If there is no mobile coverage, dial 112 (which will work on any mobile phone system). 3. If no response on 112: <ul style="list-style-type: none"><li>use a radio link (TARA, be discrete with personal information)</li><li>move to an area with mobile coverage</li><li>find a landline</li><li>use another network (e.g. a contractor's VHF radio)</li></ul>	Contact nearest Forestry Corporation office on: Channel: 236 Telephone: 1300 880 548 Give details of the situation and ask for a 000 call to be placed.		
000 operator question:	Response:		
1. Police, Fire, Ambulance?	NSW Ambulance,		
2. Suburb?	State Forest name:	Mogo	
	Nearest town or locality:	Mogo	
	Nearest ambulance station:	Batemans Bay	
3. Address?	Bimbimbie Road		
4. Nearest road junction/cross street?	Bimbimbie Road and Princes Highway		
5. Local government area?	Eurobodalla		
6. Nature of the problem?	Describe the accident, number and condition of casualties		
7. Where is the accident?	Refer to safety meeting point above		
Directions to navigate from nearest ambulance station to the emergency meeting point. From Batemans Bay head south on the Princes Highway travel approx. 13.5km to intersection with Bimbimbie Road (on right).			
8. 4WD ambulance required No	CB radio channel to use:		
9. Injuries?	Give detailed information about the condition of the casualty (do not mention names over radio system)		
10. Your name and call back number:			

### Silviculture and Harvesting Prescriptions

Year	1968	1980	1981	1987	1993	1996	2005	2009	2013
TSI	X	X	X	X	X	X	X	X	X
HR Burning	X	X	X	X	Ö	X	Ö	Ö	Ö
Wildfires	Ö	Ö	Ö	Ö	X	X	X	X	X
Logging m <sup>3</sup>	0	152	0	0	0	5885	0	0	0

Ö - applies, X – not applicable

Compartment	Resource Unit	No. of Sweeps	BA Average (m <sup>2</sup> /ha)	BA Range (m <sup>2</sup> /ha)
187	1	10	21.6	18 - 36
187	2	0	NA – excluded from harvesting	NA – excluded from harvesting

### Silvicultural Planning

#### Single Tree Selection

The 114 ha harvest area is a mixed aged forest that will be harvested under a heavy single tree selection (STS) regime. The objective of the harvesting operation is to remove 45% of the basal area to create canopy openings for regeneration, whilst retaining and minimising damage to young regenerating stems, seed trees, habitat trees and recruitment trees.

It is envisaged that the next harvesting operation in this compartment would be on average 30 years time.

The STS tract for IFOA purposes includes Resource Unit 1 and Resource Unit 2 of compartment 187 as indicated on the HPOM

**Single Tree Selection (STS) must remove no more than 45% of the basal area (BA), while retaining a minimum BA of 10m<sup>2</sup> per hectare within the tract.**

Resource Unit (Refer to HPOM for detail)	Species Composition		Stand Structure and Condition
1	Overstorey dominated by Spotted Gum ( <i>Corymbia maculata</i> ), Grey Ironbark ( <i>Eucalyptus paniculata</i> ) and Blackbutt ( <i>E. pilularis</i> ). Other species include red bloodwood ( <i>C. gummiifera</i> ).		<ul style="list-style-type: none"> <li>Resource unit 1 is a variable mixed age forest (BA range 18-36m<sup>2</sup>/ha).</li> <li>Majority of this area contains sufficient retained volume from the 1996 harvesting event to warrant another viable operation.</li> </ul>

### **Harvesting Prescription**

	<b>% of Harvest Area</b>	<b>Silvicultural Treatment</b>
1	100%	<p>STS heavy:</p> <ul style="list-style-type: none"><li>• Retain and protect from harvesting/fire damage: -poles/advanced growth (&lt;40cm DBHOB) with good form and vigour, -habitat and recruitment trees as per TSL,</li><li>• Retained trees should be evenly spaced throughout the resource unit.</li><li>• Ensure no more than 45% of the BA within the resource unit is removed, while retaining a minimum BA of 10m<sup>2</sup> per hectare within the tract.</li><li>• All other products should be removed markets permitting. If this objective cannot be achieved the following options should be considered: -reject tree felling (HC must first obtain approval from HS), -defer harvesting until ideal market conditions prevail, -consider harvesting under a light or medium STS regime</li></ul>

Note: The area of each silvicultural treatment must be mapped and recorded in the Post logging information section of this plan.

