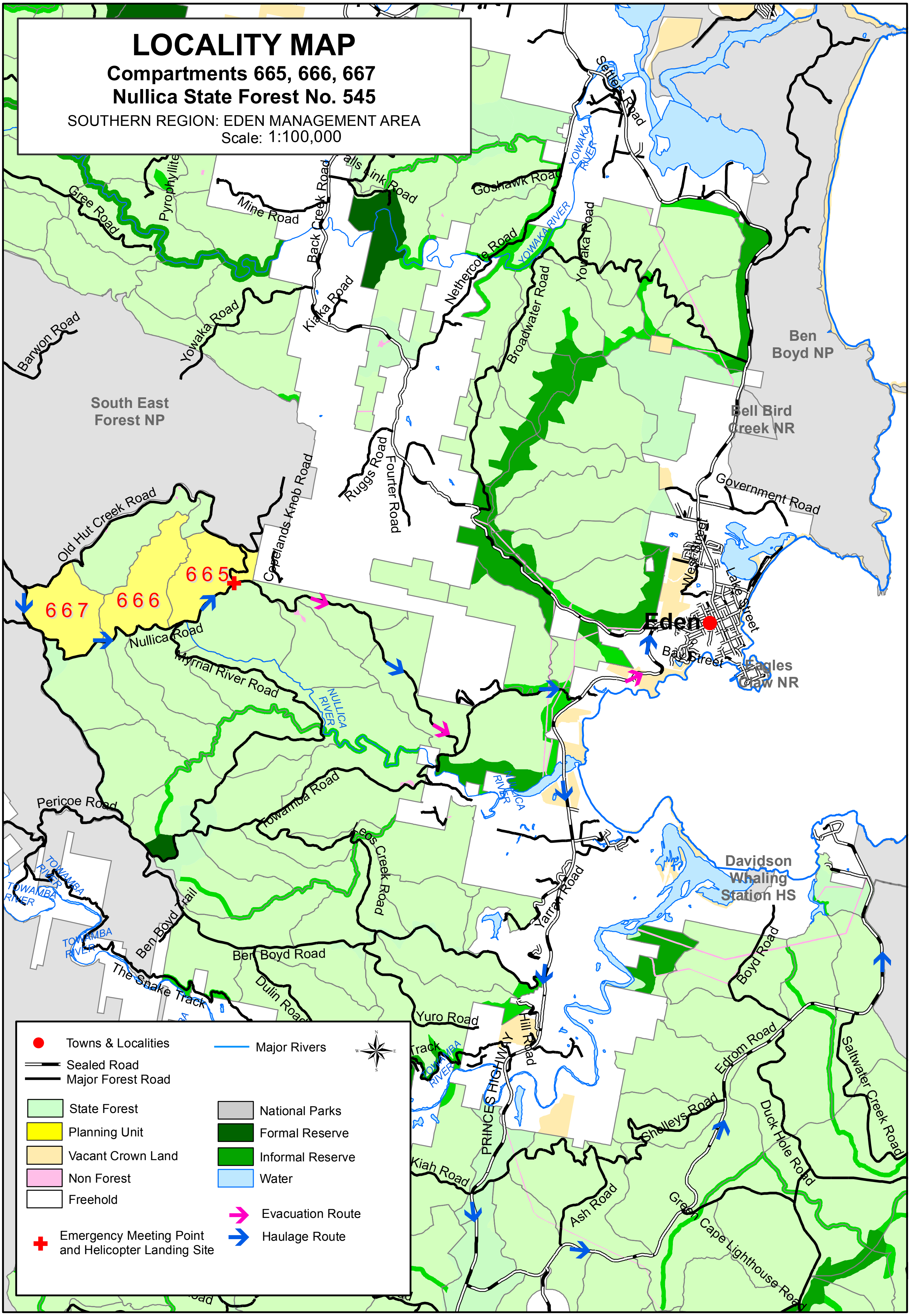

LOCALITY MAP
Compartments 665, 666, 667
Nullica State Forest No. 545
SOUTHERN REGION: EDEN MANAGEMENT AREA
Scale: 1:100,000
665
666
667
Eden
South East Forest NP
Ben Boyd NP
Bell Bird Creek NR
Eagles Claw NR
Davidson Whaling Station HS
Old Hut Creek Road
Nullica Road
Myrrial River Road
Copelands Knob Road
Ruggs Road
Fourter Road
Broadwater Road
Yowaka Road
Nethercote Road
Goshawk Road
Back Creek Road
Kiaka Road
Mine Road
Gree Road
Pyrophyllite
Barwon Road
Settlers Road
Government Road
Lake Street
Bay Street
Pericoe Road
Towamba Road
Leos Creek Road
Ben Boyd Trail
Ben Boyd Road
The Snake Track
Dulin Road
Yuro Road
Yarra Road
PRINCES HIGHWAY
Boyd Road
Edrom Road
Shelleys Road
Duck Hole Road
Saltwater Creek Road
Green Cape Lighthouse Road
Ash Road
Kiah Road
NULLICA RIVER
YOWAKA RIVER
TOWAMBA RIVER
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
Evacuation Route
Haulage Route
Emergency Meeting Point and Helicopter Landing Site

Prepared By: Andrew Kemsley

Version: 1

REGIONAL MANAGER APPROVAL

APPROVED: DANIEL TUAN

DATE: 23/07/2013

Harvest Plan Operational Map

Compartments: 665 & 666

State Forest: NULLICA No: 545

SOUTHERN REGION - Native Forests

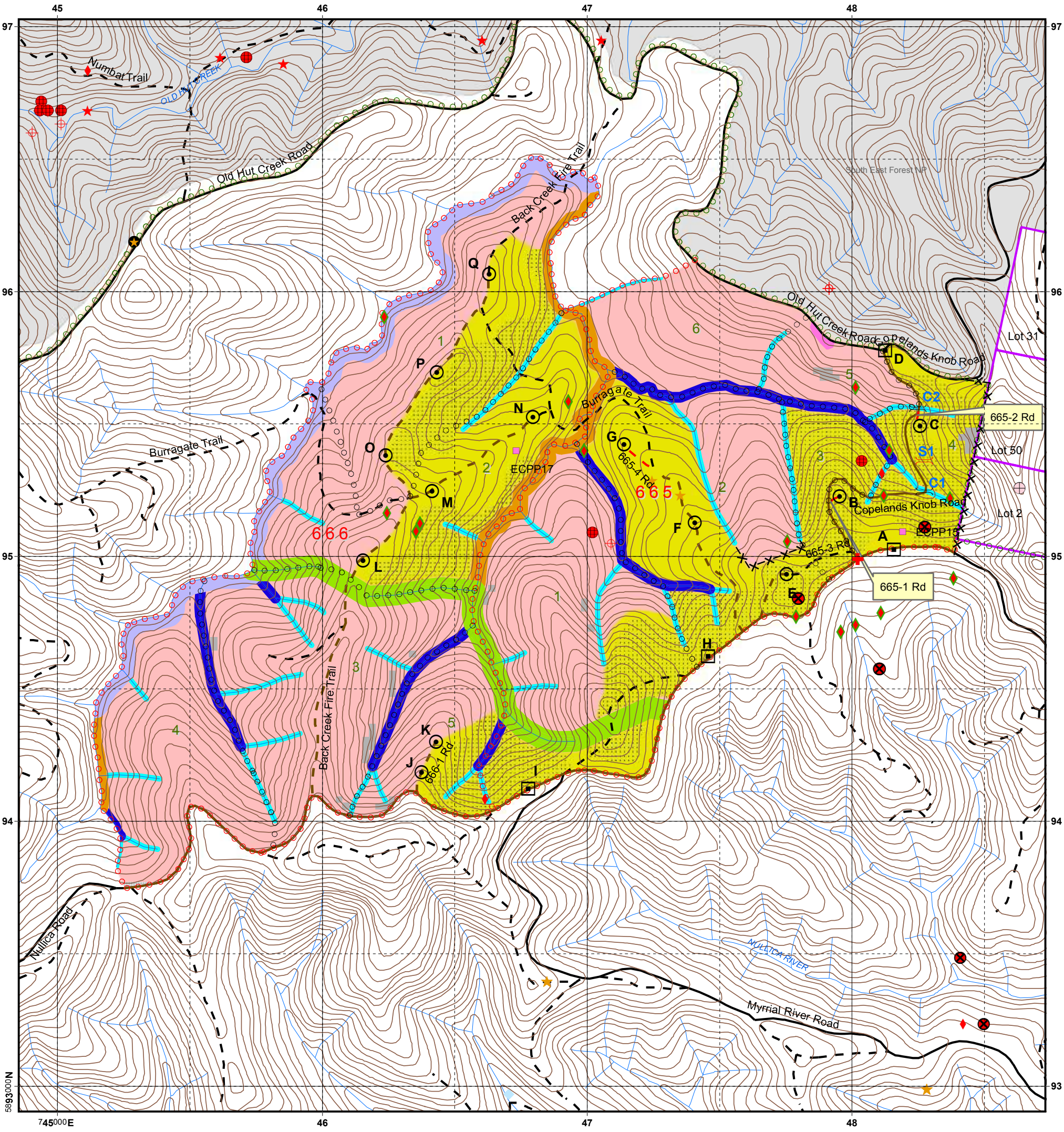
Map Sheet: EDEN 8823-1N

Forestry Corporation

N

SPEED LIMIT 60 On FCNSW unsealed gravel roads

GDA



BOUNDARIES
- State Forest Boundary
- Compartment Boundary
- Coupe Boundary
- Proposed Control Line

DUMPS & CROSSINGS
- Temporary Dry Weather
- Temporary Wet Weather
- New Crossing
- Existing Crossing

ROADS
- Major Forest
- Minor Forest
- EPL Standard Existing (Major)
- EPL Standard Existing (Minor)
- EPL Licenced (New Construction)

DRAINAGE
- Mapped LIC Drainage

NET HARVEST AREA
- FMZ 4 - MSW
- FMZ 4 - MSW (verified MAF)

NON HARVEST AREA
- Ridge & Headwater Habitat (80m)
- Slopes >30 (IHL 4)
- FMZ 7 (gravel pit)
- Excluded Forest
- FMZ 3B road maintenance (10m)

RESEARCH PLOTS
- Research Plot

TENURE
- National Park Estate
- Private Property

FAUNA FEATURES
- Sooty Owl
- Powerful Owl
- Masked Owl
- Glossy Black-Cockatoo
- Yellow-bellied Glider (Heard)
- Yellow-bellied Glider
- Smoky Mouse
- Gang Gang Cockatoo
- Common Bent-wing Bat

FLORA FEATURES
- Leionema ralstonii

MAP FEATURES
- Emergency Meeting Point & Helicopter Landing area

DRAINAGE FEATURE PROTECTION (EPL IHL 2 & TSL). NOTE: THE GREATER OF THE WIDTHS (BOLD) MUST APPLY

Feature	Filter Strip (EPL)	Stream Exclusion Zone (TSL)
Unmapped	**10m**	Nil
1st Order	**15m**	10m
2nd order	20m	20m
3rd order	25m	**30m**
4th order	25m	**50m**

