

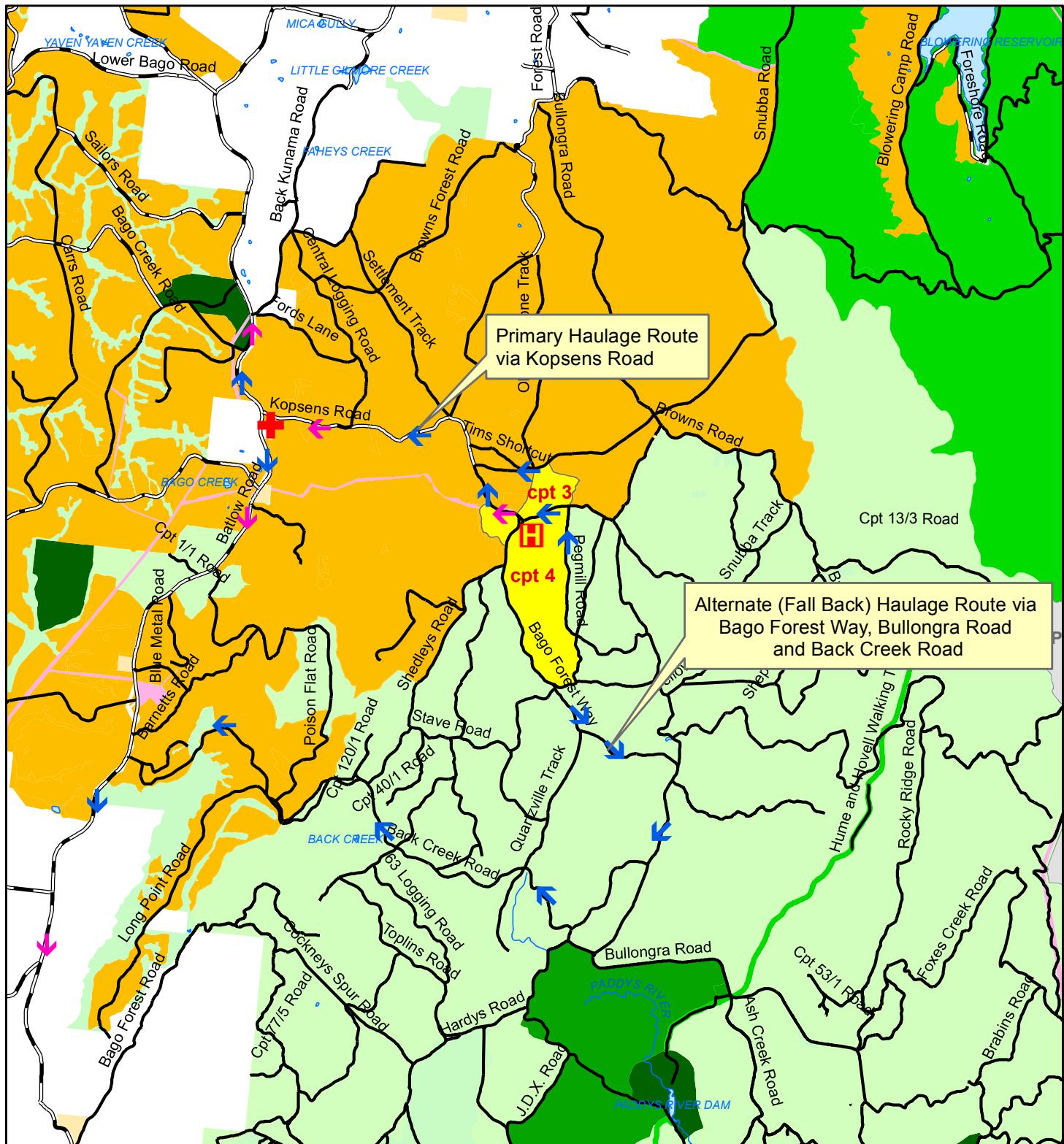
LOCALITY MAP

Compartment 3 and 4 Bago State Forest No. 560

Southern Region IFOA - Tumut Subregion

Prepared by: Mark Jones

Scale: 1:100,000



Legend

- Sealed Road
- Major Forest Road
- Major Rivers

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

- National Parks
- Formal Reserve
- Informal Reserve
- Softwood Plantations
- Water