### **Special Requirements**

#### **Noxious Weeds/Disease/Pests Hygiene Requirements**

Compartment 187 is within the Eurobodalla Shire which is a designated red zone for Myrtle Rust. In order to prevent the spread of Myrtle Rust all harvesting machinery, equipment and vehicles heading west from Eurobodalla Shire or south into Victoria must be inspected for vegetation containing Myrtle Rust. If present, the vegetation must be removed from the harvesting machinery, equipment or vehicle prior to leaving the compartment.

#### **Research Plots**

Any inventory plots located during the harvesting operation are to be treated the same as the surrounding area.

#### **Road Works**

Only roads that are shown on the HPOM as EPL standard or sealed may be used for haulage.

## Occupation Permits

### Apiary

5 apiary sites provided in the table below are located within the planning unit. Contact details are available from the Batemans Bay office.

Name	Site Number	Contact number	Pre burn notification complete?
	16.08 & 17.08		
	16.07 & 17.07		
	18.07		

- The HC must provide the apiary permittees with at least two weeks advance notice when bee boxes need to be removed or relocated.
- There are four permanent bee set down sites located within the compartment (see HPOM for locations). These sites must be levelled and free of debris at the completion of logging.

### Rocky Terrain

Rocky terrain occurs within the net planned area. All rocky terrain shown on the HPOM was assessed at the planning stage and is likely to meet the definition of a rocky outcrop or cliff. These areas will need to be excluded as per TSL requirements. FT/HC will continue to conduct on the ground mark-up and searches and report back to Planner/Field Ecologist any feature requiring further investigation.

### Underground Cables

A dial before you dig request query of the compartment did not indicate the presence of any underground cables or other associated infrastructure. However, prior to any harvesting or roading activity taking place, the FT should inspect the area for markers or other evidence of cables and flag with marking tape. When carrying out harvesting or road maintenance activities near cables, minimise ground disturbance across or along and increase depth of earth cover if required.

From time to time above ground infrastructure associated with the cables occurs. Where this infrastructure is detected, the PA should pass the location and details on to the burning supervisor who should consider if extra protection measures (eg rake hoe lines) are required.

Any damage to cables must be immediately reported to Telstra on 13 22 03.

### Forest Management Zoning

FMZ 3A (Harvesting Excluded) and FMZ 4 (General Management - normal harvesting prescriptions apply) occur within the compartment. Refer to HPOM for more detail.

FMZ 3A – Prescribed burning is only permitted in these areas where fire does not conflict with underlying protection zones e.g. rainforest, cultural heritage etc. (Refer to cultural heritage flora and fauna sections of this plan and the standard harvest plan conditions for more detail).

### IFOA Required Approval of Forestry Activities

Approvals have not been obtained for snig track construction and/or use, road construction, road re-opening, routine road maintenance and log haulage in FMZ 3A. If the HC identifies the need for harvesting related activities to occur within FMZ 3A during the operation, the Planner must be contacted to seek Planning Supervisor approval.

All areas of Rainforest require prior OEH approval and Stream Exclusion Zones require prior Planning Supervisor approval before forest harvesting related activities (e.g.: road or snig track construction & reopening) can be undertaken. It is the responsibility of the HC to identify any exclusion areas which will need to be crossed during harvesting. The HC must then contact the Planner to obtain the necessary approval.

### Cultural Heritage

All relevant representatives have been consulted &/or inspected Compartment 187.