0 125 250 500 750 1,000 Meters

Scale: 1:15,000

Contour Interval 10m

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Prepared By: Andrew Kemsley

Version: 1

REGIONAL MANAGER APPROVAL

APPROVED: DANIEL TUAN

DATE: 23/07/2013

Harvest Plan Operational Map

Compartment: 667

State Forest: NULLICA No: 545

SOUTHERN REGION - Native Forests

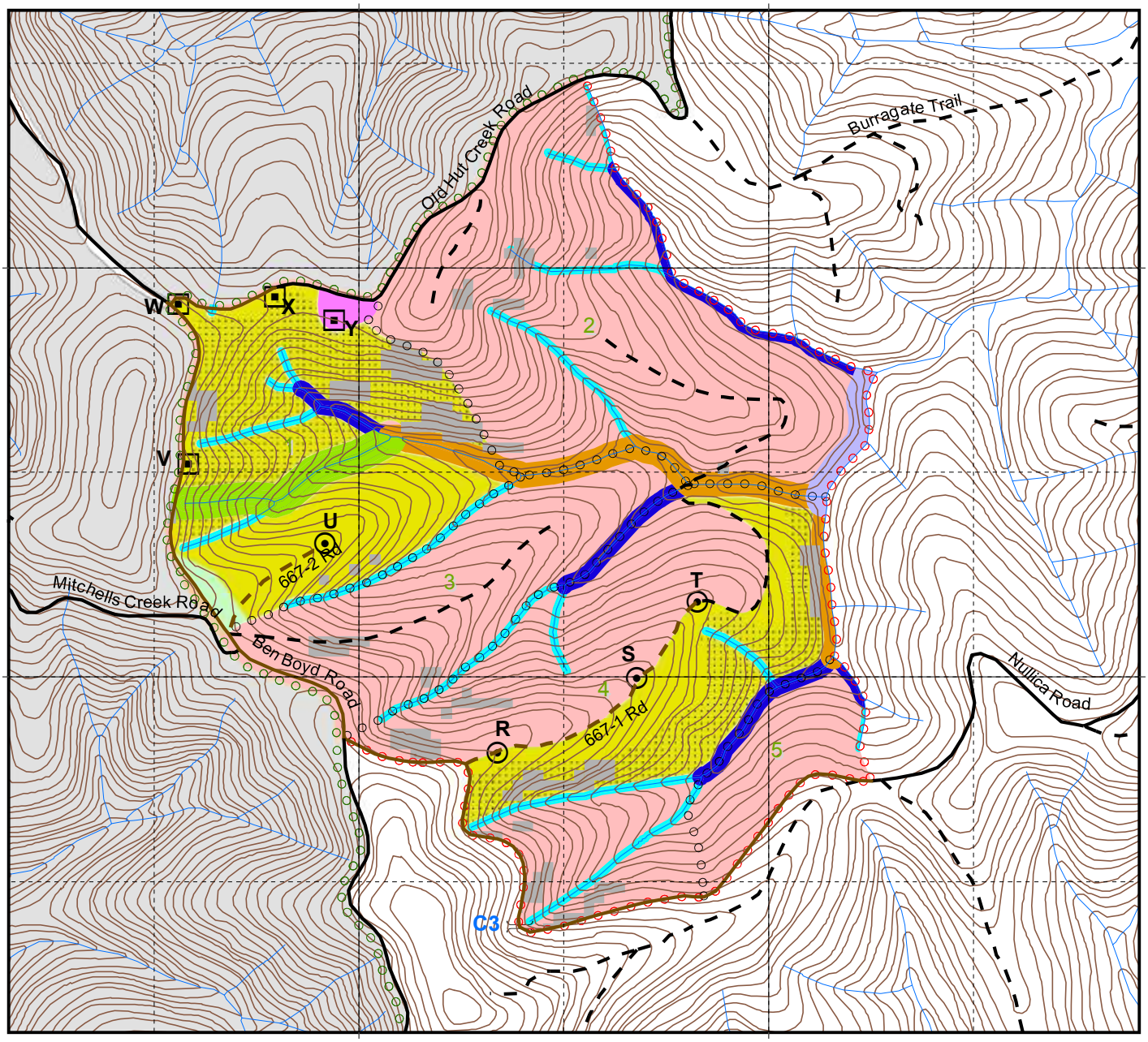
Map Sheet: BURRAGATE 8823-4N & EDEN 8823-1N

Forestry Corporation

N

SPEED LIMIT 60 On FCNSW unsealed gravel roads

GDA



BOUNDARIES
- State Forest Boundary
- Compartment Boundary
- Coupe Boundary

DUMPS & CROSSINGS
- Temporary Dry Weather
- Temporary Wet Weather
- Existing Crossing

ROADS
- Major Forest
- Minor Forest
- EPL Standard Existing (Major)
- EPL Standard Existing (Minor)

DRAINAGE
- Mapped LIC Drainage

NET HARVEST AREA
- FMZ 4 - MSW
- FMZ 4 - MSW (verified MAF)
- FMZ 4 Visual Protection - Standard MSW (30-60m)

NON HARVEST AREA
- Ridge & Headwater Habitat (80m)
- FMZ 7 (gravel pit)
- Slopes >30 (IHL 4)
- Excluded Forest
- FMZ 3B road maintenance (10-20m)

TENURE
- National Park Estate

DRAINAGE FEATURE PROTECTION (EPL IHL 2 & TSL). NOTE: THE GREATER OF THE WIDTHS (BOLD) MUST APPLY

Feature	Filter Strip (EPL)	Stream Exclusion Zone (TSL)
Unmapped	**10m**	Nil
1st Order	**15m**	10m
2nd order	20m	20m
3rd order	25m	**30m**
4th order	25m	**50m**

0 125 250 500 750 1,000 Meters

Scale: 1:15,000

Contour Interval 10m

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Prepared By: Andrew Kemsley

Version: 1

REGIONAL MANAGER APPROVAL

APPROVED: DANIEL TUAN
DATE: 23/07/2013

Burning Operational Map
Compartments: 665 & 666
State Forest: NULLICA No: 545

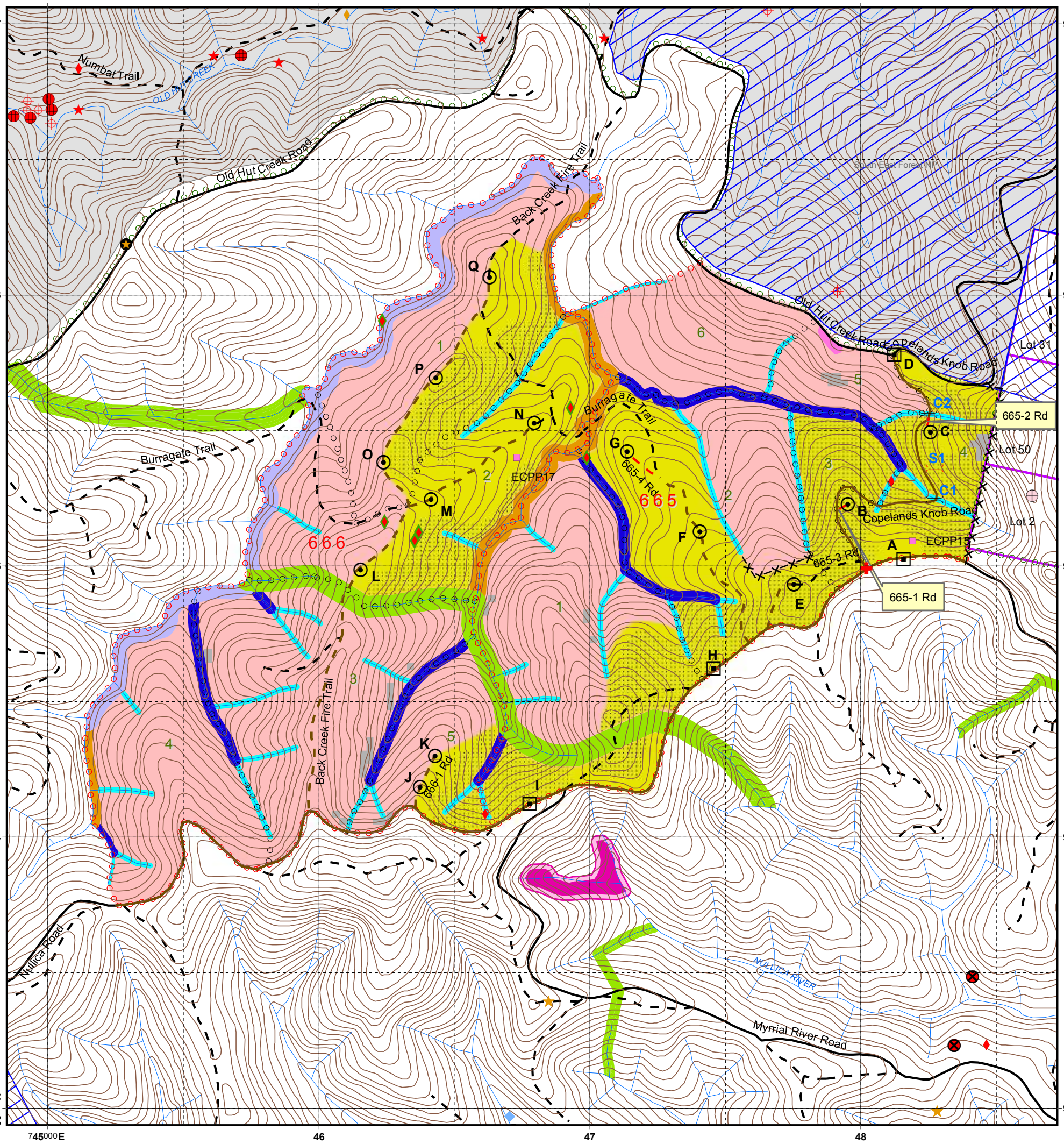
SOUTHERN REGION - Native Forests
Map Sheet: EDEN 8823-1N

Forestry Corporation

N

SPEED LIMIT 60 On FCNSW unsealed gravel roads

GDA



BOUNDARIES
- State Forest Boundary
- Compartment Boundary
- Coupe Boundary
- Proposed Control Line

DUMPS & CROSSINGS
- Temporary Dry Weather
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- New Crossing
- Existing Crossing

ROADS
- Major Forest
- Minor Forest
- EPL Standard Existing (Major)
- EPL Standard Existing (Minor)
- EPL Licenced (New Construction)

SAFETY POINTS
- Emergency Meeting Point & Helicopter Landing Area

NET HARVEST AREA
- FMZ 4 - MSW
- FMZ 4 - MSW (verified MAF)

NON HARVEST AREA
- Ridge & Headwater Habitat (80m)
- Slopes >30 (IHL 4)
- FMZ 7 (gravel pit)
- Excluded Forest
- Probable Rocky Outcrop & Buffer (0.1-0.5ha, 20m; >0.5ha, 40m)
- Probable Rainforest and Buffer (20m)

RESEARCH PLOTS
- Research Plot

TENURE
- National Park Estate
- Private Property

FAUNA FEATURES
- Sooty Owl
- Powerful Owl
- Masked Owl
- Glossy Black-Cockato
- Yellow-bellied Glider (Heard)
- Yellow-bellied Glider
- Smoky Mouse
- Gang Gang Cockatoo
- Common Bent-wing Bat

FLORA FEATURES
- Leionema ralstonii

FIRE MANAGEMENT ZONE
- Strategic Fire Advantage Zone

DRAINAGE FEATURE PROTECTION (EPL IHL 2 & TSL). NOTE: THE GREATER OF THE WIDTHS (BOLD) MUST APPLY

Feature	Filter Strip (EPL)	Stream Exclusion Zone (TSL)
Unmapped	**10m**	Nil
1st Order	**15m**	10m
2nd order	20m	20m
3rd order	25m	**30m**
4th order	25m	**50m**