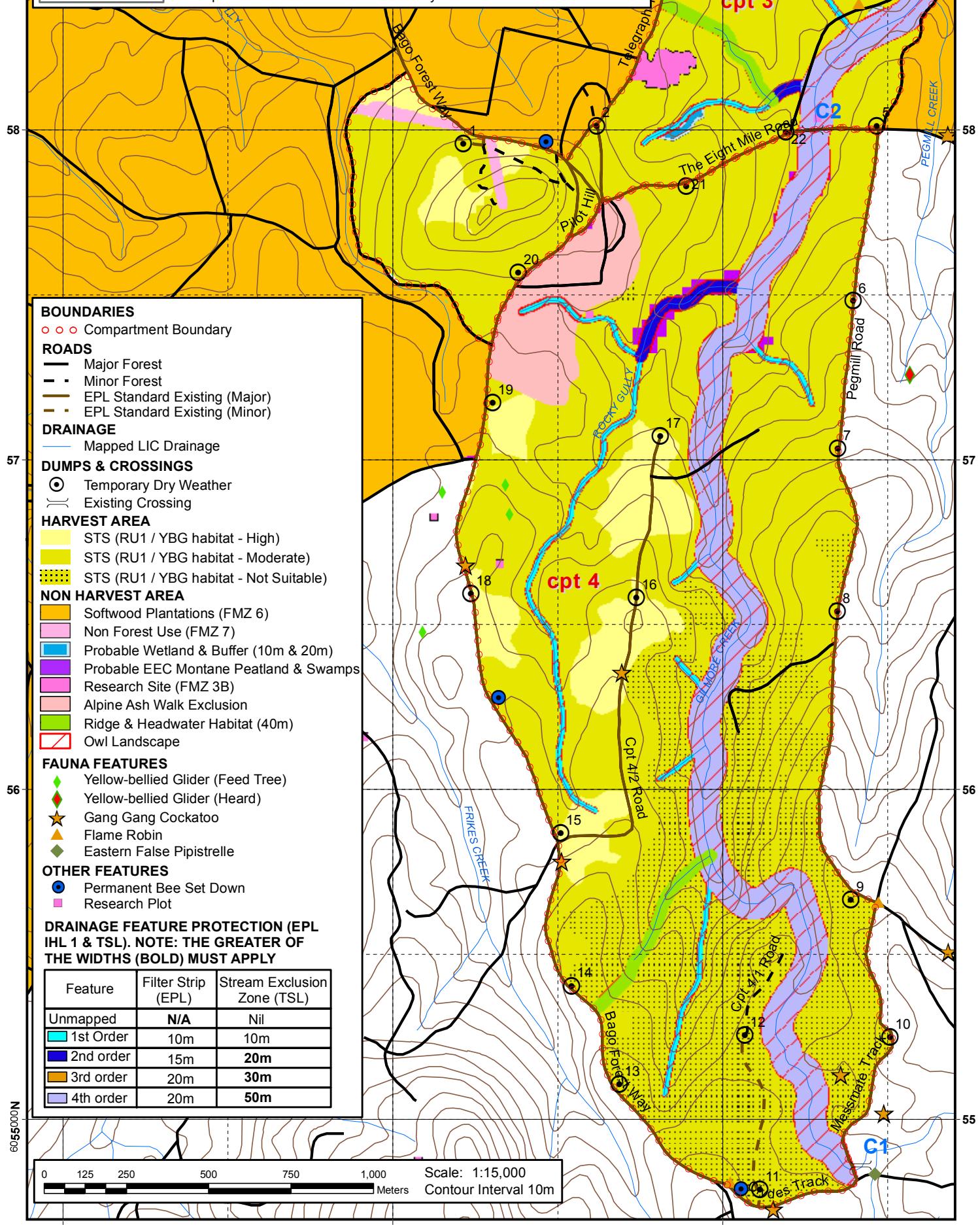
- Emergency Meeting Point
- Helicopter Landing Site
- Evacuation Route
- Haulage Route

Harvest Plan Operational Map**Compartments: 3 & 4**

State Forest: Bago No: 560

Version: 1
PLANNING SUPERVISOR APPROVAL
APPROVED: Lee Blessington
DATE: 23 / 04 / 2015

Southern Region IFOA - Tumut Subregion
Map Sheet: Batlow 8526-4N & Courabyra 8526-4S



