

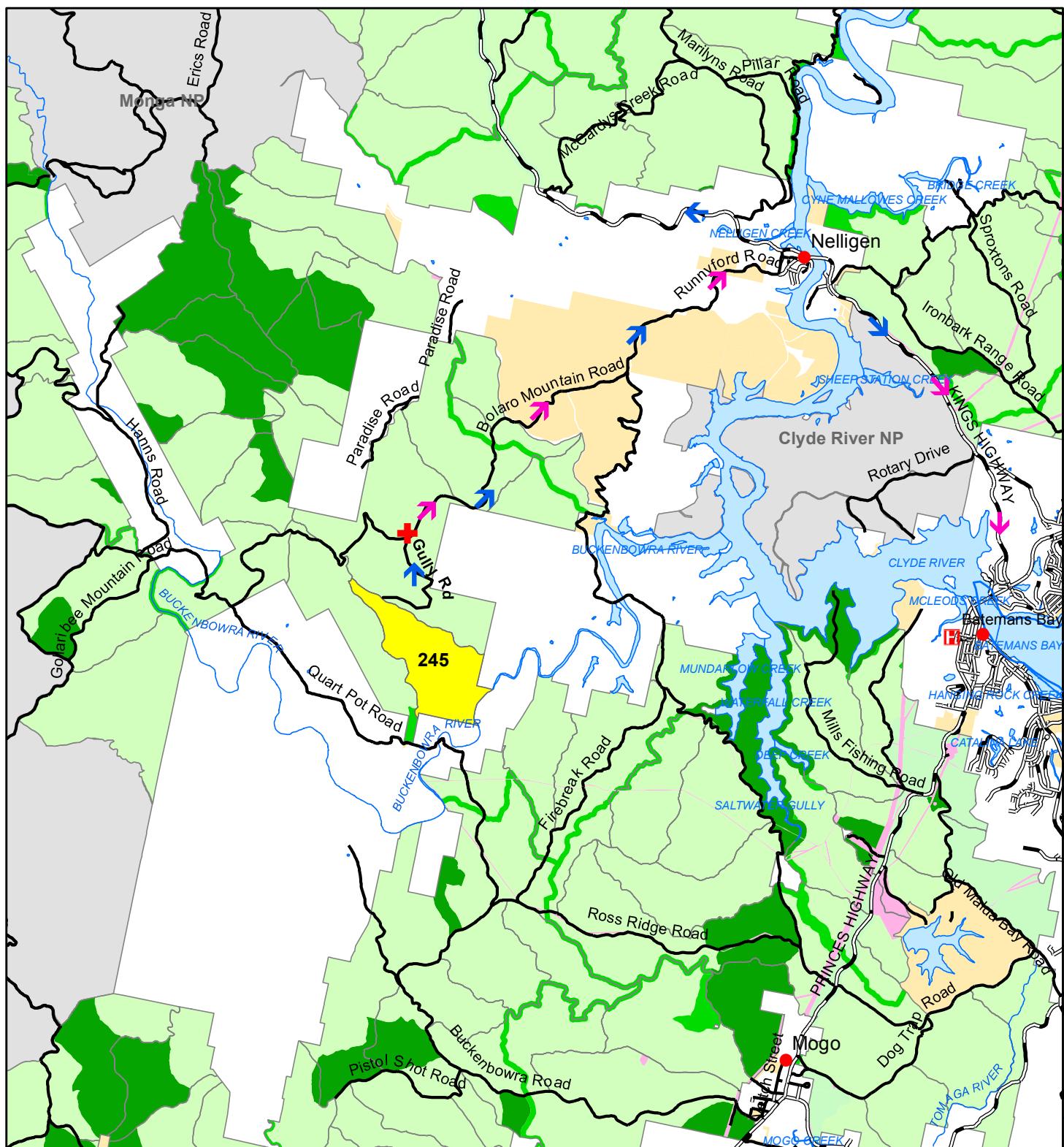
# LOCALITY MAP

Compartment 245

State Forest: Bolaro No: 566

Southern IFOA - BATEMANS BAY MANAGEMENT AREA

Scale: 1:100,000



- Towns & Localities
- Sealed Road
- Major Forest Road
- Major Rivers

- State Forest
- Planning Unit
- Vacant Crown Land
- Non Forest
- Freehold

- National Parks
- Formal Reserve
- Informal Reserve
- Water

- Emergency Meeting Point
- Helicopter Landing Area
- Evacuation Route
- Haulage Route

