



## HARDWOOD FORESTS- SOUTHERN IFOA SOUTH COAST HARVESTING PLAN

# **Boyne State Forest – Compartment 107**

#### 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:		Approved By:	
Harvest Planner	Mark Jones	Operations Planning Mgr	Lee Blessington
Signature	Mark Jones	Signature	Lee Blessington
Date	23/06/2016	Date	11/07/2016

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.

#### 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	IFOA Region	Management Area	Certification
Boyne	107	Southern	Batemans	AFS 604224
			Bay	AS4708:2013

	Cpt 107
Plan Compartment ID	22303
Gross Area (ha)	552
Net Harvestable Area (ha)	417
Harvest Area (ha)	398
Poles, Piles, Veneer & Girders	90m³
Quota Logs (HQL)	5000m <sup>3</sup>
High Quality Small	1000m <sup>3</sup>
Salvage	1400m <sup>3</sup>
Pulp E1	6000t
Firewood/Misc	2000t

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

# Slope Classes (percent of harvest area)

Slope Class	Cpt 107 % of harvest area
0-20°	95
20-25 °	4
25-30 °	1



# ATTACHMENT 1: SITE SAFETY PLAN

Worksite Information				
Is this Declared Hunting Area: Yes	Comments: Permar	nent Hunting Exclusion Zone In Place		
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.				
Site Supervisor				
Name:		Contact number:		
Communication				
Radio channel number VHF:		UHF		
Other (e.g. hand signals):				
Traffic management (describe) e.g. Signage, Road closure, Traffic control				
This plan identifies haulage from the compartm				

Road and Tomboye Road then turning left or right onto the Princes Highway (100km/hr RMS controlled Road). The intersection of Tomboye Road and the Princes Highway has been assessed as achieving a minimum of 200m sight distance on both approaches. Therefore at this intersection additional signage in accordance with a Traffic Control Plan is not required.

An alternate option for haulage from the compartment is south via Lookout Road and Big Bit Road then turning left (north) onto the Princes Highway (100km/hr RMS controlled Road). The intersection of Big Bit Road and the Princes Highway has been assessed as achieving a minimum of 200m sight distance to the south, but sight distance is inadequate to the north. At this intersection, loaded trucks may only turn left (north) onto the Princes Highway from Big Bit Road. Unloaded trucks may enter Big Bit Road from the Princes Highway from the south only.

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.

#### Dust, noise and school bus routes

**Dust and noise** – 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.

Name of on-site safety first-aider/s

Location of first-aid kit

SITE HAZARD & RISK ASSESSMENT NO.	CONTROL	WHO	IMPLEMENTED
<ol> <li>Vehicle collision at adjoining roads of various traffic levels</li> </ol>	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. Underground cables, pipelines	Minimise ground disturbance across or along cables & pipelines. Increase depth of earth cover if required.		
<ol> <li>Hazardous or dead trees</li> </ol>	<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 Contractor is responsible for implementing control strategies during harvesting.		
<ol> <li>Overhead hazards associated with dumps</li> </ol>	Refer to FCNSW WHS procedure 4.26. Assess overhead hazard within two tree lengths of the dump. Assess risk, & if necessary remove hazard or relocate dump site. Contractor is responsible for implementing control strategies during harvesting.		
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 GS	SM: N/A			Satellite: N/	A
	MGA: 250164E /	6055890N	Datum: (	GDA 94	Zone: 56
Location description: Intersection of Mill	Fire Break	k Road and	Shortcut F	Road	
Emergency meeting point for ambulance	e / police (r	efer to attac	hed locali	ty map)	
	MGA: 251296E 6	6057326N	Datum: (	GDA 94	Zone: 56
Location description: Intersection of Tor	nboye Roa	ad and Princ	es Highwa	ay.	
Helicopter landing place (refer to attache	ed locality r	map)			
GPS Lat/Long: 35° 38' 56" S 150° 1	4' 23'' E				
Location description: Junction of Durras	Road (So	outh) and Pri	nces High	way, opposite	the service station.
Procedures to obtain ambulance assista	nce				
<ol> <li>Dial 000</li> <li>If there is no mobile coverage, dial 112 (which will work on any mobile phone system).</li> <li>If no response on 112:         <ul> <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> </li> <li>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.</li> </ol>					
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	Respons				
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Year	TSI	HR Burning	Wildfires	Logging
1926	Yes	X	Х	Х
1927	Yes	X	Х	Х
1928	Yes	X	X	X
1937	Yes	X	X	Х
1944	X	X	Yes	Х
1954	X	X	Yes	Х
1963	Yes	X	X	Х
1964	Yes	X	X	Х
1966	Yes	X	Х	Х
1967	X	X	Yes	Х
1974	X	X	Х	Yes
1981	Yes	X	Х	Х
1989	X	Yes	Х	Х
1990	X	Yes	Х	Yes
1997	X	Yes	Х	Yes
1998	X	Yes	Х	Х
1999	X	Yes	Х	Х
2005	X	Yes	Х	Х
2008	X	Yes	X	Yes
2009	X	Yes	Yes	Х
2010	Х	Yes	Х	X