### Flora and Fauna

#### Species adequately covered by general prescriptions:

The following species have been recorded in or around the compartments and are adequately covered by the general prescriptions. No further protection measures are required for these species:

**Common Bent-wing Bat** (*Miniopterus schreibersii*), **Gang Gang Cockatoo** (*Callocephalon fimbriatum*), **Glossy Black-Cockatoo** (*Calyptorhynchus lathami*), **Little Lorikeet** (*Glossopsitta pusilla*), **Grey-headed Flying Fox** (*Pteropus poliocephalus*), **Large-footed Myotis** (*Myotis aduersus*), and **Square-tailed Kite** (*Lophoictinia isura*).

#### Tree Retention

Zone	Hollow bearing Trees/ha	Recruitment Trees /ha	Protection of Retained Trees (only if safe)	Dead Standing Trees	Significant Food Resource*
<b>Regrowth</b>	Up to 5	1 for every tree retained under 5.6d	ö	ö	ö
<b>TSL condition</b>	5.6d	5.6e	5.6h	5.6f	5.6 g

ö - Condition applies

\*3 Glossy Black Cockatoo feed trees and 3 Yellow Bellied Glider/Squirrel Glider sap feed trees occur within compartment 187 at locations shown in the table below. Note one of the Glossy Black Cockatoo feed trees and all three of the Yellow Bellied Glider sap feed trees occur within the excluded forest area.

Species	Feature	Zone	GDA Easting	GDA Northing	Comments
Glossy Black-Cockatoo	Feed tree	55	236413	6032388	
Glossy Black-Cockatoo	Feed tree	55	236174	6031842	
Glossy Black-Cockatoo	Feed tree	55	236860	6031324	
Yellow-Bellied Glider	Feed tree	55	236782	6030899	Within FMZ3A
Yellow Bellied Glider	Feed tree	55	236718	6030954	Within FMZ3A
Yellow Bellied Glider	Feed tree	55	236764	6030924	Within FMZ3A

### General exclusion zones

General exclusions as listed below are shown on the HPOM.

Feature/Condition	TSL cond'n	Occurs within Planning Unit
<b>Rainforest</b>	5.4	Has been assessed as a risk that Warm Temperate/Cool Temperate/Depauperate (Dry) may occur in the field. May require further investigation#.
<b>Riparian Protection Zones</b>	5.7	Yes
<b>Ridge &amp; Headwater Habitat</b>	5.8	Yes
<b>Wetlands</b>	5.9	Has been assessed & is unlikely to occur in the field. May require further investigation#.
<b>Heath and Scrub</b>	5.10	Has been assessed & is unlikely to occur in the field. May require further investigation#.
<b>Rocky Outcrops and Cliffs</b>	5.11	Has been assessed as a risk and occurs in the field. May require further investigation#.
<b>Endangered Ecological Community</b>	NA	Has been assessed & is unlikely to occur in the field. May require further investigation#. <b>Harvesting, harvesting machinery and post harvest burning must be excluded from all areas of EEC.</b>

**#FT/HC will continue to conduct on the ground mark-up & searches and report back to foresters/ecologists any features requiring further investigation.**

**General Threatened Flora and Fauna Prescriptions**

Feature	Records in Mogo 187	Licence conditions under the TSC Act
Threatened Frog General Protection Measures	No	5.12
Bird Nest and Roost Site Protection	No	5.13
Tree Bat Roost Protection	No	5.14.1
Subterranean Roost Protection	No	5.14.2
Protection of flying-fox Camps	No	5.14.3
Burning	Net planned area	5.16
Ground Habitat Protection	Net planned area	5.17

**Species & Site-Specific Threatened Flora and Fauna Prescriptions**

The following species have been recorded within or nearby the area and the associated prescriptions must be implemented:

Threatened species and habitat features within trigger distance	Records in Mogo 187	Licence conditions under the TSC Act or relevant Site-specific prescription
<b>Powerful Owl <i>Ninox strenua</i>, Masked Owl <i>Tyto novaehollandie</i>.</b>	no	6.4
<b>Swift Parrot <i>Lathamus discolor</i></b>	no	6.5
<b>Regent Honey eater <i>Xanthomyza Phrygia</i>, Yellow-bellied Glider <i>Petaurus australis</i></b>	Yes	6.13
<b>Pomaderris bodalla</b> ,	no	6.16.1 Exclusion of specified forestry activities from 100% of individuals and no buffer. To assist burning crew exclude burning individuals, minimise accumulation of debris around the base or retained trees within a 10m radius of each record. Species profile is attached to plan.