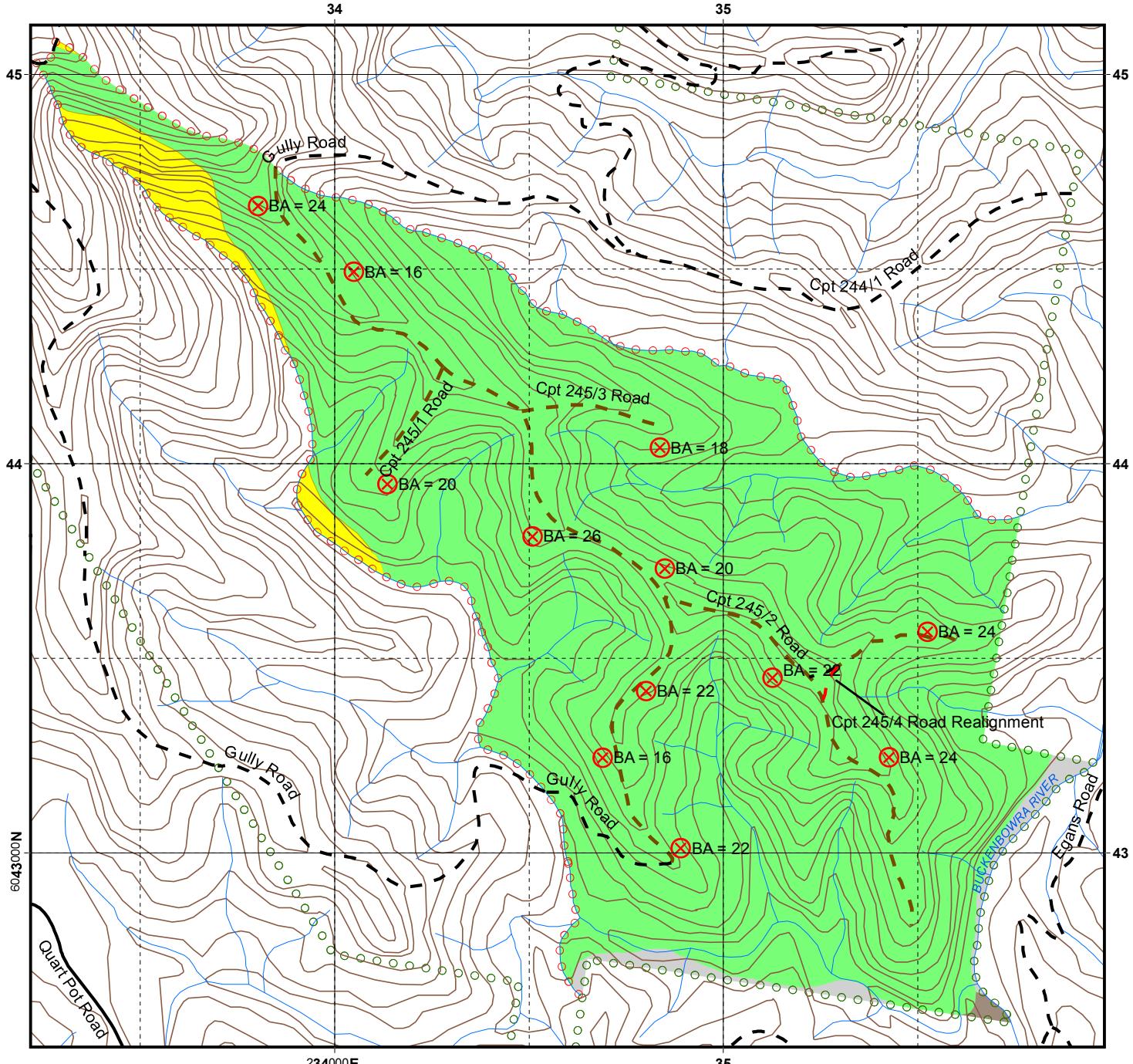


# Forest Type Map

## Compartment: 245

State Forest: BOLARO No: 566

Southern IFOA - South Coast  
Map Sheet: NELLIGEN 8926-4S



### LEGEND

#### BOUNDARIES

- Compartment Boundary (Red dashed line)
- State Forest Boundary (Green dashed line)