Harvest Plan Forest Type Map

Compartments: 3 & 4

State Forest: Bago No: 560

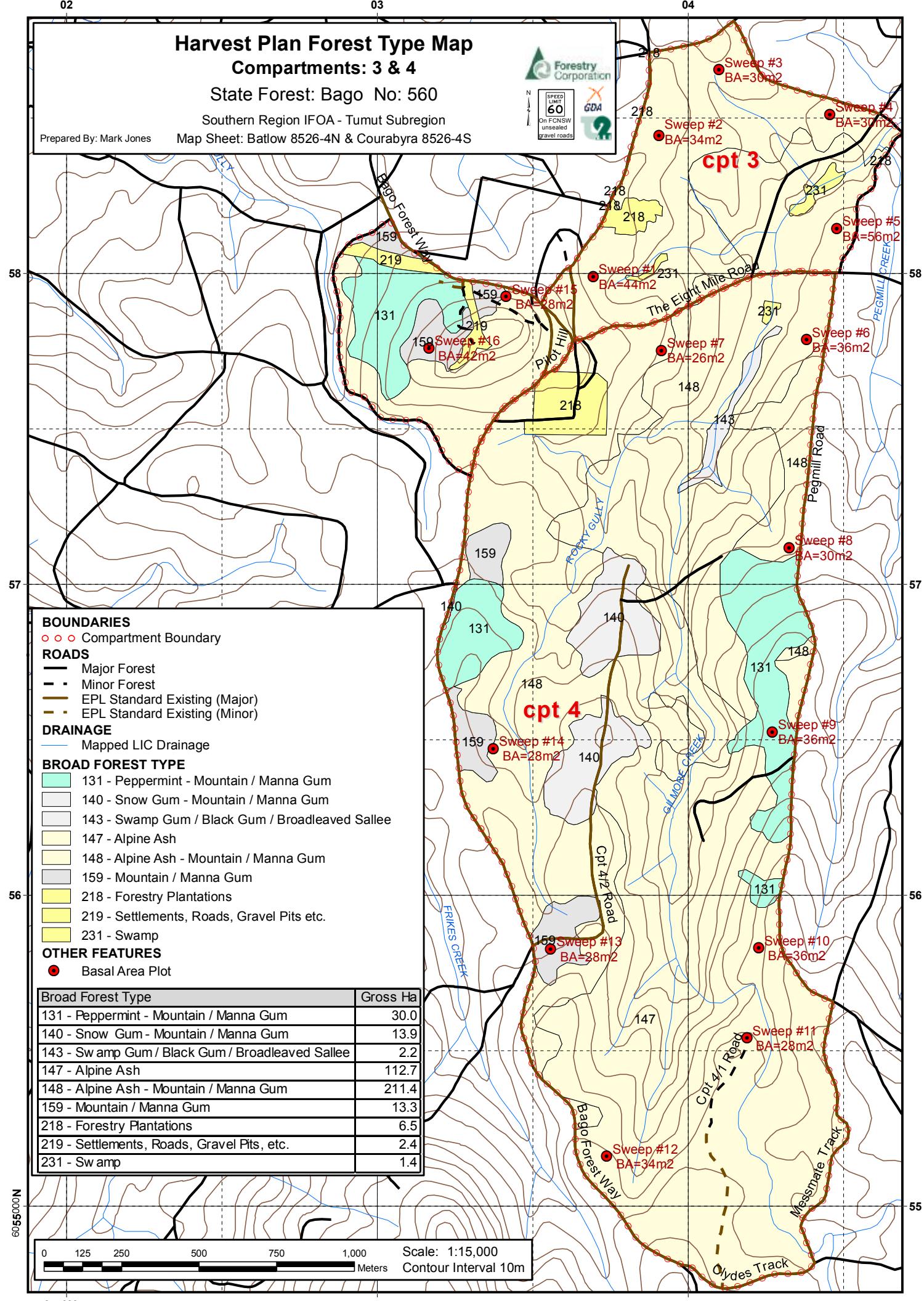
Southern Region IFOA - Tumut Subregion

Prepared By: Mark Jones

Map Sheet: Batlow 8526-4N & Courabrya 8526-4S

Forestry Corporation

N
SPEED LIMIT 60
On FONSW
unsealed
gravel roads
X GDA
2





HARDWOOD FORESTS- SOUTHERN IFOA TUMUT HARVESTING PLAN

Bago State Forest - Compartment 3 and 4

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 Standard Harvest Plan Conditions for Hardwood Forest Operations in Tumut apply to this operation.

Prepared By: Senior Planner	Mark Jones	Approved By: Planning Supervisor	Lee Blessington
Signature	Mark Jones	Signature	Lee Blessington
Date	23/04/2015	Date	23/04/2015

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 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

PA = Production Assistant, 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
Bago	3 and 4	Southern	Bago-Maragle	AS4708:2007 ISO 14001

	Cpt 3	Cpt 4	Total
Plan Compartment ID	10488	10488	NA
Gross Area (ha)	95.99	297.81	394
Net Harvestable Area (ha)	81.11	234.45	316
Harvest Area (ha)	81.11	234.45	316
Poles, Piles, Veneer & Girders	0m ³	0m ³	0m ³
Quota Logs (HQL)	1100m ³	5500m ³	6600m ³
High Quality Small	400m ³	250m ³	650m ³
Salvage	700m ³	2200m ³	2900m ³
Firewood/Misc	500t	600t	1100t