**Fisheries Licence Conditions**

There are no known records of threatened fish species or class 1 or 2 aquatic habitat relevant to this operation. The conditions of the fisheries licence are not triggered for this operation.

## Soils and Water Protection

### Refer to EPL Booklet & Standard Plan Conditions

#### Site-specific EPL Conditions

Elements	Conditions
Unmapped Drainage Lines	EPL does not apply: refer to drainage feature protection below.
Drainage Feature Protection	See HPOM for widths
Inherent Hazard Class	1
Dispersible Soils	No
Seasonality Harvesting Exclusions	No
Seasonality Burning Exclusions	No
Log Dumps	Refer relevant conditions for IHL
Snig Tracks	Refer relevant conditions for IHL
Roads	See Schedule 5 of EPL Booklet
Slope limits for harvesting	Refer to Schedule 4B.3 of EPL

#### Drainage Feature Protection

Filter strips (EPL), Protection Zones (EPL), Operational Zones (EPL), Protection Zones -hard (TSL) and Protection Zones -soft (TSL) must be retained along all drainage lines, prescribed streams and watercourses within the net planned area of the compartments at minimum widths as stated in the Table below.

**Table 1: Minimum filter strip, protection zone and operational zone widths for mapped and unmapped drainage lines, prescribed streams and watercourses in hardwood forests in Inherent Hazard Level 1 (metres – measured along the ground surface)**

Stream Order	EPL Filter Strip TSL Protection (hard)	EPL Protection Zone TSL Protection* (soft)	EPL Operational Zone	Drainage Feature Protection: FT/HC marking instruction
Unmapped	N/A#	N/A#	N/A#	5m (Red)
1st order	5	5	10	10m (Pink)
2nd order	5	15	10	20m (Pink)
3 <sup>rd</sup> order	5	25	10	30m (Pink)
4 <sup>th</sup> order +	5	45	10	50m (Pink)

# for this operation FCNSW has chosen to harvest this area without EPL coverage. All EPL conditions continue to apply **except** for the rules applying to filter strips, protection zones and operational zones of the **unmapped drainage lines**. Refer to Best Management Practices for unmapped drainage lines in the standard conditions.

Harvesting of unmapped drainage lines, MUST NOT occur in unmapped drainage lines which are running or holding water. It is the responsibility of the HC to inspect each unmapped drainage line prior to harvesting it, to determine if it is running or holding water.

### **Log Dump Location**

10 log dumps are indicated on the HPOM. Field location of log dumps must utilise the most level site available consistent with the location indicated on the HPOM. Inherent hazard level 1 Conditions 26, 27, 30, and 33 of Schedule 4 of the EPL must apply.

### **Drainage Feature Crossings**

One snig track crossings (S1) and 1 road crossing (C1) are approved for use on drainage features (Refer to HPOM). Road crossing details are contained in Attachment 2 of this Plan. Snig track crossing details are provided below:

Crossing Name & Coordinates	Crossing derails	Required Works
S1-new Easting 236255 Northing 6031944	Mapped 1 <sup>st</sup> order drainage line, occurs as a drainage line in the field.  Natural Causeway crossing.  Not class 1 or 2 Fisheries Licence aquatic habitat. Class 4 fish passage class: unlikely fish habitat.	Construct natural causeway crossing (expected side cut <0.5m) as per EPL. Construction should minimise disturbance and clearing and be at right angles to the flow unless an angled approach results in reduced disturbance.  Armour depression with rock/gravel if required in wet conditions. Install cross banks/rollovers on completion of use within timeframes and spacing's specified in EPL.

### **Mass Movement**

Compartment 187 is not in an area identified as having a potential for mass movement. No specific prescriptions relating to mass movement/snigging are required.