DRAINAGE
- Mapped LIC Drainage

0 125 250 500 750 1,000 Meters

Scale: 1:15,000
Contour Interval 10m

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Prepared By: Andrew Kemsley

Version: 1

REGIONAL MANAGER APPROVAL

APPROVED: DANIEL TUAN

DATE: 23/07/2013

Burning Operational Map

Compartment: 667

State Forest: NULLICA No: 545

SOUTHERN REGION - Native Forests

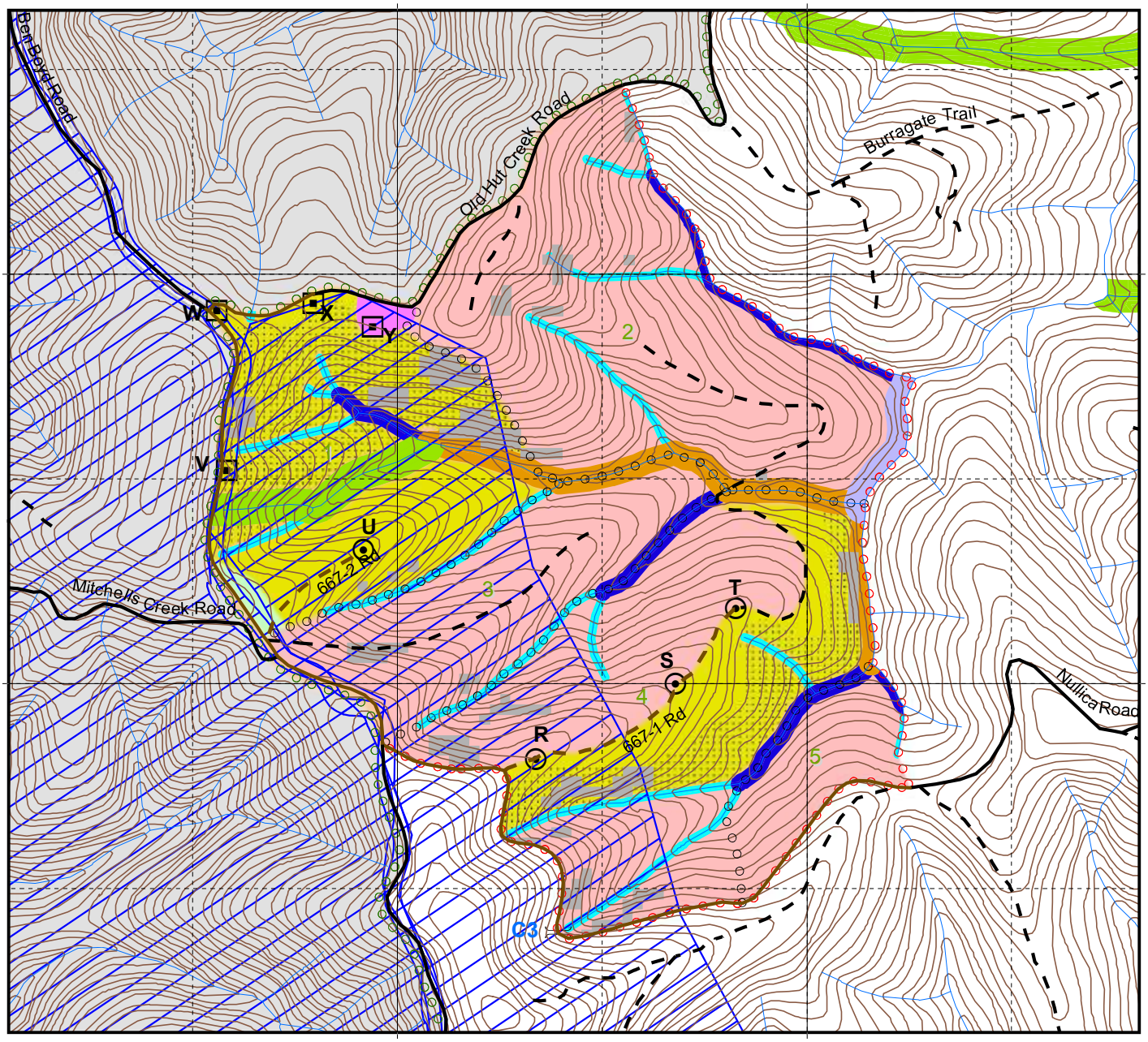
Map Sheet: BURRAGATE 8823-4N & EDEN 8823-1N

Forestry Corporation

N

SPEED LIMIT 60 On FCNSW unsealed gravel roads

GDA



BOUNDARIES

- State Forest Boundary
- Compartment Boundary
- Coupe Boundary
- Proposed Control Line

DUMPS & CROSSINGS

- Temporary Dry Weather
- Temporary Wet Weather
- Existing Crossing

ROADS

- Major Forest
- Minor Forest
- EPL Standard Existing (Major)
- EPL Standard Existing (Minor)

FIRE MANAGEMENT ZONE

- Strategic Fire Advantage Zone

NET HARVEST AREA

- FMZ 4 - MSW
- FMZ 4 - MSW (verified MAF)
- FMZ 4 Visual Protection - Standard MSW (30-60m)

NON HARVEST AREA

- Ridge & Headwater Habitat (80m)
- FMZ 7 (gravel pit)
- Slopes >30 (IHL 4)
- Excluded Forest
- FMZ 3B road maintenance (10-20m)

TENURE

- National Park Estate

DRAINAGE FEATURE PROTECTION (EPL IHL 2 & TSL). NOTE: THE GREATER OF THE WIDTHS (BOLD) MUST APPLY

Feature	Filter Strip (EPL)	Stream Exclusion Zone (TSL)
Unmapped	**10m**	Nil
1st Order	**15m**	10m
2nd order	20m	20m
3rd order	25m	**30m**
4th order	25m	**50m**

DRAINAGE

- Mapped LIC Drainage

0 125 250 500 750 1,000 Meters

Scale: 1:15,000

Contour Interval 10m

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Harvest Plan Forest Type Map
Compartments: 665 & 666

State Forest: NULLICA No: 545

SOUTHERN REGION - Native Forests
Map Sheet: EDEN 8823-1N

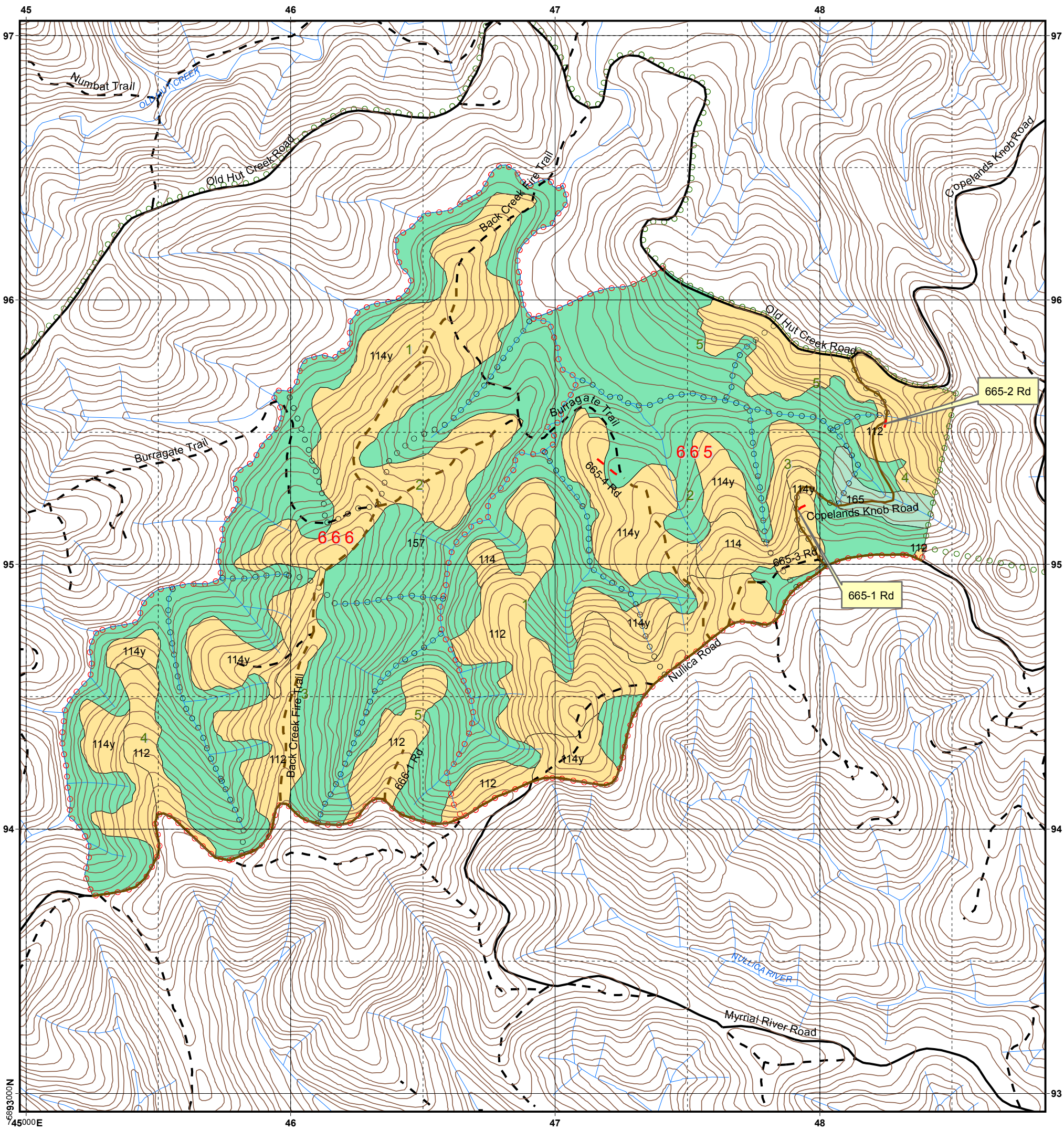
Prepared By: Andrew Kemsley

Forestry Corporation

N

SPEED LIMIT 60 On FCNSW unsealed gravel roads

GDA



BOUNDARIES
- State Forest Boundary
- Compartment Boundary
- Coupe Boundary

ROADS
- Major Forest
- Minor Forest
- EPL Standard Existing (Major)
- EPL Standard Existing (Minor)
- EPL Licenced (New Construction)

DRAINAGE
- Mapped LIC Drainage

FOREST TYPE - RN17
- **Type 112 Silvertop Ash**
- **Type 114 Silvertop Ash - Stringybark**
- **Type 157 Yellow Stringybark - Gum**
- **Type 165 Gully Peppermint**

Forest Type	Forest Type no.	Gross Ha
Silvertop Ash	112	94.51
Silvertop Ash - Stringybark	114	121.74
Yellow Stringybark - Gum	157	252.37
Gully Peppermint	165	5.09

0 125 250 500 750 1,000 Meters

Scale: 1:15,000
Contour Interval 10m

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Harvest Plan Forest Type Map

Compartment: 667

State Forest: NULLICA No: 545

SOUTHERN REGION - Native Forests

Map Sheet: BURRAGATE 8823-4N & EDEN 8823-1N

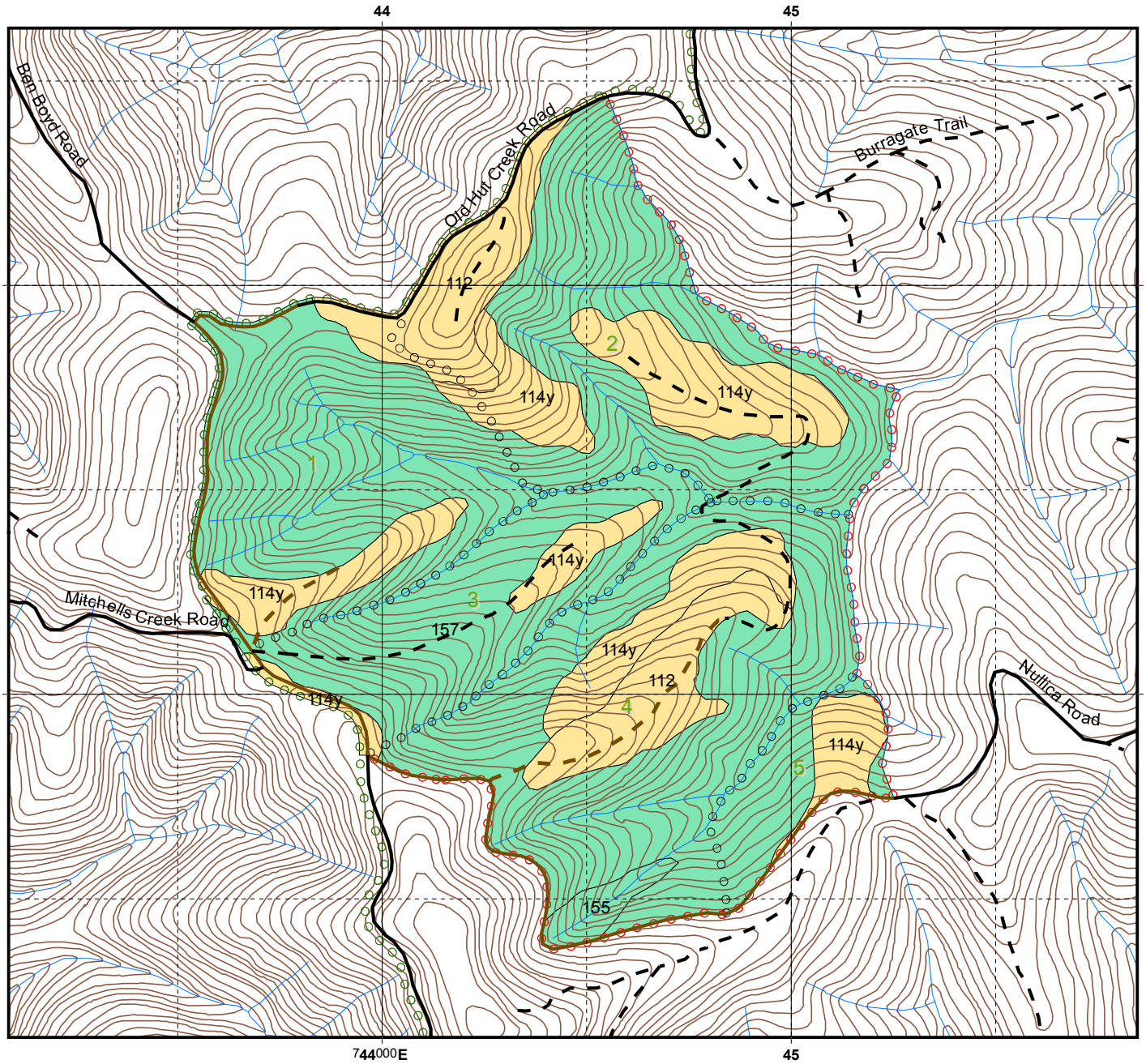
Prepared By: Andrew Kemsley

Forestry Corporation

N

SPEED LIMIT 60 On FCNSW unsealed gravel roads

GDA



BOUNDARIES
- State Forest Boundary
- Compartment Boundary
- Coupe Boundary

ROADS
- Major Forest
- Minor Forest
- EPL Standard Existing (Major)
- EPL Standard Existing (Minor)