#### Silviculture and Harvesting Prescriptions

Yes - applies, X – not applicable

Compartment	Resource Unit	No. of Sweeps	BA Average (m²/ha)	BA Range (m²/ha)
107	1	16	19	10 - 24
107	2	3	26	20 - 34

#### Silvicultural Planning

#### Single Tree Selection

The compartment (NHA 417 Ha) is divided into two resource units:

Resource unit 1 (398Ha) is a predominantly mixed age forest that will be harvested under a heavy single tree selection (STS) regime. The objective within 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.

Resource unit 2 (19Ha) is a predominantly mixed age forest that will be excluded from harvesting.

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

# Single Tree Selection (STS) must remove no more than 45% of the basal area (BA), while retaining a minimum BA of $10m^2$ 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> ) with scattered grey ironbark ( <i>Eucalyptus</i> <i>paniculata</i> ), blackbutt ( <i>E. pilularis</i> ), white stringybark ( <i>E. globoidea</i> ), yellow stringybark ( <i>E. muelleriana</i> ), Yetchuk ( <i>E. consideniana</i> ), and bloodwood ( <i>C. gummifera</i> )	Stand is a mixed age forest. Majority of area contains sufficient retained volume from the previous harvesting events to warrant another viable operation. Occasional pockets of thick regeneration occur on previously disturbed areas such as old road and dumps.
2	Overstorey dominated by spotted gum ( <i>C. maculata</i> ) with scattered white stringybark ( <i>E. globoidea</i> ), Yetchuk ( <i>E. consideniana</i> ) and Sydney peppermint ( <i>E. piperita</i> ) with scattered areas of Sydney blue gum ( <i>E. saligna</i> )	Stand is a mixed aged forest. Majority of area contains sufficient retained volume from the previous harvesting events to warrant another viable operation. However, for operational reasons, this area will be excluded from harvesting.

#### Harvesting Prescription

Resource Unit (Refer to HPOM for detail)	% of Harvest Area	Silvicultural Treatment
1	100	<ul> <li>STS heavy:</li> <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</li> </ul>
		regime
2	0	Exclude from harvesting

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 107 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.

#### Permanent Growth and Research Plots

Any permanent growth and research plots located during the harvesting operation are to be treated the same as the surrounding area.

#### Road Works

Except for the Princes Highway (RMS Owned and maintained), within the compartment boundary only roads that are shown on the HPOM as haulage roads may used for haulage and must be maintained to EPL standard.

#### Private Property

Private property occurs adjacent to the eastern boundary of the compartment on the eastern side of the Princes Highway, 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 107

Name	Lot/DP Number (s)	Postal Address	Contact number (& email if available)	Was harvest plan notification letter returned to sender?
Scott				

- 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

10 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

- 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 adjacent dump 4 and 24 and within the excluded area east of dump 36 see HPOM), must be levelled and free of debris at the completion of logging.

#### **National Parks**

National Park is separated from the eastern boundary of the planning unit/harvest area by the Princes Highway as identified on the HPOM.

No harvest disturbance is permitted within National Park.

- 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 the compartment indicates that underground Telstra cables are present on the eastern side of the compartment. Dial before you dig markers have been used to indicate the approximate location of the cable on the HPOM. Prior to any harvesting or roading activity taking place in the vicinity of the cables, the HC should inspect the area for markers or other evidence of the 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 FT should pass the location and details on to the burning supervisor who should consider if extra protection measures (eg rake hoe line) are required.

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

#### Forest Management Zoning

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

FMZ 3B (Visual) – A visual protection zone exists 80 metres wide parallel to the Princes Highway. This area is completely contained within RU2 (identified on the HPOM) which is excluded from harvesting.

FMZ 3A - Logging operations are restricted as per condition 18(b) of the IFOA. Refer to Harvest Plan Standard Conditions for Hardwood Forest Operations in South Coast for detail of what logging operations are permitted in this zone.

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).

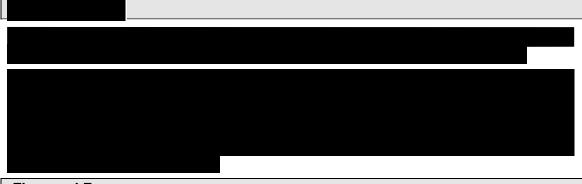
#### IFOA Required Approval of Forestry Activities

Operations Planning Manager approvals have been obtained for routine road maintenance and log haulage in FMZ 3A on Big Bit Road and Mill Fire Break Road haulage roads (identified on the HPOM). No other crossings of this feature are approved. Forestry Operations within the plan area must minimise impacts to the exclusion zones and meet the requirements of the EPL and General Exclusion Zones in section of this plan.