### **Suitability of existing log dams and gully stuffers**

There are no known log dams or gully stuffers on snig track or road crossings in the compartments.

Condition 47 of Schedule 4 of the EPL must apply.

### **Post Log Burning Control Lines**

To assist the post log burning crews prevent fire from entering areas to be excluded from burning, control line construction must be undertaken concurrently with harvesting. Where possible, snig tracks patterns should be designed to double as control lines. Control lines must be located as close as reasonably practical to the feature to be excluded from burning. The HC must assess the areas harvested, snig track network and existing roads to determine if there are sufficient control lines in place and where required instruct the contractor to construct additional mineral earth control lines to supplement these. The HC must record instances where it was not possible to construct a suitable control line close to the feature to be excluded and recommend harvest areas which should be excluded from the post log burning operation due to inadequate control lines.

The table below lists critical boundaries in compartment 187. Where possible design snig track patterns so they double as bare earth containment lines as close as possible to these boundaries. Where this is not practical, it is NOT necessary to construct a bare earth break along boundary of the exclusion; the practice of no direct ignition will be followed.

Critical boundary	Completed Yes /No
South-western boundary of Resource Unit 1 adjacent rocky outcrop north of Bimbimbie Road	

The table below lists critical boundaries in compartment 187. Where possible design snig track patterns so they double as bare earth containment lines as close as possible to these boundaries. Where this is not practical, HC must instruct contractor to construct a bare earth break (drained as per EPL snig track conditions) as close as possible to the critical boundary.

Critical boundary	Completed Yes /No
South-eastern boundary of compartment (North of Misons Road)	
North eastern boundary of compartment adjacent Ridge and Headwater Habitat section (either side of Bimbimbie Road)	

#### **Pre-Operational Briefing**

I acknowledge that I have received a copy of the Harvesting Plan for Compartment 187 in Mogo State Forest and that I have been briefed on the conditions of the Plan and understand the supervision and operational control requirements as explained to me by the HS or his/her delegate.

Position	Name	Signature	Date

**Post Harvest Mapping Features Confirmation Checklist**

Feature	Planning Updates	Reason (Error/New)	GIS update tool completed?	Harvesting Updates	Comments
Soil Regolith	No				
Mapped Drainage	No				
Rainforest	No				
Rocky outcrops	No				
Wetlands	No				
Cultural Heritage	No				
Existing Roads	No				
New Roads	No				
Heath	No				
Powerlines etc	No				
Other	No				

## HC Feature Usage Record

### Dates of commencement and cessation of logging

Date of commencement of logging: \_\_\_\_\_

Date of cessation of logging: \_\_\_\_\_

## DUMP USAGE RECORD

- Record the commencement and completion of harvesting at each dump
  - Record the occurrence of temporary stopping of harvesting at each dump.

\*At completion of snig track/dump, track drainage must be completed within **2** days unless soil is saturated.

\*At temporary cessation of snig track use, track drainage must be completed within 5 days unless soil is saturated.

Situations where drainage could not be completed due to saturated soils must be recorded in HC/FT Notes.

## HC/FT Notes

## HC/FT Notes (continued)

## HC/FT Notes (continued)

## HC/FT Notes (continued)

## HC/FT Notes (continued)

**Clearance Certificate**

**COMPARTMENT: 187, MOGO STATE FOREST**

To ..... HC

I request approval for me to move my logging crew and all associated machinery from the above-mentioned area to the next compartment in accordance with Section 3.5 of the Forest Practices Code.