DRAINAGE
- Mapped LIC Drainage

FOREST TYPE - RN17
- Type 112 Silvertop Ash
- Type 114 Silvertop Ash - Stringybark
- Type 155 Brown Barrel - Gum
- Type 157 Yellow Stringybark - Gum

Forest Type	Forest Type no.	Gross Ha
Silvertop Ash	112	22.34
Silvertop Ash - Stringybark	114	39.52
Brown Barrel - Gum	155	2.79
Yellow Stringybark - Gum	157	155.39

0 125 250 500 750 1,000 Meters

Scale: 1:15,000
Contour Interval 10m

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Harvest Plan Habitat Map (Indicative)

Compartments: 665 & 666

State Forest: NULLICA No: 545

SOUTHERN REGION - Native Forests

Map Sheet: EDEN 8823-1N

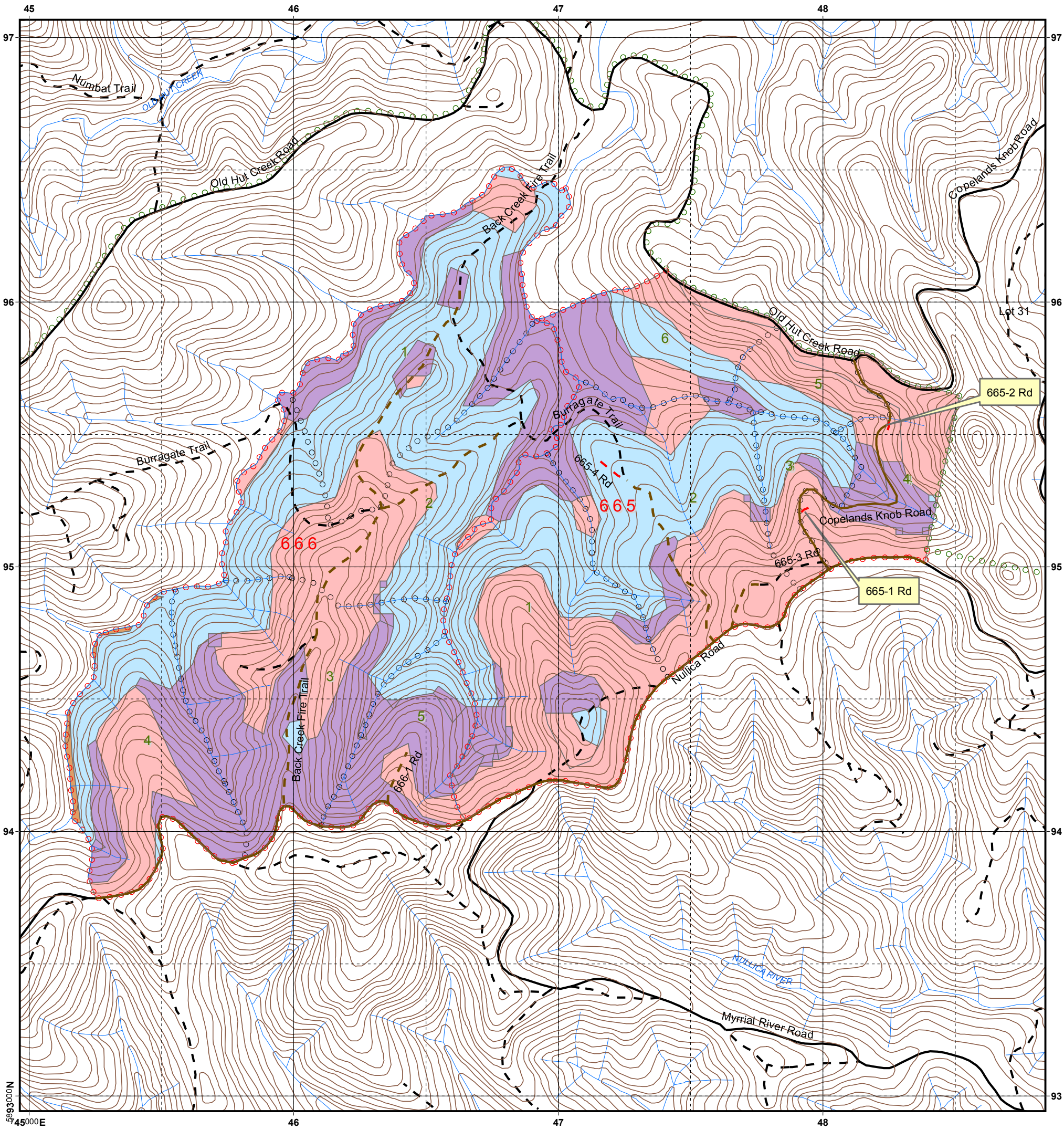
Prepared By: Andrew Kemsley

Forestry Corporation

N

SPEED LIMIT 60 On FCNSW unsealed gravel roads

GDA



ROADS
- Major Forest
- Minor Forest
- EPL Standard Existing (Major)
- EPL Standard Existing (Minor)
- EPL Licenced (New Construction)

BOUNDARIES
- State Forest Boundary
- Compartment Boundary
- Coupe Boundary

DRAINAGE
- Mapped LIC Drainage

HABITAT CLASS
- Unknown
- High
- Moderate
- Low

0 125 250 500 750 1,000 Meters

Scale: 1:15,000

Contour Interval 10m

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Harvest Plan Habitat Map (Indicative)

Compartment: 667

State Forest: NULLICA No: 545

SOUTHERN REGION - Native Forests

Map Sheet: BURRAGATE 8823-4N & EDEN 8823-1N

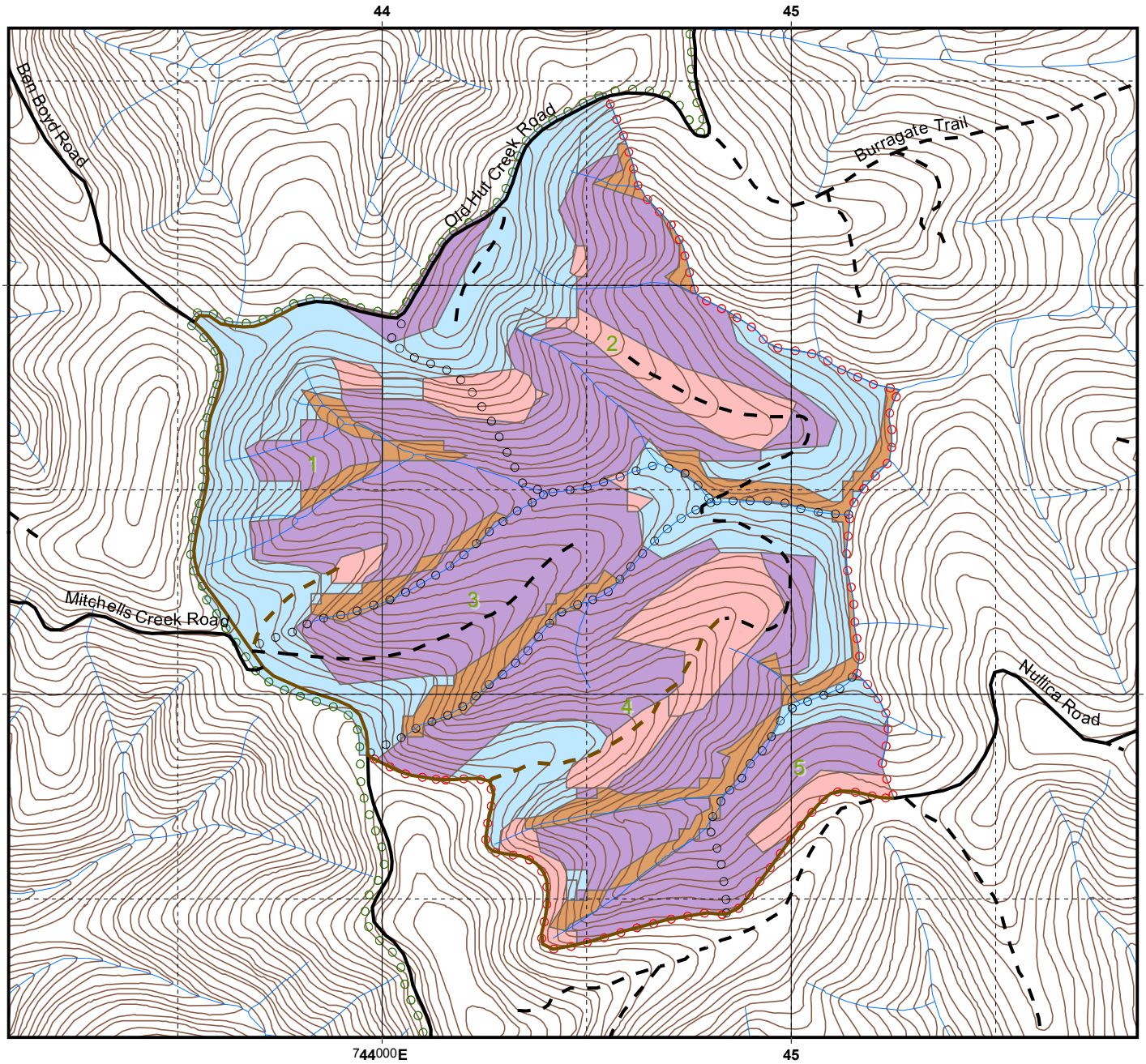
Prepared By: Andrew Kemsley

Forestry Corporation

N

SPEED LIMIT 60 On FCNSW unsealed gravel roads

GDA



BOUNDARIES
- State Forest Boundary
- Compartment Boundary
- Coupe Boundary

ROADS
- Major Forest
- Minor Forest
- EPL Standard Existing (Major)
- EPL Standard Existing (Minor)

DRAINAGE
- Mapped LIC Drainage

HABITAT CLASS
- Unknown
- High
- Moderate
- Low

0 125 250 500 750 1,000 Meters

Scale: 1:15,000
Contour Interval 10m

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HARDWOOD FORESTS- SOUTHERN REGION HARVESTING PLAN

Nullica State Forest - Compartments 665, 666, 667

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 Native Forest Operations in Southern Region, Eden apply to this operation.

Prepared By: Harvest Planner	Andrew Kemsley	Endorsed By: Harvest Planning Team Leader	Kate Halton	Approved By: Regional Manager	Daniel Tuan
Signature	Andrew Kemsley	Signature	Kate Halton	Signature	Daniel Tuan
Date	23.07.2013	Date	23.07.2013	Date	23.07.2013

Note: Approval includes the Harvest Plan Operational Map (HPOM) and Burning Operational Map with the corresponding approval date displayed on the map, verifying final approved version.

Other maps included with this plan are locality, forest type, roading, cultural heritage (limited distribution), and habitat quality class (SFO and indicative).

Description of Proposal

Harvesting of native forest

(a) Integrated Harvesting of Native Forest:
Mixed-age stands dominated by a commercially mature overstorey will be harvested to create regeneration opportunities through integrated harvesting of sawlogs and pulpwood with the retention of trees for future sawlogs, fauna habitat, seed trees, visual maintenance and soil and water protection.

This operation will be licensed under the EPL with notification sent to the regulatory authorities as per clause 23 of Integrated Forestry Operations Approval (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.
Attachment 3: Burning Plan prescribes burning requirements for this harvesting operation.
Post-harvest burning should be confined as far as practicable to the Net Harvest Area. Site specific burning exclusions associated with other tenures, regrowth patches, and exclusions (flora, fauna, cultural heritage and other exclusion zones) are explained within the relevant sections of this harvest plan, in the critical boundaries section of the burning plan and indicated on the HPOM and BOM.

The BOM and critical boundaries section of the burning plan also considers exclusion zones in compartments surrounding the planned compartments. If the post-log burn escapes the containment lines, the burn supervisor should use this information to assess if it is necessary to extinguish the fire or if it is acceptable to allow fire to burn out to a secondary control line.