#### ROADS

- Major Forest (Solid line)
- Minor Forest (Dashed line)
- EPL Standard Existing (Minor) (Brown dashed line)
- EPL Standard (New Construction) (Red dashed line)

#### DRAINAGE

- Drainage Line (Blue line)

#### FOREST TYPES

- |                               |
|-------------------------------|
| Coastal Moist Forest (4.1 Ha) |
| Spotted Gum (239.7 Ha)        |
| Coastal Dry Forest (8.3 Ha)   |
| Non Eucalypt Forest (0.4 Ha)  |

#### OTHER FEATURES

- Basal Area Plot (Red X)

0 125 250 500 750 1,000 Meters

Scale: 1:15,000  
Contour Interval 10m



## HARDWOOD FORESTS - SOUTHERN IFOA SOUTH COAST HARVESTING PLAN

### Bolaro State Forest – Compartment 245

#### 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	01 / 02 / 2016	Date	01 / 02 / 2016

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, 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.

<b>Abbreviations used in this plan</b>
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FT = Forest Technician, HC= Harvesting Coordinator, PtS= Protection Supervisor, HS = Harvesting Supervisor, RC = Roading Coordinator, IFOA = Integrated Forestry Operations Approval.

<b>Area Identification and Yield Estimates</b>
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State Forest	Compartment/s	IFOA Region	Management Area	Certification
Bolaro	245	Southern	Batemans Bay	AS4708:2007 ISO 14001

	<b>Cpt 245</b>
Plan Compartment ID	<b>22218</b>
Gross Area (ha)	253
Net Harvestable Area (ha)	212
Harvest Area (ha)	205
Poles, Piles, Veneer & Girders	0m <sup>3</sup>
Quota Logs (HQL)	1350m <sup>3</sup>
High Quality Small	650m <sup>3</sup>
Salvage	840m <sup>3</sup>
Pulp E1	2000t
Firewood/Misc	650t

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

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

<b>Slope Class</b>	<b>Cpt 245</b>
	<b>% of harvest area</b>
0-20°	78
20-25 °	16
25-30 °	6



## **ATTACHMENT 1: SITE SAFETY PLAN**

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	A Potential Mine Shaft Area exists within 200m of the compartment's south-eastern boundary. Assess snig track routes and tree felling paths prior to operating. Identify and mark sites accordingly.		
3. Hazardous or dead trees	<b>Refer to FCNSW WHS procedure 4.26.</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>		
4. Overhead hazards associated with dumps	<b>Refer to FCNSW WHS procedure 4.26.</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. Trucks colliding with oncoming school buses on Reid St and Runnyford Road weekdays 7-8.30am and 3-4:30 pm.	Use UHF channel 30 (channel used by school buses) whilst travelling along Reid Street and Runnyford Road. When approaching corners communicate trucks location and/or direction of travel to alert bus drivers.		
7.			