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

Slope Classes (percent of harvest area)

Slope Class	Cpt 3	Cpt 4
	% of harvest area	% of harvest area
0-20°	100	99.8
20-25 °	0	0.2
25-30 °	0	0



ATTACHMENT 1: SITE SAFETY PLAN

Worksite Information		
Is this Declared Hunting Area: Yes	Comments: Hunting exclusion zone in place at time of planning	
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		
<p>1) This plan identifies haulage from compartment 3 as north via Telegraph Track and Compartment 3/1 Road, west via Snubba Road and Kopsens Road then turning left or right onto Batlow Road (80km/hr Road). The Kopsens Road/Batlow Road intersection has been assessed as having a minimum of 160m sight distance on both approaches. Therefore, at this intersection, additional signage in accordance with a Traffic Control Plan is not required.</p> <p>2) This plan identifies haulage from compartment 4 as northwest via Messmate Track, Pegmill Road, The Eight Mile Road, Bago Forest Way, Kopsens Road then turning left or right onto Batlow Road (80km/hr Road). As described above, the Kopsens Road/Batlow Road intersection has been assessed as having a minimum of 160m sight distance on both approaches. Therefore, at this intersection, additional signage in accordance with a Traffic Control Plan is not required.</p> <p>3) Where interruptions to log truck traffic are expected on the primary haulage routes identified above, an alternate haulage route for compartments 3 and 4 is south via Bago Forest Way, Bullongra Road, Back Creek Road, then turning left or right onto Batlow Road (100km/hr Road). The Back Creek Road/Batlow Road intersection has been assessed as having 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.</p>		
Additional information: Bago Forest Way is a popular road used by members of the public.		
Name of on-site safety first-aider/s		
Location of first-aid kit		

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. Overhead powerlines or cables	Assess every individual tree for directional felling and degree of risk. Do not fall trees towards overhead hazard if within two tree lengths.		
3. Underground cables, pipelines	Minimise ground disturbance across or along cables & pipelines. Increase depth of earth cover if required.		
4. Hazardous or dead trees	Refer to FCNSW operational safety standard OSS010. 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.		
5. Overhead hazards associated with dumps	Refer to FCNSW operational safety standard OSS010. 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.		
6. 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.		
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° 37' 2.01" S / 148° 8' 35.27" E	MGA: 603525E / 6057904N	Datum: GDA 94	Zone: 55
Location description: Intersection of Telegraph Track and Bago Forest Way.			
Emergency meeting point for ambulance / police (refer to attached locality map)			
GPS Lat/Long: 35° 35' 54.56" S / 148° 5' 36.09" E	MGA: 599041E 6060033N	Datum: GDA 94	Zone: 55
Location description: Intersection of Kopsens Road and Batlow Road.			
Helicopter landing place (refer to attached locality map)			
GPS Lat/Long: 35° 37' 12.83" S / 148° 8' 38.46" E			
Location description: Pilot Hill Arboretum			
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">• use a radio link (TARA, be discrete with personal information)• move to an area with mobile coverage• find a landline• use another network (e.g. a contractor's VHF radio)	<p>Contact nearest Forestry Corporation office on:</p> <p>Channel: 101 Telephone: 1300 880 548</p> <p>Give details of the situation and ask for a 000 call to be placed.</p>		
000 operator question:	Response:		
1. Police, Fire, Ambulance?	NSW Ambulance,		
2. Suburb?	State Forest name:	Bago	
	Nearest town or locality:	Laurel Hill	
	Nearest ambulance station:	Batlow	
3. Address?	Batlow Road		
4. Nearest road junction/cross street?	Kopsens Road and Batlow Road intersection		
5. Local government area?	Tumbarumba		
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 Batlow, head south on the Batlow Road and travel approximately 14km to intersection with Kopsens Road (on left). If coming from Tumbarumba, head north on Batlow Road and travel approximately 23km to intersection with Kopsens 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	1916	1920	1924	1944	1955	1959	1961	1962	1968	1970	1972	1976	1990
TSI	✓	✓	✓	✓	X	✓	X	✓	✓	✓	X	X	X
HR Burning	X	X	X	X	X	X	X	X	X	X	X	X	X
Wildfires	X	X	X	X	X	X	X	X	X	X	X	X	X
Logging (m ³)	X	X	X	X	687	1171	4805	X	X	X	4341	2048	17320

✓ - applies, X – not applicable

Compartment	Resource Unit	No. of Sweeps	BA Average (m ² /ha)	BA Range (m ² /ha)
3	1	7	38	28 – 56
4	1	9	31	26 - 36

Silviculture Prescription

Single Tree Selection

Forest stands of mixed age cover 100% of the STS tract (315ha) and will be harvested under a heavy single tree selection (STS) regime with the objective of removing approx 35% of mature trees and defective trees containing a sawlog, while minimising damage to young regenerating stems, and creating canopy openings where appropriate for regeneration.