During the planning stage the location and type of control lines required to contain fire within the nha are considered and listed in the control lines section of the burn plan. Snig track

patterns should be designed to double as bare earth control lines for each of the proposed control lines specified in the burn plan and for any other critical boundaries identified during the operation (e.g. nest exclusions, regrowth patches). Where this is not practical, the Contract Coordinator is to assess the need for a bare earth break to be constructed close to harvesting exclusion boundaries and seek advice and approval from the Operations Team Leader for the additional earth works.

The Contract Coordinator/SFO must record the following information in the burn plan and prior to burning use this information and any other relevant information from the CC/SFO notes to brief the Burning Supervisor:

- Any new critical boundaries identified during the operation,
- If works required for existing and proposed control lines were carried out,
- If proposed control lines were deemed to be unsuitable (e.g. a proposed new road did not get constructed or where a mapped drainage line didn't occur to the full length as mapped),
- If proposed control lines are no longer required (e.g. a section of the net harvest area did not get harvested) and will therefore not undergo post-log burning.

Area Identification and Yield Estimates

State Forest	Compartment/s	Coupe/s	Region	Management Area	Certification
Nullica	665, 666 & 667	1 (part), 2 (part), 3, 4 – Cpt 665 1 (part), 2 (part), 5 (part) – Cpt 666 1, 4 (part) – Cpt 667	Southern	Eden	AS4708:2007 ISO 14001

	Cpt 665	Cpt 666	Cpt 667	Total
Plan Compartment ID	20102	20103	20104	NA
Gross Area (ha)	218.7	254.9	220.0	693.6
Net Harvest Area (ha)	95.3	61.1	59.2	215.6
Estimated Yield Pulp (t)	6200 t	2800 t	1300 t	10300 t
Estimated Yield Sawlog (m3)	1500 m3	700 m3	800 m3	3000 m3

Slope Classes (percent of harvest area)

Slope Class	Cpt 665 % of harvest area	Cpt 666 % of harvest area	Cpt 667 % of harvest area
0-20º	73.7	66.1	39.0
20-25 º	20.1	26.5	29.9
25-30 º	5.7	6.9	7.3

Forestry Corporation NSW – Southern Region
Harvesting Plan HP_ED_665_666_667_12
Compartments 665, 666 & 667

Attachment 1 – Site Safety Plan

SAFETY CONSIDERATIONS

Emergency Plan Information

(a) **Mobile Phone reception on work site:**

[ ] Good [√] Poor [ ] Nil

Nearest reliable reception: Higher points on Nullica Road.

(b) **FCNSW Radio from work site:**

Channel No: 247
Call to: Eden Base
Call sign from: Your name

Contractor Radio at work site:

UHF Channel No:
Contractor Radio No:
Call to Bush Boss:

(c) **Emergency meeting point for ambulance:**

Junction of Nullica Road & Copelands Knob Road.

1:100000 map sheet:	Eden 8823	
MGA zone:	55	
MGA Grid reference:	E748023	N5894990.
Lat/Long for GPS:	37° 3' 30" S	149° 47' 21" E.

(d) **Closest Helicopter Landing Place:**

Junction of Nullica Road & Copelands Knob Road.

1:100000 map sheet:	Eden 8823	
MGA zone:	55	
MGA Grid reference:	E748023	N5894990.
Lat/Long for GPS:	37° 3' 30" S	149° 47' 21" E.

(e) **Procedure for obtaining Ambulance assistance:**

Dial "000" OR Call 1300 880 548 Batemans Bay Forestry Office for Ambulance assistance.

Dial “112” only as an alternative to “000” if you have a GSM digital mobile phone and you are outside your own provider’s GSM network coverage area.

"**000" Operator Question**.	**Response**
1. Police , Fire , Ambulance?	Ambulance.
2. Suburb (*State Forest name*):	Nullica
(*Nearest town or named locality)*:	Eden
(*Nearest Ambulance station):*	Eden
3. Address: (*Nearest named State forest road*):	Nullica Road.
4. Nearest Road Junction:	Nullica Road and Copelands Knob Road.
5 Local Government Area:	Bega Valley Shire Council
6. Nature of the problem:	Give details of accident, number and condition of casualties.
7. Where is the accident:	Work site location – (Centre of Compartments).
MGA Grid reference:	Zone 55 E746239 N5895158.
Lat/long for GPS:	37° 3' 26" S 149° 46' 9 " E.

8. Directions to navigate from Ambulance Station to meeting point:

Directions from Eden:

- Head South on the Princes Highway for approx. 4.3km to Towamba Road junction.
- Turn right onto Towamba Road for approx. 3.7km to Nullica Road junction.
- Turn right onto Nullica Road for approx. 7.4km to Copeland Knob Road junction.

9. Injuries?:	Give detailed information about the condition of the casualty.
10. Call back No.:	Give your Mobile Number. or Batemans Bay Office:1300 880 548.
11. Name of Reporter:	Give own name.

Site Specific Identified Hazards

Assessment of existing hazards was undertaken at the time of planning. These hazards are in the attached table and where appropriate, control strategies have been applied. Where no control strategy has been described, the contractor must develop appropriate strategies as part of the contractors Safety Management Plan. A copy of the hazard assessment and control strategies is provided to assist in the development of the contractors Safety Management Plan for this harvesting area.

All additional site hazards identified during harvesting must be assessed and documented in the SFO and Contractor copies of the site specific plan.

Identified hazards requiring risk assessment and control strategy in Safety Management Plan

IDENTIFIED HAZARD	RISK RATING	SUGGESTED CONTROL STRATEGY
1. Adjoining roads of various traffic levels	1	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. Cliff lines & rocky very steep terrain	3	Operators to assess work site within two tree lengths to identify immediate hazards. Communicate to other operators and mark sites.
3. Hazardous or dead trees	1	**Refer to FCNSW safety standard 1.3.9.** 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.**
4. Overhead hazards associated with dumps	1	**Refer to FCNSW safety standard 1.3.9.**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	2	Restrict speed to minimise dust generation, slow down when passing vehicles. Turn on driving and hazard lights to increase visibility.
9.		
10.		

Hazard Nos. 1/2/4/5 are shown on the attached HPOM

Nullica Quarry

Haulage along Nullica road travels past the entrance of Nullica Quarry. The following safety procedures must be adhered to:

- All haulage vehicles and any vehicle associated with this harvesting operation (with a UHF radio), that will be using this route between 7:00am and 6:00pm Monday to Friday, and 7:00am to 12 noon Saturdays, are required to call on UHF Channel 37 and inform the quarry/other road users of the following;

  Travelling West on Nullica Road Towards Nullica Quarry.

1. Entering Nullica Road the driver will notify Nullica Quarry and state “Turning onto Nullica Road”.
2. The driver is to notify Nullica Quarry at every kilometre marker and state that they are going past the relevant kilometre signage (ie going past the 1km heading towards the quarry).

Leaving Nullica Quarry and Travelling East on Nullica Road.

1. Before travelling past Nullica Quarry the driver will inform Nullica Quarry that they are travelling past the quarry.
2. The driver is to notify Nullica Quarry at every kilometre marker and state that they are going past the relevant kilometre signage (ie going past the 5km heading out).
3. Entering Towamba Road the driver will notify Nullica Quarry and state “Turning onto Towamba Road”.

- At all times (even after contacting by UHF radio) all vehicles within 200m of the Nullica quarry entrance are to slow down to a maximum of 40km/h and proceed with caution.
- At all times vehicles using this route are to abide by all relevant road signage.

Traffic management/road closures

The logging contractor is responsible for traffic control on all roads when felling is within two tree lengths of the tallest tree to be felled of the road, or snigging on roads or loading is occurring within 10 metres of a road. Warning of trucks entering must be **displayed 200 metres either side** of all State Forest road approaches leading to areas where harvesting operations are in progress.

Warning of timber harvesting operations must be **displayed 200 metres either side** of all thoroughfare State Forest road approaches leading to areas where harvesting operations are in progress.

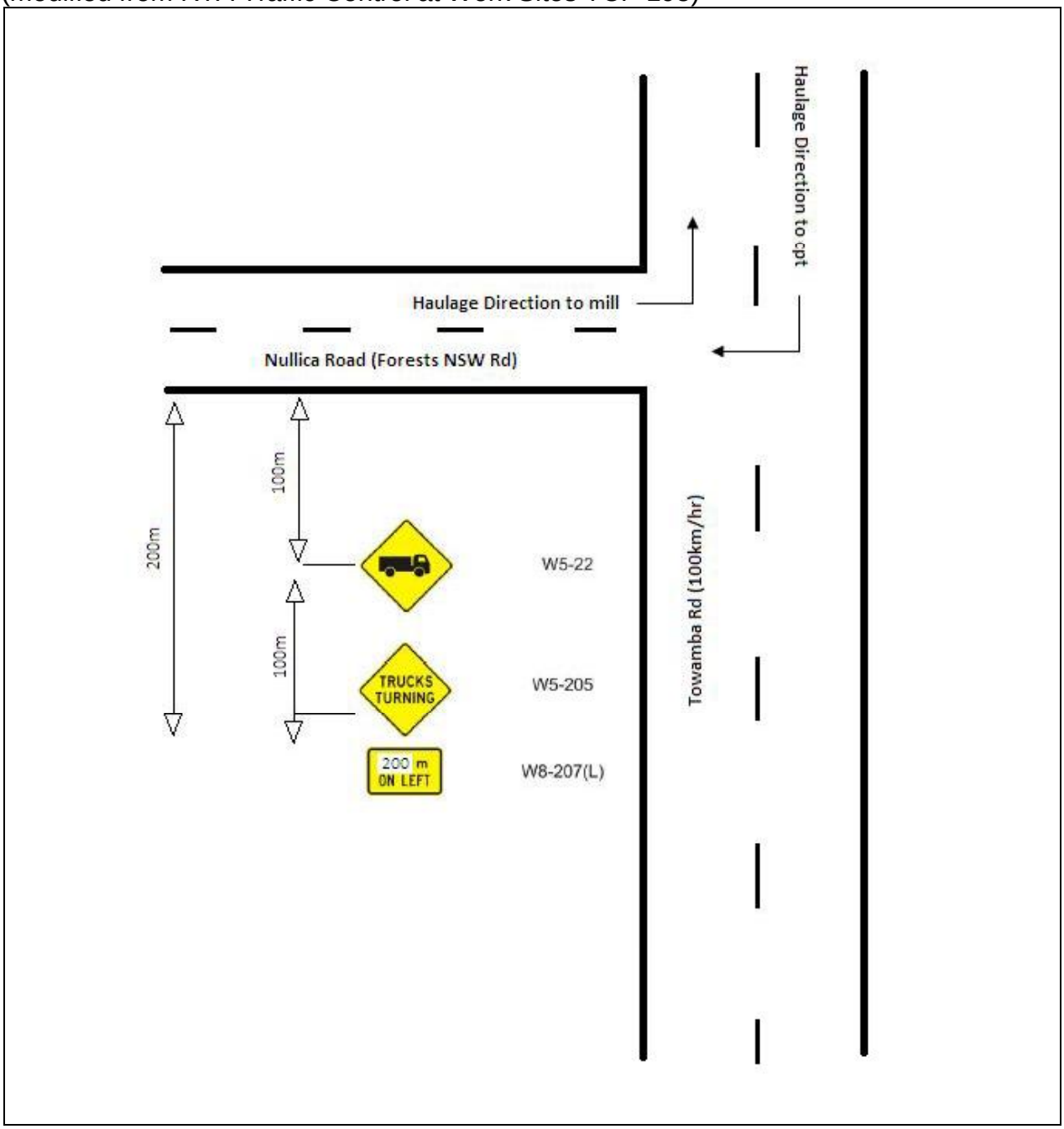
This plan identifies haulage from the compartment will be east via Nullica Road turning left onto shire owned/controlled Towamba Road (100km/hr Road). The intersection of Nullica Road and Towamba Road has been assessed as achieving a minimum sight distance of 200m for vehicles travelling on Towamba road in a westerly direction, but not for vehicles travelling along Towamba Road in a easterly/north easterly direction. Therefore prior to haulage commencing, a suitably qualified person must implement “TCP_195_ Towamba-Nullica Road intersection”, which is attached to this harvest plan.

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.

School bus route – Towamba road is used by school buses between the hours of 7:00am to 10:00 am and 1.45pm to 5:00pm, or as signposted. On weekdays, to the greatest extent practicable, log haulage should avoid school bus times on the above road.

FCNSW Southern Region Traffic Control Plan 195: Towamba-Nullica Road intersection (modified from RTA Traffic Control at Work Sites TCP 195)



Log Haulage: Intersection of Forests FCNSW road (Nullica Road) with 100km/hr Shire road (Towamba Road). Sight distance restricted to 90 m when travelling in an easterly/north-easterly direction towards the intersection.