- 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° 41' 42.25" S', 150° 3' 48.85" E	MGA: 234294E 6045897N	Datum: GDA 94	Zone: 56
Location description: Northern Intersection of Gully Road and Bolaro Mountain Road			
Emergency meeting point for ambulance / police (refer to attached locality map)			
GPS Lat/Long: -35° 41' 42.25" S', 150° 3' 48.85" E	MGA: 234294E 6045897N	Datum: GDA 94	Zone: 56
Location description: Northern Intersection of Gully Road and Bolaro Mountain Road			
Helicopter landing place (refer to attached locality map)			
GPS Lat/Long: -35° 42' 28.43" S', 150° 10' 19.69" E			
Location description: Mackay Park Oval, Batemans Bay			
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:	Bolero	
	Nearest town or locality:	Nelligen	
	Nearest ambulance station:	Batemans Bay	
3. Address?	Bolero Mountain Road		
4. Nearest road junction/cross street?	Northern Intersection of Gully Road and Bolaro Mountain Road		
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 north on the Princes Highway travel approx. 1.3km then turn left onto Kings Highway. Travel approx. 8.2 km then turn left onto Reid Street. Travel approximately 0.45km and turn right onto Runnyford Road. Travel approximately 4.1km then turn right onto Bolero Mountain Road. Travel Approximately 6.4km and the intersection of Gully Road and Bolero Mountain Road will be on the left.			
8. 4WD ambulance required N	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	1980	1982	1983	1994	2005
<b>TSI</b>	<b>X</b>	ö	<b>X</b>	<b>X</b>	<b>X</b>
<b>HR Burning</b>	<b>X</b>	<b>X</b>	<b>X</b>	ö	ö
<b>Wildfires</b>	ö	<b>X</b>	<b>X</b>	ö	<b>X</b>
<b>Logging m<sup>3</sup></b>	0	1850	337	0	1380

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)
245	1	12	22	16 - 26
245	2	0	NA – excluded from harvesting	NA – excluded from harvesting

### Silvicultural Planning

#### Single Tree Selection

The STS tract (Resource Unit 1 - 205 ha) is a mixed aged mature forest that will be harvested under a heavy single tree selection (STS) regime. The objective within the 205 ha harvest area for this operation (resource unit 1) 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 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 of Bolaro compartment 245 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> ), white stringybark ( <i>Eucalyptus globoidea</i> ), and yellow stringybark ( <i>E. muelleriana</i> )	Mature to over mature predominantly mixed age stand. Stand has reached endpoint with limited further growth potential.
2	Overstorey dominated by spotted gum ( <i>Corymbia maculata</i> ), white stringybark ( <i>Eucalyptus globoidea</i> ), and yellow stringybark ( <i>E. muelleriana</i> )	Mature to over mature predominantly mixed age stand. Stand has reached endpoint with limited further growth potential. Accessibility constraints preclude the harvesting of this area.

### Harvesting Prescription

Resource Unit (Refer to HPOM for detail)	% of Harvest Area	Silvicultural Treatment
1	100	<p>STS heavy:</p> <ul style="list-style-type: none"> <li>• Retain and protect from harvesting/fire damage:           <ul style="list-style-type: none"> <li>-poles/advanced growth (&lt;40cm DBHOB) with good form and vigour,</li> <li>-habitat and recruitment trees as per TSL,</li> </ul> </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:           <ul style="list-style-type: none"> <li>-reject tree felling (HC must first obtain approval from HS),</li> <li>-defer harvesting until ideal market conditions prevail,</li> <li>-consider harvesting under a light or medium STS regime</li> </ul> </li> </ul>
2	0	Exclude from harvest due to accessibility issues

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 245 is within Eurobodalla Shire Council 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 Council 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.

#### **Inventory 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.

#### **Private Property**

Private property occurs adjacent to the eastern and southern boundary of the compartment, as indicated on the HPOM. Private property owners have been notified of the scheduled harvesting and post-harvest burning. The table below lists neighbours who adjoin Compartment 245:

Name	Lot/DP Number (s)	Postal Address	Contact number (& email if available)	Was harvest plan notification letter returned to sender?	Pre burn notification done?
	Lot 92,94,133 / DP755969 Lot 61,62 / DP755950				

- No harvest disturbance is permitted on private property.
- Harvesting debris must not be left within five metres of the boundary fence lines.
- Any damage to fences must be repaired by the contractor.
- Access roads must be maintained free of debris and in a trafficable state.

### Occupation Permits

#### Apiary

2 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?
	15.16, 16.15		

- The HC must provide the apiary permittees with at least two weeks advance notice when bee boxes need to be removed or relocated.
- Permanent apiary set down sites located approximately 50m east of dump 2 and 50m southeast of dump 7 (see HPOM), must be levelled and free of debris at the completion of logging.