I certify that:

- (a) all permanent roads, trails and mitre drains have been cleared of harvesting debris;
- (b) butt damage to retained trees has been kept to acceptable limits;
- (c) all trees marked for removal have been felled;
- (d) utilisation limits have been satisfactorily met;
- (e) stump heights conform to requirements;
- (f) all hanging trees have been felled and brought down;
- (g) all log dumpsites have been satisfactorily restored as required;
- (h) harvesting debris is not accumulated around retained trees;
- (i) all accumulated litter has been disposed of properly;
- (j) all filter and buffer strip requirements have been complied with;
- (k) all snig track, extraction track and temporary logging road drainage has been installed satisfactorily and other required rehabilitation work has been completed;
- (l) all necessary repairs to damaged roads, signs, fences and other structures have been carried out.
- (m) **\_\_\_\_\_ (insert quantity) rubber flaps have been recovered in a satisfactory condition and reported to Roading Coordinator for collection.**
- (n) all machinery, equipment and vehicles have been checked and are free of noxious weeds, diseases and pests.

I believe that I have met all my obligations under the conditions of the Contractors Licence, the EPL and TSL which apply to the compartment just completed, as stated in this Harvesting Plan.

Signature.....Name.....Date .....

Contractor

As a result of inspections of the logging operations made in accordance with this Harvesting Plan, I am satisfied that, to the best of my knowledge, the contractor responsible for this harvesting operation has satisfactorily completed all work and approval is given for her/him to remove her/his machinery and equipment and leave the area/commence operations in another compartment.

This clearance does not release the contractor from any obligation to undertake any remedial work if subsequent deficiencies are shown to result from inadequate practices during the harvesting operation, which are found during any inspections of the area made within 12 months of the date of this post-harvesting inspection.

Last inspection was made on .....(Date)

Signed .....(Date).....

HC

### Post Logging Information

Record any circumstances of significance relating to the harvesting of this compartment. Please draw or include any annotations on the attached operation scale map.

#### Summary of silvicultural treatment

Treatment type	Area (ha) subject to treatment (HC estimate)	Number of AGS gaps created	Comments
Australian Group Selection			
Single Tree Selection			
Thinning/Spacing			
Post Harvest Silviculture			

**Actual area harvested (record on attached HPOM)** Give reasons for harvestable areas that were not harvested (e.g. too steep, defective timber). Make reference to map.

#### Post Logging Basal Area sweeps (Resource Unit 1)

Sample point	GPS (GDA 94) Easting	GPS (GDA 94) Northing	Pre-harvest (B) BA m <sup>2</sup> /ha	Post-harvest(A) BA m <sup>2</sup> /ha	Difference (D) (B – A) m <sup>2</sup> /ha	% BA removed D/B x100	Comments
1	236494	6031881	20				
2	236869	6031860	18				
3	237268	6031686	26				
4	236183	6031828	22				
5	236380	6032262	18				
6	237025	6031416	18				
7	237282	6031563	36				
8	236898	6032291	20				
9	236689	6032303	20				
10	236814	6032667	18				
Average			21.6				

Comply with maximum STS BA removal of 45% or Thinning BA removal of 60% Y/N

#### Possible next cut (tick appropriate boxes)

Main product type	Anticipated volume		
	H	M	L
Girders			
Veneer			
Poles/piles			
Quota			
Smalls/Thinnings			
Salvage			
Pulpwood/chipwood			

Time to next harvest	
0 to 5 years	
5 to 10 years	
10 to 20 years	
20 to 30 years	
30 plus years	

**ATTACHMENT 2**

**ROADING PLAN**

**Summary of Roading Requirements**

Feature	Details	Works Required
Existing roads to be used.	2730m/5	Yes
New roads to be constructed	0m	NA
Existing crossings used	1	Yes
New crossings to be constructed	0	NA
Length of road >10°	0m	NA
Borrow pits and gravel pits	0	NA
Mass movement prescriptions apply	No	NA
Dispersible soil conditions apply	No	NA
Seasonality provisions apply	No	NA

**Note:** Maintenance works not completed by Roading Coordinator must be recorded and passed onto the HC for completion during harvesting and documentation.

The start and finish dates of all maintenance and construction must be recorded on the individual roading sheets along with other relevant changes or explanations.

All rubber flaps on minor forest roads must be removed and replaced with trafficable rollover banks on completion of operation.