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

The STS tract for IFOA purposes includes the entire net harvest area of resource unit one in compartments 3 and 4 as indicated on the HPOM.

Single tree selection (STS) must remove no more than 35% of the basal area (BA), while retaining a minimum BA of 10m² within the tract.

Resource Unit (Refer to HPOM for detail)	Species Composition	Stand Structure and Condition
1	Overstorey dominated by Alpine Ash (<i>Eucalyptus delegatensis</i>) with some smaller areas of mountain gum (<i>E. dalrympleana</i>), manna gum (<i>E. viminalis</i>), and narrow-leaved peppermint (<i>E. radiata</i>).	Uneven-aged, mostly fully stocked. Highly variable over short distances. Mostly mature with some advanced pole/small sawlog sizes and occasional clumps of sapling regrowth.

Harvesting Prescription

Resource Unit (Refer to HPOM for detail)	% of NHA	Silvicultural Treatment
1	100%	<p>STS heavy:</p> <ul style="list-style-type: none"> • Retain and protect from harvesting/fire damage: <ul style="list-style-type: none"> ○ poles/advanced growth (<40cm DBHOB) with good form and vigour; and ○ habitat and recruitment trees as per TSL. • Retained trees should be evenly spaced. • Ensure no more than 35% of the BA is removed, while retaining a minimum BA of 10m² within the tract. • 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"> ○ reject tree felling (Contract Coordinator must first obtain approval from HTL); ○ defer harvesting until ideal market conditions prevail; ○ consider harvesting under a light or medium STS regime.

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

Blackberry, Scotch Broom and St John's Wort are known to occur within the compartments and surrounding area. In order to prevent the spread of Blackberry, Scotch Broom and St John's Wort from this area, all harvesting machinery, equipment and vehicles coming in contact with the weeds must be inspected prior to leaving the compartment and cleaned accordingly.

Permanent Growth and Research Plots

Research plots identified on the HPOM and any permanent growth plots located within the compartments during the harvesting operation are to be treated the same as the surrounding area. The PA must collect all metal measurement tags from trees fallen during harvesting and return them to the Resources and Tactical Planning Manager.

A 1.6 hectare *Pinus radiata* research site exists within compartment 3 adjacent to Telegraph Track (as outlined on the HPOM). This site is to be excluded from harvesting under this plan.

Road Works

Within the compartment boundary, only roads that are shown on the HPOM as EPL standard or sealed may be used for haulage.

Occupation Permits

Apiary

6 apiary sites are located within the planning unit as detailed in the table below. Further contact details are available from the Batemans Bay office.

Name	Site Number	Contact number	Pre burn notification complete?
	Bam9 – 29, Bam9 – 30, Bam 10 - 30		
	Bam10 - 29		
	Hum9 – 28 and Hum10 – 28.		

- The PA 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, as illustrated on the HPOM, must be levelled and free of debris at the completion of logging.
- Permanent sites must not be ripped.

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 PA 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 3B-Special Prescriptions (visual, heritage, roadside management), FMZ 7 Non Forest and FMZ 4- General Management (normal harvesting prescriptions apply) occur within the compartments. Refer to HPOM for more detail.

FMZ 3B (Scientific Research)

A 1.6 hectare *Pinus radiata* research site exists within compartment 3 adjacent to Telegraph Track (as outlined on the HPOM). This site is to be excluded from harvesting under this plan.

FMZ 7 – Prescribed burning is only permitted if fire does not conflict with the specific non-forest use of the site.

IFOA Required Approval of Forestry Activities

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 PA to identify any exclusion areas which will need to be crossed during harvesting. The PA must then contact the Planner to obtain the necessary approval.

Cultural Heritage

Cultural Heritage - There are Cultural Heritage sites within the compartments. All relevant representatives have been consulted &/or inspected Compartments 3 and 4.

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*), **Common Bent-wing Bat** (*Miniopterus schreibersii*), **Flame Robin** (*Petroica phoenicea*), **Gang Gang Cockatoo** (*Callocephalon fimbriatum*),

Tree Retention

Zone	YPG PMP additional hollow bearing tree retention/ha (in addition to TSL requirements):					
	Moderate Quality Habitat	High Quality Habitat	Significant Food Resource*	Dead Standing Trees (only if safe)	Protection of Retained Trees	
Regrowth	Up to 5	1 for every tree retained under 5.3d	0	0	0 +5	0 +3
TSL condition	5.3d	5.3e	5.3h	5.3f	5.3 g	N/A refer to PMP

✓ = condition applies to planning unit.