#### National Parks and Nature Reserves

Compartment 245 adjoins the Sanctuary Zone for Buckenbowra River Marine Park. The boundary between the Marine Park and compartment 245 is the mean high water mark of Buckenbowra River. Exclusion zones for the Buckenbowra River and all other drainage lines in compartment 245 will be applied as per Southern Region IFOA. The following conditions on harvesting will also be applied:

- No harvest disturbance is permitted within National Park or Nature Reserves.
- Harvesting debris must not be left within five metres of the boundary fence lines.
- The contractor must repair any damage to fences.
- Access roads must be maintained free of debris and in a trafficable state.
- Boundaries must be marked in the field.

#### Underground Cables

A dial before you dig request query of compartment 245 indicated that no underground Telstra cables are present within the compartment boundary.

### 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 FMZ3A during the operation, the Planner must be contacted to seek Planning Supervisor approval.

Construction or re-opening of roads or snig tracks may occur with prior approval in the following exclusion zones:

- Planning Supervisor approval required for Stream Exclusion Zones or Rainforest.

During the harvesting operation the HC must identify any crossings required in these exclusion zones and contact the Planner to obtain required approvals.

### Cultural Heritage

**Cultural Heritage** - All relevant representatives have been consulted &/or inspected Compartment 245.

### 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:

**Sooty Owl (*Tyto tenebricosa*), Glossy Black-Cockatoo (*Calyptorhynchus lathami*), Square-tailed Kite (*Lophoictinia isura*), Little Lorikeet (*Glossopsitta pusilla*), Gang Gang Cockatoo (*Callocephalon fimbriatum*)**

**Tree Retention**

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

ö - Condition applies

\*32 Glossy black cockatoo feed trees occur within compartment 245 at locations shown in the table below.

Species	Feature	Zone	GDA Easting	GDA Northing	Comments
Glossy Black-Cockatoo	Feed tree	56	234581	6043509	1 Marked with orange tape
Glossy Black-Cockatoo	Feed tree	56	234561	6043523	1 Marked with orange tape
Glossy Black-Cockatoo	Feed tree	56	234543	6043525	1 Marked with orange tape
Glossy Black-Cockatoo	Feed tree	56	234322	6043771	1 Marked with orange tape
Glossy Black-Cockatoo	Feed tree	56	234311	6043816	2 Marked with orange tape
Glossy Black-Cockatoo	Feed tree	56	234448	6043835	1 Marked with orange tape
Glossy Black-Cockatoo	Feed tree	56	234473	6043511	1 Marked with orange tape
Glossy Black-Cockatoo	Feed tree	56	234427	6043524	3 Marked with orange tape
Glossy Black-Cockatoo	Feed tree	56	234392	6043595	1 Marked with orange tape
Glossy Black-Cockatoo	Feed tree	56	234395	6043604	1 Marked with orange tape
Glossy Black-Cockatoo	Feed tree	56	234507	6044399	2 Marked with orange tape
Glossy Black-Cockatoo	Feed tree	56	235387	6043944	2 Marked with orange tape
Glossy Black-Cockatoo	Feed tree	56	234857	6043607	1 Marked with orange tape
Glossy Black-Cockatoo	Feed tree	56	234935	6042837	1 Marked with orange tape
Glossy Black-Cockatoo	Feed tree	56	235251	6042924	1 Marked with orange tape
Glossy Black-Cockatoo	Feed tree	56	235400	6042805	1 Marked with orange tape
Glossy Black-Cockatoo	Feed tree	56	233972	6044057	3 Marked with orange tape
Glossy Black-Cockatoo	Feed tree	56	234194	6043825	1 Marked with orange tape
Glossy Black-Cockatoo	Feed tree	56	234203	6043848	1 Marked with orange tape
Glossy Black-Cockatoo	Feed tree	56	234198	6043961	1 Marked with orange tape
Glossy Black-Cockatoo	Feed tree	56	234136	6043757	1 Marked with orange tape
Glossy Black-Cockatoo	Feed tree	56	234155	6043784	1 Marked with orange tape
Glossy Black-Cockatoo	Feed tree	56	234622	6043127	3 Marked with orange tape