**CHECKLIST OF WORKS REQUIRED ON ROADS & CROSSINGS**

Road/Crossing Name	Works Required	Date Started	Date finished	Signature
Bimbimbie Road (1000m)	<p>Reshape road &amp; maintain existing drainage structures as specified on Roading Map. If existing rollovers are on slopes greater than 5 degrees, replace with rubber flaps.</p> <p><b>RC/HC Comments:</b></p>			
Cpt 187/4 Road (359m)	<p>Reshape road &amp; maintain existing drainage structures, install new drainage as required and to meet EPL standard;</p> <p>Spacing of drainage on this road was not assessed by the planner</p> <p><b>RC/HC Comments:</b></p>			
Cpt 187/3 Road (790m)	<p>Reshape road &amp; maintain existing drainage structures. Install new drainage as required and to meet EPL standard;</p> <p>Spacing of drainage on this road was not assessed by the planner</p> <p><b>RC/HC Comments:</b></p>			
Misons Road (478m)	<p>Nil work required as at 30/06/15.</p> <p><b>RC/HC Comments:</b></p>			
Cpt 186/3	<p>Reshape road &amp; maintain existing drainage structures, install new drainage as required and to meet EPL standard;</p> <p>Spacing of drainage on this road was not assessed by the planner</p> <p><b>RC/HC Comments:</b></p>			

Road/Crossing Name	Works Required	Date Started	Date finished	Signature
C1 (on Cpt 186/3 Road)	<p>Maintain existing road drainage structures within 30m of crossing. I.e. existing rollover and mitre drain at approximately 28m on eastern side of crossing and crown and mitres at 14m (N side road) and 24m (S side road) on western side of crossing. Install rubber flaps at between 5m and 30m from crossing point if field conditions become impractical for rollovers, mitres and road crown to be maintained.</p> <p>Armour bed of drainage feature point with 100mm rock</p> <p>Armour banks of drainage feature with 60mm gravel</p> <p><b>RC/HC Comments:</b></p>			

## **Pomaderris bodalla**

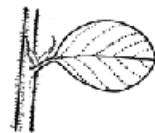
### Description:

- a shrub between 2 and 4 metres high.
- young stems have spreading rusty simple hairs and dense greyish hairs.
- Shaped like a football, sometimes longated
- mostly 2-3 cm long and 12-15 mm wide.
- Leaves: upper leaf surface :dark green and hairless
- Leaves lower surface has sparse spreading rusty hairs over short greyish hairs.
- Flowers cream and display in loose, irregular clusters.



### Habitat

- On the south coast occurs in moist open forest along sheltered gullies or along stream banks.



### Distribution

- Generally found between Bodalla and Merimbula

### TSL REQUIREMENTS

- **Condition 6.16.1 Exclusion of specified forestry activities from 100% of individuals and no buffer**