Long Term Use.

ADP <1500 vehicles per day, <20 truck movements, sight distance restricted.

Prepared by Kate Halton, Red Card Certificate No. 5192033076 on 13/04/2011

Silviculture and Harvesting Prescriptions

Compartment 665

Year	1951	1972	1999	2005	2007
TSI	X	X	X	X	X
HR Burning	X	X	√	X	√
Wildfires	√	√	X	X	X
Logging m^3	0	0	0	15900	0

√ - applies, **X** – not applicable

Compartment 666

Year	1951	1972	1986	1996	1997	1999	2005	2007
TSI	X	X	X	X	X	X	X	X
HR Burning	X	X	X	√	X	√	X	√
Wildfires	√	√	√	X	X	X	X	X
Logging m^3	0	0	10100	0	9700	0	11700	0

√ - applies, **X** – not applicable

Compartment 667

Year	1951	1972	1986	1987	1996	1999	2001
TSI	X	X	X	X	X	X	X
HR Burning	X	X	X	X	√	√	X
Wildfires	√	√	√	X	X	X	X
Logging m^3	0	0	0	13500	0	0	14500

√ - applies, **X** – not applicable

Silvicultural Planning

Compartments 665, 666 & 667 are primarily even aged due to wildfire in 1951, with regeneration occurring in areas previously subjected to integrated harvest operations.

In 1986-88 sections of compartment 666 & 667 were subject to an operation with varying intensity with the intention of increasing sawlog growth in the retained trees. In 2001 an integrated operation took place in the remainder of compartment 667.

A thinning operation and Integrated operation took place in 2005 in sections of compartments 665 & 666. Sections of high quality stems nearing small sawlog diameter were retained with the intention of obtaining a higher sawlog product yield by harvesting in the medium term.

This operation seeks to harvest stems previously retained from past harvest events in order to regenerate the stand. Retained habitat trees will primarily be mature trees which survived the 1951 wildfire.

Harvesting Prescription

Stand type	% of net area	Area (refer to HPOM for details)	Treatment (% INT)
Mature (mixed aged)	100%	Entire NHA (including FMZ 4 and FMZ 3B visual protection)	• 100% Integrated (modified shelter-wood) • Target sawlogs, pulpwood and other miscellaneous products as markets allow in line with TSL and EPL requirements. • Retain potential sawlog growers. • Refer to Standard Harvest Planning Conditions for more detail.

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

IFOA Limits

The integrated harvesting operation is in accordance with IFOA Part 1 Condition 5 (11).

No more than 60% of the net harvestable area within these compartments will be harvested during this operation. The next integrated harvesting operation is not permitted within 5 years from the completion of this harvesting event.

The SFO will ensure that TSL tree retention prescriptions are met concurrent with harvesting operations.

Special Requirements

Non-harvest areas

The HPOM indicates the non-harvest areas in the compartments, as detailed in the legend. Harvesting disturbance is not permitted in non-harvest areas unless authorised by the Regional Manager.

Noxious Weeds/Disease/Pests Hygiene Requirements

Compartments 665, 666 & 667 are within Bega Valley 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 Bega Valley Shire Council must be inspected for vegetation containing Myrtle Rust and if present be washed down prior to leaving this local government area.

Permanent Growth and Research Plots

Eden Coastal Permanent Plots - (ECPP15 & ECPP17) are located in compartment 665 & 666 as shown on the HPOM. This plot plus a two tree length buffer (measured from the edge of the plot) is to be excluded from harvesting.

Any other inventory plots located during the harvesting operation which are not shown on the HPOM or described above are to be treated the same as the surrounding area.

Private Property and Critical Boundaries

A Private property occurs adjacent to the eastern boundary of compartment 665, as indicated on the HPOM. The Private property owner has been notified of the scheduled harvesting and post-harvest burning. Contact details are available from the Eden office. The table below lists the neighbour who adjoins Compartment 665:

Name	Lot Number
	Lot 2, Lot 31 & Lot 50

- 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.
- Boundaries must be marked in the field.

Rocky Terrain

Rocky terrain was not assessed at planning stage to determine if it met the definition of rocky outcrop or cliff. SFO will continue to conduct on the ground mark-up and searches and report back to foresters/ecologist any feature requiring further investigation.

National Parks and Nature Reserves

National Park neighbours compartment 667 to the north and west and compartment 665 to the north.

The majority of the boundary between National Park and compartments 665 and 667 is the western and northern edge of a 20 and 10 metre wide road maintenance corridor which runs parallel to Ben Boyd Road, Old Hut Creek Road and Copelands Knob Road (HPOM provides further detail as to where the widths change from 10 to 20m).

Within the road maintenance corridor the only activities allowed are normal road maintenance (eg: road side clearing, road drainage and road re-alignment). Harvesting is NOT permitted within the road corridor.

For the area described above, for the purpose of the harvesting activities within compartments 665 and 667 the boundary is Ben Boyd Road, Old Hut Creek Road and Copelands Knob Road.

There is a 80m section of boundary between State Forest and National Park east of Copelands Knob Road which does not form part of the road maintenance corridor. This section of boundary is to be marked in the field using GPS as mapped.

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.

Forest Management Zoning

FMZ 3B-Special Prescriptions (road maintenance and visual protection) , FMZ 4- General Management (normal harvesting prescriptions apply) & FMZ 7- Non Forestry Use (gravel pits) occur within the compartment. Refer to HPOM for more detail.

FMZ 3B (Road Maintenance)
There are various road maintenance corridors throughout the planning unit. Within these areas the only activities allowed are normal road maintenance (eg: road side clearing, road drainage and road re-alignment). Harvesting is NOT permitted within the road maintenance corridor. Details of the road maintenance corridors are shown below.

- Compartment 667:
    - parallel to the western side of Ben Boyd Road (the widths vary between 10m and 20m refer to HPOM for detail)
    - parallel to the northern side of Old Hut Creek Road (10m)
- Compartment 665:
    - Parallel to the northern side of Old Hut Creek Road and Copelands Knob Road (10m).

At the time of planning no maintenance within these corridors was assessed as being required. Any maintenance within the corridors not covered by this plan is permitted (eg removing harvesting debris from the drains/road) provided it is within the corridor widths specified above.

FMZ 3B (Visual Amenity)
Within compartment 667 FMZ 3B (Visual amenity) exists at various widths (30-60m) parallel to Ben Boyd Road. This area is to be harvested as per the surrounding FMZ 4 area as specified in the harvesting prescription section of this plan (modified shelter wood silviculture).

FMZ 7 – Gravel Pits occur in compartment 667 and 665. Refer to the log dumps section for special conditions relating to the gravel pit in cpt 667. As there is no infrastructure or assets requiring protection from fire located on either gravel pit, fire does not conflict with the specific non-forest use of the site and not special conditions are required for burning.

IFOA Required Approval of Forestry Activities

Stream Exclusion Zones require prior Regional Manager approval before forest harvesting related activities (eg: road or snig track construction & reopening) can be undertaken. It is the responsibility of the SFO to identify any exclusion areas which will need to be crossed during harvesting. The SFO should then contact the Harvest Planner to obtain the necessary approval.

Cultural Heritage

Cultural Heritage - Due to the confidentiality of the Cultural Heritage sites, a Cultural Heritage site map will only be attached to the specific copies of the plan. All 10 metre radius exclusion buffers are to be marked in the field as **hard exclusion zones (i.e. pink & yellow tape)** where logging and/or road works are scheduled to be undertaken. **All operators must be taken to each site within the planned area before any activities are commenced**.

Flora and Fauna

Refer to TSL Booklet for Conditions

Mark-Up Conditions

During the pre-harvest mark up the SFO must search for and record threatened species habitat features consistent with Conditions 5.2 and 8.6 of the TSL. Searches for threatened species features must be conducted within that portion of the net planned area where harvesting will occur, and within 50 metres outside this area (eg HCVOG, etc) (conditions 5.1, 5.2 of the TSL).

Where any of these features are found, the feature must be recorded, the Harvesting Plan, including the HPOM, must be amended accordingly and the appropriate condition applied.

Species adequately covered by general prescriptions:
The following species have been recorded in or around the compartments and are adequately covered by the general prescriptions. No further protection measures are required for these species: **Common Bent-wing Bat** *(Miniopterus schreibersii)*, **Eastern False Pipistrelle Pipistrelle** *(Falsistrellus tasmaniensis)***, Gang Gang Cockatoo** (Callocephalon fimbriatum), **Glossy Black-Cockatoo** *(Calyptorhynchus lathami)*, **(Greater Broad-nosed Bat** *(Scoteanax rueppellii)*.

Tree Retention-Non-Regrowth Zone

The non-regrowth zone applies to the entire net harvest area. The SFO is to mark as per Condition 5.6 of the TSL, in conjunction with indicative Habitat Quality Class Map and on ground assessment. Where the density of habitat trees specified in the table are not available, retain the existing habitat trees plus additional trees of the largest dbhob to meet the required retention rate.

Habitat Quality	Hollow Bearing Tree/ 2ha	TSL Condition	Recruitment Trees/ 2ha	TSL Condition	Protection of Retained Trees	TSL Condition	Dead Standing Tree (only if safe)	TSL Condition	Significant Food Resource*	TSL Condition
High	12	5.6g)i	12	5.6h)i	√	5.6l	√	5.6j	√	5.6 k
Medium	8	5.6g)ii	8	5.6 h)ii	√	5.6 l	√	5.6j	√	5.6 k
Low	4	5.6g)iii	4	5.6 h)iii	√	5.6 l	√	5.6j	√	5.6 k

√ - Condition applies

General exclusion zones

General exclusions as listed below are shown on the HPOM.

Feature/Condition	TSL cond'n	Occurs within Planning Unit
Rainforest	5.4	Has been assessed & is unlikely to 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 investigation#.
Endangered Ecological Community	NA	Has been assessed & is unlikely to occur in the field. May require further investigation#. **Harvesting, harvesting machinery and post harvest burning must be excluded from all areas of EEC.**

#SFO/Contract coordinators 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 665, 666 & 667	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

Contractors and supervisory staff must immediately report any sightings of Schedule 1 and 2 species to the Harvesting Team Leader. The Harvesting Plan must be amended to include additional prescriptions if necessary. If any species requiring a site specific prescription in accordance with condition 1.2 of the TSL are detected in or within 100m of the compartment boundaries cease operations immediately & Inform Harvesting Team Leader.

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 665	Records in 666	Records in 667	Licence conditions under the TSC Act or relevant Site-specific prescription
Powerful Owl *Ninox strenua,*	Yes	No	No	6.3
Masked Owl *Tyto novaehollandie*	Yes	No	No	6.3
Sooty Owl *Tyto tenebricosa*	Yes	No	No	6.3
Smoky Mouse *Pseudomys fumeus*	No	No	No	Species Management Plan
Spotted tailed Quoll *Dasyurus maculatus*	No	No	No	6.10
Koala *Phascolarctos cinereus*	No	No	No	6.11
Yellow-bellied Glider *Petaurus australis*	Yes	Yes	No	6.13
Leionema ralstonii	No	No	No	6.17 Where practicable, minimise damage to individuals from specified forestry activities.
Westringia davidii	No	No	No	6.18 Apply 10m exclusion around individuals. If colonies of more than 5 individuals are found apply 6.18 d) additional modified harvesting zone.

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 applies
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

Log Dump Location

25 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.

Within compartment 667, Dump Y is located on a gravel pit. After the dump is utilised any debris must be removed from the site to the greatest extent possible, in order for the site to be used as a gravel pit in the future. Ripping is not required.

Expected Felling/ Extraction & Loading Method

The expected felling method is mechanical, extraction method by skidder, and loading method is by excavator.

Drainage Feature Crossings

One snig track drainage line crossing~~s~~ (S1) is approved for use on drainage features. (Refer to HPOM). Crossing details are contained in Attachment 2 of this Plan.

Mass Movement

The compartment 666 is in an area identified as having a potential for mass movement. The following conditions apply to snig tracks constructed in this area:

- The construction of new snig tracks should not involve side cuts of greater than 3 metre batter height.
- Wherever possible snig tracks should follow the terrain rather than sidecut across contours, particularly where the slope exceeds 25º.

  Any old snig tracks on slopes up to 30º (including side cut snig tracks) that are showing no sign of mass movement may be used provided they can be satisfactory drained to EPL specifications.

Compartments 665 & 667 are not in an area identified as having a potential for mass movement. No specific prescriptions relating to mass movement/snigging are required within compartment 665 & 667.

Suitability of existing log dams and gully stuffers

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

Condition 47 of Schedule 4 of the EPL must apply.