### 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 & is unlikely to 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 & is unlikely to occur in the field. May require further investigation#.
<b>Endangered Ecological Community</b>	NA	Has been assessed as a risk that River-Flat Eucalypt Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions EEC may 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 Cpt 245	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 245	Licence conditions under the TSC Act or relevant Site-specific prescription
<b>Powerful Owl</b> <i>Ninox strenua</i>	Yes	6.4 <i>Owl Landscape Exclusion Zones occur in compartment 245</i>
<b>Spotted tailed Quoll</b> <i>Dasyurus maculatus</i>	Yes	6.10
<b>Yellow-bellied Glider</b> <i>Petaurus australis</i>	Yes	6.13

### 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	2
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 2 (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
<b>Unmapped</b>	<b>5</b>	<b>5#</b>	<b>10</b>	<b>5m (Pink &amp; Yellow)</b>
<b>1st order</b>	<b>5</b>	<b>5</b>	<b>10</b>	<b>10m (Pink)</b>
<b>2nd order</b>	<b>5</b>	<b>15</b>	<b>10</b>	<b>20m (Pink)</b>
<b>3<sup>rd</sup> order</b>	<b>5</b>	<b>25</b>	<b>10</b>	<b>30m (Pink)</b>
<b>4<sup>th</sup> order +</b>	<b>5</b>	<b>45</b>	<b>10</b>	<b>50m (Pink)</b>

**NOTE:** # FCNSW has chosen to harvest this area without EPL coverage, all EPL conditions continue to apply except for the rule applying to the cutting of trees from within the protection zone (soft) of the unmapped drainage lines. In this case, trees within protection zones of unmapped drainage lines may be felled and removed.

### **Log Dump Location**

15 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 2 Conditions 26, 27, 28, 30, 31 and 33 of Schedule 4 of the EPL must apply.

### **Mass Movement**

Compartment 245 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 245. 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.

<b>Critical boundary</b>	<b>Completed Yes /No</b>
FMZ 3A	
EEC	
North/northwest compartment boundary	

The table below lists critical boundaries in compartment 245. 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.

<b>Critical boundary</b>	<b>Completed Yes /No</b>
Private Property (along eastern boundary of Compartment)	

### Pre-Operational Briefing

I acknowledge that I have received a copy of the Harvesting Plan for Compartment 245 in Bolaro 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: 245, BOLARO 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 (eg. Too steep, defective timber). Make reference to map.

#### Post Logging Basal Area sweeps

Sample Point	GDA 94 Zone 56		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
	Easting	Northing					
1	234510	6043814	26				
2	235525	6043568	24				
3	235427	6043246	24				
4	234802	6043416	22				
5	234891	6043012	22				
6	234690	6043245	16				
7	233805	6044663	24				
8	234051	6044494	16				
9	234838	6044042	18				
10	234850	6043732	20				
11	234138	6043948	20				
12	235127	6043451	22				
Average			22				

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.	4651m/5	Yes
New roads to be constructed	200m/1	Yes
Existing crossings used	0	NA
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
Gully Road	<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 245/1 Road	<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 245/2 Road	<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 245/3 Road	<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
Cpt 245/4 Road	<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>Roadside clearing and some side-cutting is needed to construct the road realignment (dozer required);</p> <p>See New Road Construction section for details of Cpt 245/4 road realignment.</p> <p><b>RC/HC Comments:</b></p>			

### NEW ROAD CONSTRUCTION

#### Road Specific Conditions:

Road Name	Road Length (m)	Max. width of road prism (m)	Max. road grade (length road >10 degrees?)	Max. ground slope (length road >30 degrees?)	Estimated Max. height of cut / fill batters (m)	Estimated Max length of batters (m)	Mass movement / dispersible soils	Final road use	Responsibility	Start Date	Finish Date
Cpt 245/4 Road Realignment	200	7m	9°	25°	1m	100m	No	Close	Contractor		