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

- Operations Planning Mgr 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.



#### 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:

#### Eastern False Pipistrelle (Falsistrellus tasmaniensis), Eastern Freetail-bat (Mormmopterus norfolkensis), Gang-gang Cockatoo (Callocephalon fimbriatum), Glossy Black-Cockatoo (Calyptorhynchus lathami), Grey-headed Flying Fox (Pteropus poliocephalus), Southern Myotis (Myotis macropus), Little Lorikeet (Glossopsitta pusilla), Scarlet Robin (Petroica boodang), Sooty Owl (Tyto tenebricosa), and Varied Sittella (Daphoenositta chrysoptera)

#### **Tree Retention**

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

 $\sqrt{1}$  - Condition applies

4 Glossy black cockatoo feed trees and 1 Yellow-Bellied Glider sap feed tree occurs occur within / adjacent to compartment 107 at locations shown in the table below.

Species	Feature	Zone	GDA Easting	GDA Northing	Comments
Glossy Black-Cockatoo	Feed tree	56	248357	6053776	3 trees marked here
Glossy Black-Cockatoo	Feed tree	56	250517	6054782	1 tree marked here
Yellow-Bellied Glider	Feed tree	56	249506	6054087	Feed tree retention area impacts compartment 107

#### General exclusion zones

General exclusions as listed below are shown on the HPOM.

Feature/Condition	TSL	Occurs within Planning Unit
	cond'n	
Rainforest	5.4	Has been assessed as a risk that Warm
		Temperate/Cool Temperate/Depauperate
		(Dry) may occur in the field. May require
		further investigation#.
Riparian Protection Zones	5.7	Yes
Ridge & Headwater Habitat	5.8	Yes
Wetlands	5.9	Has been assessed & is unlikely to occur
		in the field. May require further
		investigation#.
Heath and Scrub	5.10	Has been assessed & is unlikely to occur
		in the field. May require further
		investigation#.
Rocky Outcrops and Cliffs	5.11	Has been assessed & is unlikely to occur
		in the field. May require further
Endenmented Feelenieel Community		investigation#.
Endangered Ecological Community	NA	Has been assessed as a risk that River-
		Flat Eucalypt Forest EEC on Coastal Floodplains may occur in the field. May
		require further investigation#.
		Note the area shown on HPOM has not
		been verified at planning stage and must
		be marked as mapped.
		Harvesting, harvesting machinery and
		post-harvest burning must be
		excluded from all areas of EEC.

**#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 107	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 107	Licence conditions under the TSC Act or relevant Site-specific prescription
Powerful Owl Ninox strenua, Masked Owl Tyto novaehollandie.	No	6.4 Owl Landscape Exclusion Zones occur in compartment 107
Swift Parrot Lathamus discolor	Yes	6.5
Regent Honey eater Xanthomyza Phrygia,	No	6.5
Spotted tailed Quoll, Dasyurus maculatus	No	6.10
Yellow-bellied Glider, Petaurus australis	Yes	6.13
Cryptostylis hunteriana, Genoplesium vernalis,	No	6.16.2 Apply 10m exclusion around individuals (no specified forestry activates in exclusion zone). Apply additional 10m buffer zone around the exclusion zone on individuals (limited tree removal and snigging permitted, hazard reduction burning excluded to greatest extent practical). To assist burning crew exclude burning from buffer zone, minimise accumulation of debris around the base or retained trees.

#### **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

#### Spatially Corrected LIC Drainage

Spatially corrected LIC drainage has been built using LiDAR derived drainage in compartments 107. Protection zones and filter strips have been rebuilt based on spatially correct LIC drainage and an additional mean stream bed width included for each stream order. Stream based Owl Landscape, Ridge and Headwater Habitat and FMZ 3A have been rebuilt based on spatially corrected LIC drainage (mean stream width is not built in to these exclusions). The FT or Harvest Contractor may use the HPOM and GPS mapping to locate exclusion boundaries or FT's may use traditional measure and mark up methods. If GPS mapping is being used to locate boundaries, as a minimum the FT must mark with flagging tape all unmapped and 1st order drainage features. The FT must document and notify the HC of which boundaries are/aren't marked on the ground.

#### 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 1 & 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
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

36 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.

#### Drainage Feature Crossings

One road crossing (C1) is approved for use on drainage features. (Refer to HPOM). Road crossing details are contained in Attachment 2 of this Plan.