Road Works

The HPOM indicates the location of existing roads and crossings.

Feature	Length &/or Number	Work Required
Existing Roads	14030m / 10	Yes
New Roads	260m / 3	Yes

Existing Crossings	3	Yes
New Crossing	Nil	No
Borrow & Gravel Pits	1	No

Roading and Crossing details are contained within the Roading Plan (Attachment 2 of this Plan).

The roading and crossing works must be under taken prior to the commencement of harvesting activity in the area served by the road or crossing. The roading plan specifies whether the contractor or FCNSW is responsible for carrying out the works.

Within the compartment boundary only roads that are shown on the HPOM as EPL standard or sealed may be used for haulage. **Refer to EPL Schedule 5 – Operating Conditions for Roads.**

Roads within the compartment boundary may be used with SFO approval for snigging or extraction provided they are drained to EPL specifications.

Legal Conditions

In 1999, the Commonwealth and NSW Governments signed a Eden Regional Forest Agreement which, among other things, allows for the supply of timber for 20 years from public lands under the following NSW legislation:

- Forestry Act 2012, and
- Forestry & National Park Estate Act 1998

The latter Act provides for the Eden Forest Agreement and Eden Integrated Forest Operations Approval (IFOA), both approved by NSW Government Ministers. This harvest plan is issued under the authority provided within the IFOA.

The IFOA also contains three licences issued under:

- Section 55 of the Protection of the Environment Act 1997 (EPL)
- Threatened Species Conservation Act 1995 (TSL).
- Section 220ZW of the Fisheries Management Act 1994 (FL).

This harvest plan will be managed in the field under:

- Licences issued under the Forestry Act (2012)
- Forest Practices Code part 2 (Timber Harvesting in Native Forests - 1999) and part 4 (Forest Roads and Fire Trails - 1999)
- Standard Harvest Plan Conditions for Native Forest Operations under the IFOA
- FCNSW Corporate Fuel Management Plan 2008.

Harvesting operations must comply with all of the above Licences and the Code.
Further information is available from http://www.environment.nsw.gov.au/

Pre Operational Briefing

I acknowledge that I have received a copy of the Harvesting Plan for Compartments 665, 666 & 667 in Nullica 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 Harvesting Team Leader or his/her delegate.

Position	Name	Signature	Date

Details to Record in SFO Notes

- Dates of commencement and cessation of logging
- Record the commencement and completion of harvesting at each dump
- Record the occurrence of temporary stopping of harvesting at each dump.
- Situations where drainage could not be completed due to saturated soils must be recorded in SFO Notes**.**
- Record the commencement and completion of each construction, upgrading or maintenance of drainage feature crossings by snig tracks or extraction tracks.
- Bi-weekly checks of road drainage structures during haulage operations.
- Record the date of checks, drainage structure compliance and the any repairs required within the specified time period.
- Records of Threatened Flora and Fauna identified during compartment markup.
- Minor variations associated with moving or adding dumps.
- Daily events of importance eg. Instructions to crew, work activity.

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	Yes	New			
Heath	No				
Powerlines etc	No				
Other					

SFO 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 SFO Notes.

Snig/Extraction Track Crossing Record

Record the commencement and completion of each construction, upgrading or maintenance of watercourse/drainage line crossings by snig tracks or extraction tracks.

Type and number of structure	Start date	Finish date	Temporary crossing (yes/no)	* Soil stabilisation completed within 5 days (yes/no)	** Clearing beyond 3m upstream or downstream (yes/no)

* If soil is not stabilised within 5 days it must be recorded as a non-compliance including the reason why on a Harvest Compliance Issue Report.
If soil is saturated, temporary stabilisation must be put in place, and the instance entered into the compartment diary.

**** If track edge clearing exceeds 3 metres, document the reason for field approval in the compartment diary.**

Weekly and Bi-weekly inspection

Item Inspected	Insert dates of inspection											
	Week 1		Week 2		Week 3		Week 4		Week 5		Week 6	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Road drainage												
Road sediment controls												
Road causeways												
Road gully stuffers												
Snig gully stuffers												
SFO initial												
SFO presence												

Comments: record the item number in a box above and comment as required.

1._____

2._____

3._____

4._____

5._____

6._____

7._____

8._____

9._____

Weekly and Bi-weekly inspection

Item Inspected	Insert dates of inspection											
	Week 7		Week 8		Week 9		Week 10		Week 11		Week 12	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Road drainage												
Road sediment controls												
Road causeways												
Road gully stuffers												
Snig gully stuffers												
SFO initial												
SFO presence												

Comments: record the item number in a box above and comment as required.

1._____

2._____

3._____

4._____

5._____

6._____

7._____

8._____

9._____

Weekly and Bi-weekly inspection

Item Inspected	Insert dates of inspection											
	Week 13		Week 14		Week 15		Week 16		Week 17		Week 18	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Road drainage												
Road sediment controls												
Road causeways												
Road gully stuffers												
Snig gully stuffers												
SFO initial												
SFO presence												

Comments: record the item number in a box above and comment as required.

1._____

2._____

3._____

4._____

5._____

6._____

7._____

8._____

9._____

Weekly and Bi-weekly inspection

Item Inspected	Insert dates of inspection											
	Week 19		Week 20		Week 21		Week 22		Week 23		Week 24	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Road drainage												
Road sediment controls												
Road causeways												
Road gully stuffers												
Snig gully stuffers												
SFO initial												
SFO presence												

Comments: record the item number in a box above and comment as required.

1._____

2._____

3._____

4._____

5._____

6._____

7._____

8._____

9._____

SFO Notes

Date	Event	Signed

SFO Notes (continued)

Date	Event	Signed

SFO Notes (continued)

Date	Event	Signed

SFO Notes (continued)

Date	Event	Signed

SFO Notes (continued)

Date	Event	Signed

Clearance Certificate

COMPARTMENTS: 665, 666 & 667

NULLICA STATE FOREST, SOUTHERN REGION

To .....Supervising Forest Officer

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 Operations Branch 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 Timber 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).....
Supervising Forest Officer

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 (SFO estimate)	Number of AGS gaps created	Comments
Integrated/Modified shelterwood			
Thinning			
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

Dump No#	Sweep 1	Sweep 2	Sweep 3	Sweep 4	Average
			Post BA	Average	m^2/ha
			Pre BA	Average	m^2/ha

Comply with maximum Thinning BA removal of 75%? 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

Length of existing roads/trails to be maintained	14030m
Length of new roads to be constructed	260m
Number of existing crossings to be maintained	3
Number of new crossings to be constructed	Nil
Length of road >10°	560m
Mass movement prescriptions apply	Yes (cpt 666) No (cpt 665,667)
Dispersible soil conditions apply	No
Seasonality provisions apply	No

Note: Maintenance works not completed by Operations must be recorded and passed onto the SFO Harvesting for completion 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
Nullica Rd (Length = 6030m) (FCNSW Responsibility)	Clean inlet and outlet of blocked pipes. Roadside clearing 3m either side of road prism. Grade & gravel if required. **The following additional prescriptions must be implemented on sections of Nullica Road which exceed 30 degrees:** - Any spoil must be consolidated onto road surface or removed from site. Spoil must not be push off road surface. - Roadside clearing must not occur. - Do not disturb cut batter. If disturbed cut batter must be packed to mitigate against erosion. **Ops/SFO Comments:**			
Copelands Knob Rd (Length = 1340m) (FCNSW Responsibility)	Clean inlet and outlet of blocked pipes. Roadside clearing 3m either side of road prism. **Ops/SFO Comments:**			

665-3 Rd (Length = 220m) (Contractors Responsibility)	Roadside clearing 3m either side of road prism. Grade if required. Replace rollovers with rubberflaps, installing additional rubberflaps were required. **Ops/SFO Comments:**			
Burragate Trail (Length = 1330m) (Contractors Responsibility)	Roadside clearing 3m either side of road prism. Grade if required. Replace rollovers with rubberflaps, installing additional rubberflaps were required. **The following additional prescriptions must be implemented on sections of Burragate Trail which exceed 30 degrees:** - Any spoil must be consolidated onto road surface or removed from site. Spoil must not be push off road surface. - Roadside clearing must not occur. - Do not disturb cut batter. If disturbed cut batter must be packed to mitigate against erosion. **Ops/SFO Comments:**			
Back Creek Fire Trail (Length = 2240m) (Contractors Responsibility)	Roadside clearing 3m either side of road prism. Grade if required. Replace rollovers with rubberflaps, installing additional rubberflaps were required. **Ops/SFO Comments:**			
666-1 Rd (Length = 210m) (Contractors Responsibility)	Roadside clearing 3m either side of road prism. Grade if required. Replace rollovers with rubberflaps, installing additional rubberflaps were required. **Ops/SFO Comments:**			

Ben Boyd Rd (Length = 1300m) (Contractors Responsibility)	Clean inlet and outlet of blocked pipes. Grade & gravel if required. **The following additional prescriptions must be implemented on sections of Ben Boyd Road which exceed 30 degrees:** - Any spoil must be consolidated onto road surface or removed from site. Spoil must not be push off road surface. - Roadside clearing must not occur. - Do not disturb cut batter. If disturbed cut batter must be packed to mitigate against erosion. **Ops/SFO Comments:**			
Old Hut Creek Rd (Length = 280m) (Contractors Responsibility)	Clean inlet and outlet of blocked pipes. Roadside clearing 3m either side of road prism. Grade & gravel if required. **Ops/SFO Comments:**			
667-1 Rd (Length = 330m) (Contractors Responsibility)	Roadside clearing 3m either side of road prism. Grade if required. Replace rollovers with rubberflaps, installing additional rubberflaps were required. **Ops/SFO Comments:**			
667-2 Rd (Length = 330m) (Contractors Responsibility)	Roadside clearing 3m either side of road prism. Grade if required. Replace rollovers with rubberflaps, installing additional rubberflaps were required. **Ops/SFO Comments:**			

C1 Existing pipe (450mm) (E 748276 N 5895248) (FCNSW Responsibility)	Clean inlet & outlet if required. Install rubberflaps on both approaches if crossfall is inadequate. **Ops/SFO Comments:**			
C2 Existing pipe (450mm) (E 748250 N 5895560) (FCNSW Responsibility)	Clean inlet & outlet of pipe if required. Install rubberflaps on northern approach if crossfall is inadequate. Rubberflap is not required on southern approach due to negative grade away from drainage line. **Ops/SFO Comments:**			
C3 Existing pipe (450mm) (E 744392 N 5893393) (FCNSW Responsibility)	Clean inlet & outlet if required. Install rubberflaps on both approaches if crossfall is inadequate. **Ops/SFO Comments:**			

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
665-1 Rd	50m	7m	6º	9º	<1m	50m	No	Temp.	Contractor		
665-2 Rd	60m	7m	12º (60m)	21º	3-4m	60m	No	Temp.	Contractor		
665-4 Rd	150m	7m	2º	3º	Nil	Nil	No	Temp.	Contractor		

General Instructions for road construction:

Features	Road Specifications	Additional instructions / Materials
Type of sediment trapping / soil erosion/ sediment control device to be used during construction	Natural surrounding vegetation supplemented with silt fencing, seed and mulch as required.	SFO to monitor during road construction and assess requirements.
Recommended road drainage type	Recommend rubber flaps if >5 degrees. Rollovers or mitres if < or = 5 degrees. SFO to measure & mark in the field in accordance to Sch. 5 Table 1 of the EPL. Trafficable rollovers to be installed upon harvest completion	Rubber flaps during operation. Permanent trafficable rollovers to be installed upon completion of use.
Spacing of road structures to be installed	As per EPL Sch. 5, Section C, Table 1	
Soil erosion / sediment control techniques	Drainage outlets must drain onto stable surface which provides efficient sediment trapping & energy dissipation. Upon harvest completion, logging debris is to be removed from table and mitre drains so they are left in effective working order	Seed & mulch as required
Stabilisation assessment intervals	As per EPL Sch. 5, Clause 5, 15, 17, 19 & 20	
Drop down & dissipater required	Required where fill batter >1m as per EPL Schedule 5 Clause 36	SFO to monitor. Mitres with rock dissipater recommended.
Soil stabilisation techniques of disturbed areas	Seed & mulch as required	

Note: Maintenance works not completed by Operations must be recorded and passed on to the SFO.