*Yellow Bellied Glider sap feed trees occur within compartment 4 at locations shown in the table below.

Species	Feature	Zone	GDA Easting	GDA Northing	Comments
Yellow Bellied Glider	Feed tree	55	603354	6056834	
Yellow Bellied Glider	Feed tree	55	603342	6056923	

General exclusion zones

General exclusions as listed below are shown on the HPOM.

Feature/Condition	TSL cond'n	Occurs within Planning Unit
Stream Exclusion Zones	5.4	Yes
Ridge & Headwater Habitat	5.5	Yes
Wetlands	5.6	Has been assessed as a risk that it may occur in the field. May require further investigation#.
Heath and Scrub	5.7	Has been assessed & is unlikely to occur in the field. May require further investigation#.
Rocky Outcrops and Cliffs	5.8	Has been assessed & is unlikely to occur in the field. May require further investigation#.
Endangered Ecological Community	NA	Has been assessed as a risk that Montane Peatland and Swamps EEC may occur in the field. May require further investigation#. Harvesting, harvesting machinery and post harvest burning must be excluded from all areas of mapped EEC.

PA 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 Cpts 3 & 4	Licence conditions under the TSC Act
Threatened Frog General Protection Measures	No	5.9
Bird Nest and Roost Site Protection	No	5.10
Tree Bat Roost Protection	No	5.11.1
Subterranean Roost Protection	No	5.11.2
Protection of Flying-fox camps	No	5.11.3
Burning	Net planned area	5.13
Ground Habitat Protection	Net planned area	5.14

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 Cpts 3 & 4	Licence conditions under the TSC Act or relevant Site-specific prescription
Spotted tailed Quoll <i>Dasyurus maculatus</i>	No	6.5
Yellow-bellied Glider <i>Petaurus australis</i>	Yes	6.8 Population Management Plan Bago Plateau applies to this compartment/s. In addition to conditions specified in the TSL, the following conditions from the Population Management Plan apply to this compartment/s (refer to HPOM for detail): -High quality habitat (additional tree retention conditions apply) -Moderate quality habitat (additional tree retention conditions apply) -Forest types not considered suitable for YBG habitat (no additional tree retention conditions apply).

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	Not Licensed: 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

Drainage Feature Protection

Filter strips (EPL) and Stream Exclusion Zones (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.

Stream Order	Inherent Hazard <u>Level 1 Filter Strip</u> (EPL)	Stream Exclusion Zone (TSL)
Unmapped	NA#	0
1st order	10	10
2nd order	15	20
3 rd order	20	30
4 th order or greater	20	50

NOTE: # 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 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 Contract Coordinator to inspect each unmapped drainage line prior to harvesting it, to determine if it is running or holding water.

Log Dump Location

22 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

Two existing road crossings (C1 and C2) are approved for use on drainage features. (Refer to HPOM). Crossing details are contained in Attachment 2 of this Plan.

Mass Movement

Compartments 3 and 4 are 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

Post log burning is not planned for compartments 3 and 4 therefore no post log burning control lines will be installed.

Pre-Operational Briefing

I acknowledge that I have received a copy of the Harvesting Plan for Compartments 3 and 4 in Bago 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)	No				

PA 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 PA Notes.

PA Notes

PA Notes (continued)

PA Notes (continued)

PA Notes (continued)

PA Notes (continued)

Clearance Certificate

COMPARTMENTS: 3 and 4, BAGO STATE FOREST

ToPA

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).....

PA

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 (Contract Coordinator 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) and make reference to the map.

Post Logging Basal Area sweeps

Sample point	Eastings GDA 94 Zone 55	Northings GDA 94 Zone 55	Pre-harvest (B) BA m ² /ha	Post-harvest(A) BA m ² /ha	Difference (D)	% BA removed	Comments
					(B – A) m ² /ha	D/B x100	
1	603694	6057990	44				
2	603906	6058443	34				
3	604099	6058654	30				
4	604456	6058511	30				
5	604479	6058145	56				
6	604381	6057787	36				
7	603914	6057752	26				
8	604325	6057118	30				
9	604271	6056525	36				
10	604227	6055829	36				
11	604189	6055539	28				
12	603737	6055159	34				
13	603557	6055827	28				
14	603372	6056471	28				
15	603414	6057924	28				
16	603166	6057760	42				
Average			34				

Comply with maximum STS BA removal of 35% or Thinning BA removal of 60%

Possible next cut (tick appropriate boxes)

Y/N

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.	12,928m (12)	Yes
New roads to be constructed	0	NA
Existing crossings used	2	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