# Roading Map

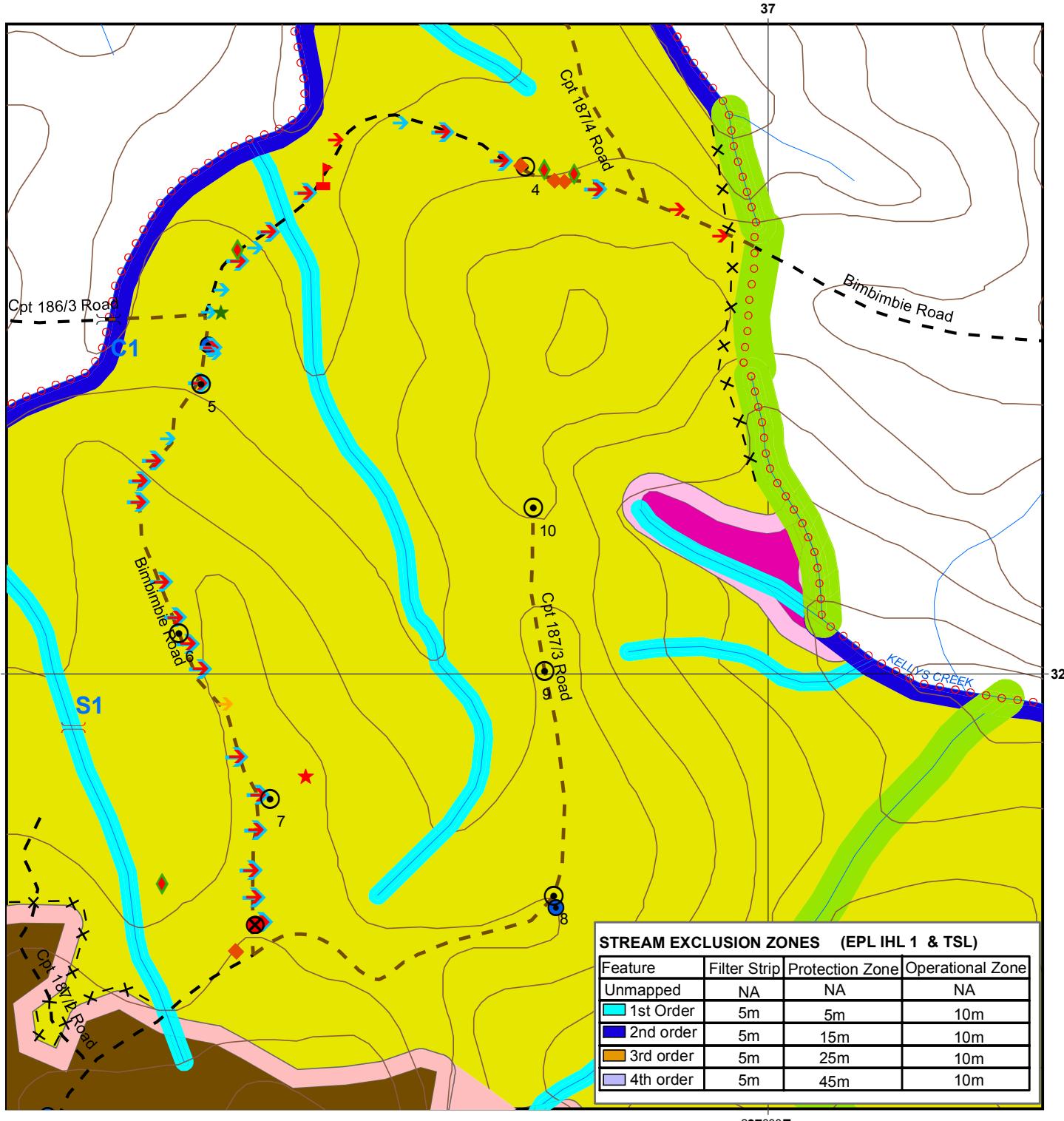
## Compartment: 187

State Forest: MOGO No: 549

Southern IFOA - South Coast

Map Sheet: MOGO

8926-3N



### LEGEND

#### BOUNDARIES

○ ○ ○ Compartment Boundary

-×- Proposed Control Line

#### DRAINAGE

— Mapped LIC Drainage

#### ROADS

— Major Forest

- - Minor Forest

— EPL Standard Existing (Major)

— EPL Standard Existing (Minor)

### FAUNA FEATURES

- Yellow-bellied Glider (Heard)
- Yellow-bellied Glider (Feed Tree)
- Glossy Black-Cockatoo
- Glossy Black-Cockatoo (Feed Tree)
- Grey-headed Flying-fox

### DUMPS & CROSSINGS

- Temporary Dry Weather
- Permanent Bee Set Down
- Existing Crossing
- New Crossing

### NON HARVEST AREA

- Green: Ridge & Headwater Habitat (40m)
- Pink: Rainforest & Exclusion (20m)
- Brown: Rock & Exclusion (20m)
- Light Pink: RU2 - Excluded Forest - (8 Ha)

### HARVEST AREA

- Yellow: RU1 - STS Heavy (114 Ha)

### ROADING FEATURES

- Rubber Flap
- Mitre Drain
- Rollover Drain
- Spoon Drain
- Rollover with Mitre Drain

### SAFETY ALERT FEATURES

- 红旗: Dangerous Tree