#### Mass Movement

Compartment 107 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 107. 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
FMZ 3A	
Owl Landscape	
Rainforest	
Excluded Forest	
Riverflat Eucalypt on Coastal Floodplain EEC	
Ridge and Headwater Habitat	

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

I acknowledge that I have received a copy of the Harvesting Plan for Compartment 107 in Boyne 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 (state what it is)					

#### **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.

Dump number	Start date	Finish date	*Track drainage completed within 2 days (yes/no)	Date of temporary cessation	**Temporary track drainage completed within 5 days (yes/no)	Date resumed

\*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

Date	Event	Signed

Date	Event	Signed

Date	Event	Signed

Date	Event	Signed

Date	Event	Signed

#### **Clearance Certificate**

#### COMPARTMENTS: #cpt#, #SF# STATE FOREST

То .....НС

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;
- (I) 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......Date ......Date .....

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).....

#### 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 Image: Comment of AGS gaps created Image: Comment of AGS gaps created Image: Comment of AGS gaps created Single Tree Selection Image: Comment of AGS gaps created Image: Comment of AGS gaps created Image: Comment of AGS gaps created Thinning/Spacing Image: Comment of AGS gaps created Image: Comment of AGS gaps created Image: Comment of AGS gaps created Post Harvest Silviculture Image: Comment of AGS gaps created Image: Comment of AGS gaps created Image: Comment of AGS gaps created

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.

Po	ost Logging Basal Are	ea sweeps				
Sample point	GPS (GDA 94)	Pre-harvest (B) BA m <sup>2</sup> /ha	Post- harvest(A) BA m²/ha	Difference (D) (B – A) m²/ha	% BA removed D/B x100	Comments
1	E N	1				
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
Total averages						

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		lume
	Н	М	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.	17937m/13	Yes
New roads to be constructed	Nil	NA
Existing crossings used	1	No
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

<u>Note:</u> 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
Big Bit Road 3936m	Reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard; Spacing of drainage on this road was not assessed by the planner; Clearing as required (except through Cultural Heritage exclusion zones). Lift blade when machine traverses the exclusions. Blue flagging tape on approaches to the exclusion zones mark points where blades should be lifted and then lowered RC/HC Comments:			
Cpt 107/1 Road 1147m	Reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard; Spacing of drainage on this road was not assessed by the planner; <b>RC/HC Comments:</b>			
Cpt 107/2 Road 830m	Reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard; Spacing of drainage on this road was not assessed by the planner; <b>RC/HC Comments:</b>			

		I	1
Cpt 107/3 Road 548m	Reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard;		
	Spacing of drainage on this road was not assessed by the planner;		
	RC/HC Comments:		
Cpt 107/4 Road 637m	Reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard;		
	Spacing of drainage on this road was not assessed by the planner;		
	RC/HC Comments:		
Dump 12 Road 150m	Reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard;		
	Spacing of drainage on this road was not assessed by the planner;		
	RC/HC Comments:		
Cpt 107/5 Road 386m	Reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard;		
	Spacing of drainage on this road was not assessed by the planner;		
	RC/HC Comments:		

		[	[	ı
Dump 14 Road 96m	Reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard;			
	Spacing of drainage on this road was not assessed by the planner;			
	RC/HC Comments:			
Lookout Road 1861m	Reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard;			
	Spacing of drainage on this road was not assessed by the planner;			
	Clearing as required (except through Cultural Heritage exclusion zones). Lift blade when machine traverses the exclusions. Blue flagging tape on approaches to the exclusion zones mark points where blades should be lifted and then lowered			
	RC/HC Comments:			
Morris Fire Break Road 2989m	Reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard;			
	Spacing of drainage on this road was not assessed by the planner;			
	Clearing as required (except through Cultural Heritage exclusion zones). Lift blade when machine traverses the exclusions. Blue flagging tape on approaches to the exclusion zones mark points where blades should be lifted and then lowered			
	RC/HC Comments:			

		[	[	1
Dump 22 Road 747m	Reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard;			
	Spacing of drainage on this road was not assessed by the planner;			
	RC/HC Comments:			
Mill Fire Break Road 3904m	Reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard; Spacing of drainage on this road was			
	not assessed by the planner; Clearing as required ( <b>except</b>			
	through Cultural Heritage exclusion zones). Lift blade when machine traverses the exclusions. Blue flagging tape on approaches to the exclusion zones mark points where blades should be lifted and then lowered			
	RC/HC Comments:			
Cpt 107/6 Road 706m	Reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard;			
	Spacing of drainage on this road was not assessed by the planner;			
	RC/HC Comments:			
C1 250984E 6054447N Zone 55 GDA 94	Reshape road approaches and maintain existing drainage structures. Install new drains as required and to meet EPL specification			
	RC/HC Comments:			