Note: Maintenance works not completed by Roading Coordinator must be recorded and passed onto the PA 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
Bago Forest Way	Road stable – ensure existing drainage structure are effective. If required, reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard RC/PA Comments:			
Pegmill Road	Reshape road & maintain existing drainage structures. Install new drainage as required and to meet EPL standard RC/PA Comments:			
Messmate Track	Reshape road & maintain existing drainage structures. Install new drainage as required and to meet EPL standard RC/PA Comments:			
Clydes Track	Reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard RC/PA Comments:			
Telegraph Track	Reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard RC/PA Comments:			
Snubba Road	Road stable – ensure existing drainage structure are effective. If required, reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard RC/PA Comments:			

Road/ Crossing Name	Works Required	Date Started	Date finished	Signature
Cpt 3/1 Road	Reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard RC/PA Comments:			
Cpt 3/2 Road	Reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard RC/PA Comments:			
Cpt 4/1 Road	Reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard RC/PA Comments:			
Cpt 4/2 Road	Reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard RC/PA Comments:			
Pilot Hill Road	Reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard RC/PA Comments:			
The Eight Mile Road	Reshape road & maintain existing drainage structures, install new drainage as required and to meet EPL standard RC/PA Comments:			
Crossing 1 (C1) on Messmate Track	Refer to attached crossing form RC/PA Comments:			
Crossing 2 (C2) on The Eight Mile Road	Refer to attached crossing form RC/PA Comments:			

Bago SF, Cpt 3 and 4

CROSSING NAME: C1 (Messmate Track pipe crossing over mapped drainage line)

Waterway Classification: Fish Passage Class 3 - minimal fish habitat.

Fisheries Licence Aquatic Habitat: Not class 1 or 2

Assessors Name: Mark Jones

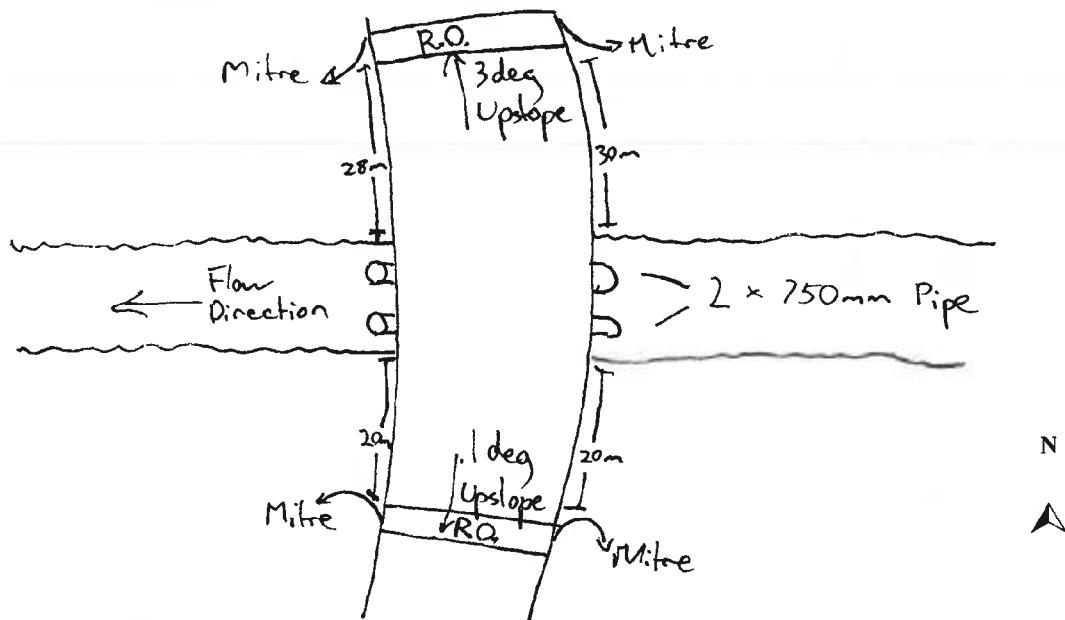
Crossing Type: Existing Pipe

Features	Works (As per EPL Schedule 5)	Plant/Materials
Structure	Stable at time of assessment? Yes	NA
Bed and Banks	Stable at time of assessment? Yes	NA
Erosion and Sediment Control	Nil works required	NA
Disposal of excess spoil	Nil works required	NA
Soil Stabilisation within 20m	NA.	NA
Road drainage within 5-30m	Mitres/rollover drains within 30m in serviceable condition at time of assessment. Monitor to ensure drainage structures are functional for the duration of harvest and haulage operations	NA
• Type • outlet control • table drain checking devices		

Date of Assessment: 12/3/2015

Final Crossing Use: Retain

Event	Min. pipe size(mm)	Min. Fill (cm)	Outlet Protection
1:5	NA	NA	NA



Date Work Started: _____

Key

Date Work Finished: _____

→ Ru	Rubber strip
→ M	Mitre drain
xxx	Roadside clearing
→ Ro	Rollover drain
ψ	Sill Log
ooooo	Rock
ψ	Seeding
▽	Sediment control
..	Gravel

Soil stabilisation must be completed within 5 days

Record implementation date here: _____

Bago SF, Cpt 3 and 4

CROSSING NAME: C2 (The Eight Mile Road bridge crossing over mapped drainage line)

Waterway Classification: Fish Passage Class 3 - minimal fish habitat.

Fisheries Licence Aquatic Habitat: Not class 1 or 2

Assessors Name: Peter Haenig

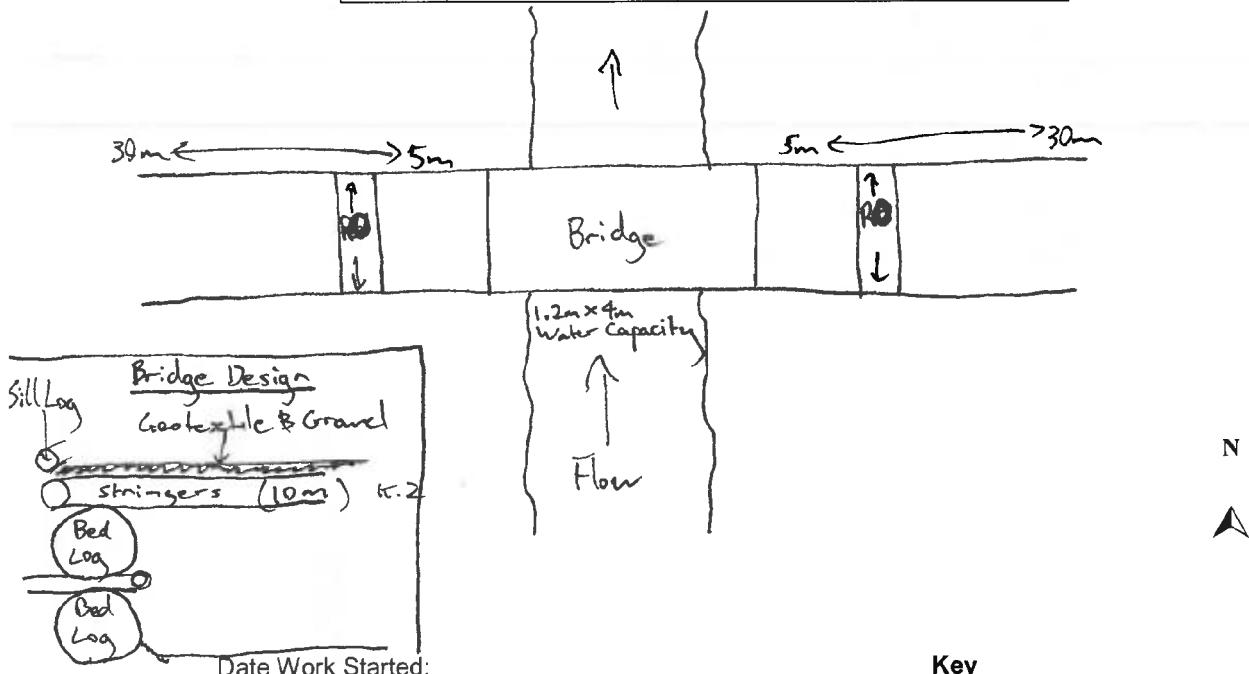
Crossing Type: Existing Bridge

Features	Works (As per EPL Schedule 5)	Plant/Materials
Structure	Stable at time of assessment? Yes	NA
Bed and Banks	Stable at time of assessment? Yes	NA
Erosion and Sediment Control	Nil works required	NA
Disposal of excess spoil	Nil works required	NA
Soil Stabilisation within 20m	NA.	NA
Road drainage within 5-30m	Mitres/rollover drains within 30m in serviceable condition at time of assessment. Monitor to ensure drainage structures are functional for the duration of harvest and haulage operations	NA
• Type • outlet control • table drain checking devices		

Date of Assessment: 12/7/2012

Final Crossing Use: Retain

Event	Min. pipe size(mm)	Min. Fill (cm)	Outlet Protection
1:5	NA	NA	NA



Date Work Finished: _____

Soil stabilisation must be completed within 5 days

Record implementation date here: _____

→ Ru	Rubber strip
→ M	Mitre drain
xxx	Roadside clearing
→ Ro	Rollover drain
ψ	Sill Log
ooooo	Rock
ψ	Seeding
▽	Sediment control
⋮	Gravel