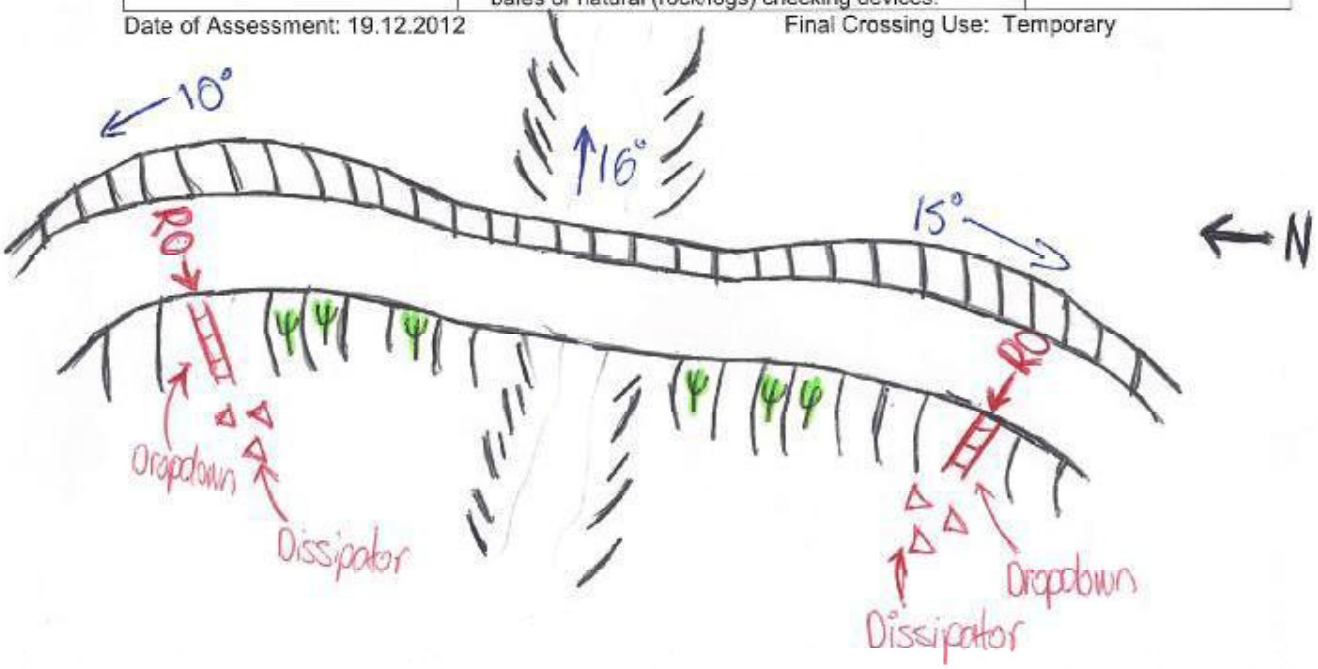
CROSSING NAME: S1

Waterway Classification: Fish Passage Class 4- Unlikely fish habitat.

Assessors Name: Andrew Kemsley **Crossing Type:** Natural Snig Crossing (construction)

Features	Works (As per EPL Schedule 5)	Plant/Materials
Structure	Construct side cut causeway crossing. - If possible construct with cross fall drainage to avoid the need for table drain checking devices.	Dozer/Excavator
Bed and Banks	- Reshape disturbed areas to achieve stable cross section.	Dozer/Excavator
Erosion and Sediment Control	- Minimize roadside clearing and soil disturbance to the greatest extent practicable. - Utilise natural rock surface on crossing. Armour approaches with gravel if required in wet conditions.	Seed & mulch. 100mm rock.
Disposal of excess spoil	- All excess spoil to be removed outside of SEZ and/or re-spread & consolidated onto crossing and fill batter.	Dozer/Excavator.
Soil Stabilisation within 20m	- Seed and mulch disturbed areas on completion of snigging.	Manual labour/Seed & mulch.
Road drainage within 5-20m • Type • outlet control • table drain checking devices	• Upon completion of crossing usage install rollovers on both approaches within timeframes specified in EPL sch 4, 79 & 80. • Install dropdown & dissipaters/slash at outlets of rollovers. • If possible utilise cross fall drainage, if not install hay bales or natural (rock/logs) checking devices.	Dozer/Excavator

Date of Assessment: 19.12.2012 Final Crossing Use: Temporary



Date Work Started: _____

Date Work Finished: _____

Soil stabilisation must be completed within 5 days

Record implementation date here: _____

Key

→Ru	Rubber strip
→M	Mitre drain
xxx	Roadside clearing
→Ro	Rollover drain
ψ	Sill Log
○○○○○	Rock
🌱	Seeding
∇	Silt trapping
∴	Gravel

ATTACHMENT 3 POST-HARVEST BURNING PLAN

This burn plan has been planned and must be implemented in accordance with:

Bushfire Environmental Assessment Code (and accompanying Bush Fire Hazard Reduction Certificate).	X
Eden IFOA*	ü

*This burn plan will be managed in accordance with the principles detailed in the FCNSW Corporate Fuel Management Plan 2008. All practical measures will be taken to ensure fire is contained within predetermined control lines and to prevent entry into exclusion areas. However due to the unpredictable nature of fire from time to time fire may escape the containment lines and enter exclusion zones. In these instances the Burn Supervisor should consider suitable strategies to manage the escaped fire.

PLANNING INFORMATION

Planned Burn Area: NHA of compartment**s 665, 666 & 667**, Nullica State Forest**LGA**: Bega Valley

Refer to Area Identification and Yield Estimates section of harvest plan.

Season: autumn / winter / spring

Bush Fire Management Zone: Land Management Zone (LMZ) & Strategic Fire Advantage Zone (SFAZ)

BURN OBJECTIVES

LMZ and SFAZ

- Promote regeneration of eucalypt species
- Protect & enhance ecological communities
- To reduce fine fuel loads to 4-8 tonnes/ha. (assisting future fire suppression)
- A burn coverage between 60-80% of harvested area.
- To contain fire within harvested area.
- To minimise mortality in trees retained under condition 5.6 of TSL (H & R trees and feed trees).
- To minimise defect damage to retained regrowth stems.

CRITICAL AND NON CRITICAL BOUNDARIES

A summary of critical boundaries where burning must be excluded are listed below (refer to harvest plan and BOM for further details).

Critical boundaries within the planned compartments:

- Compartment 665, coupes 2 (part), 5 & 6. (contains regrowth from 2005 integrated harvest).
- Exclusion for ridge and headwater.

Critical boundaries outside the planned compartments

- Exclusions for probable rainforest and ridge and headwater and probable rocky outcrop.
- National Park and private property.

Non-Critical Boundaries

Non-critical boundaries are areas within the planned compartments which are outside the nha where fire should not be deliberately introduced (through lighting patterns or direct ignition). However if fire does enter these areas, attempts to extinguish the fire are not necessary and it is acceptable to allow fire to burn out to a secondary containment line.

Snig track patterns should still aim to form a control line around these boundaries, however if this in impractical (e.g due to steep/rocky terrain) it is not necessary for CC/SFO to seek approval for the construction a bare earth break.

- Boundary between nha and excluded forest in compartment 665, coupe 1. This area underwent an thinning harvest in 2005. The remaining trees are sufficiently established and will not be adversely affected by low intensity burning.
- Boundary between nha and excluded forest in compartment 666, coupe 5. This area underwent an thinning harvest in 2005. The remaining trees are sufficiently established and will not be adversely affected by low intensity burning.
- Boundary between nha in compartment 667, coupe 1 and excluded forest in compartment 667, coupe 2. This area underwent an integrated harvest in 2001. The 12 year old regrowth is sufficiently established and will not be adversely affected by low intensity burning.

REGIONAL BURNING GUIDELINES

Max Temp (°C): 25 **Min RH (%) :** 30 **Max Wind Speed (km/h):** < 20 Southerly aspect
< 15 Northerly aspect

Max BKDI:< 70 **Max FDI:** 8 **(** subject to area assessment). **Scorch Height:** 0.6 x dominant tree height

Max Fuel Moisture Range: 12-25% **Max Rate of Spread:** 300m/hr. **Average Flame height:** up to 4m

BURN AREA INFORMATION

Fine Fuel loads: 50-150 tons per hectare of logging slash, 10 – 20 tons per hectare in between tree heads.

Fuel arrangement: Multi-tiered structure (litter, grasses, shrubs, eucalypt regeneration and mature trees)

Compartment 665

Terrain (gross area): 0.6%>30°, 7.3% @ 25°-30°, 22% @ 20°-25°, 52.3% @10°-20°, 17.8% @ 0°-10° slope.

Time since last burn: 2007 (6 years)

Compartment 666

Terrain (gross area): 0.5%>30°, 6.9% @ 25°-30°, 26.5% @ 20°-25°, 53.9% @10°-20°, 12.2% @ 0°-10° slope.

Time since last burn: 2007 (6 years)

Compartment 667

Terrain (gross area): 4.7%>30°, 18.9% @ 25°-30°, 29.3% @ 20°-25°, 37.8% @10°-20°, 9.3% @ 0°-10° slope.

Time since last burn: 1999 (14 years)

IMPORTANT BURNING PRESCRIPTIONS

- A small test burn must always be lit prior to main burn. This will assist in determining FIRE BEHAVIOUR and IGNITION PATTERNS.

- **Seek information from Harvesting Contract Coordinator on regrowth excluded burn areas.**
- Sections will be lit by drip torch to a determined ignition pattern.
- Areas will generally be burnt from ridge tops down and into the wind to minimise excessive fire behaviour.
- **Minimise fire intensity in regrowth stands.**
- Where one or more of the parameters detailed in the regional burning guidelines is not met, burning may still be conducted provided the other parameters will provide favourable conditions for burning to meet the burn objectives. Any decision to conduct burning outside of the parameters must be fully documented by the Burning Supervisor in the field copy of the burn plan.

ENVIRONMENTAL PRESCRIPTIONS

FLORA AND FAUNA:

Refer to Flora and Fauna sections of the Harvest plan document.

The burn crew should be aware of and look for any H & R trees, *Allocasuarina* feed trees, eucalypt feed trees, stags or yellow bellied glider/squirrel glider sap trees where logging debris is stacked >1m high within the 5m radius of the tree. If any are found, minimise damage to these trees by not directly lighting within 5m of the tree.

SOIL, WATER & AQUATIC HABITAT:

Refer to Soils and Water and Drainage Features sections of the Harvest plan document.

- Preferred months of burn – March to August
- Fuel moisture differentials will be utilised to minimise impacts upon drainage features within the burn area

ABORIGINAL CULTURAL HERITAGE:

Refer to the cultural heritage section of the Harvest plan document to determine if there are any sites and if so refer to the cultural heritage map for the location of the sites. Significant sites, e.g. scar trees, groove stones, should be raked around to prevent fire damage. Where practial, burning of scattered artefacts should be avoided.

CONTROL AND STRATEGY

CONTROL LINES:

EXISTING Description of each control line	Description of Work Required	Completed Yes /No
Copelands Knob Road	Nil	
Nullica Road	Nil	
Back Creek Fire Trail	Nil	
Ben Boyd Road	Nil	
Old Hut Creek Road	Nil	
Second and third order drainage line separating Cpt 665, coupe 6 from NHA.	Near ground elevated fuel moisture content >25%	
First and second order drainage line separating Cpt 665, coupe 5 from NHA.	Near ground elevated fuel moisture content >25%	
First and second order drainage line separating excluded forest in Cpt 665, coupe 2 from NHA.	Near ground elevated fuel moisture content >25%	
Check for trees that could burn down and fall over any boundary roads and wet down, rake around or remove as necessary		
PROPOSED **Description of each control line**	**Description of Work Required**	**Completed** **Yes /No**

Boundary between nha and Ridge & Headwater	If possible design snig track patterns so they double as bare earth containment lines. 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.	
Boundary between nha and excluded forest (regrowth area) within compartment 665, coupe 2.	Design snig track patterns so they double as bare earth containment lines. Where this is not practical, CC/SFO to instruct contractor to construct a bare earth break along boundary of the exclusion (after seeking approval from Operations Team Leader).	
Boundary Between nha in cpt 665 and Private Property	Design snig track patterns so they double as bare earth containment lines. Where this is not practical, CC/SFO to instruct contractor to construct a bare earth break along boundary of the exclusion (after seeking approval from Operations Team Leader).	
Boundary Between nha in cpt 665 and National Park	Design snig track patterns so they double as bare earth containment lines. Where this is not practical, CC/SFO to instruct contractor to construct a bare earth break along boundary of the exclusion (after seeking approval from Operations Team Leader).	
Scar trees, grinding grooves, nest trees, quality regrowth discovered during the harvesting operation.	Design snig track patterns so they double as bare earth containment lines. Where this is not practical, CC/SFO to instruct contractor to construct a bare earth break (drained as per EPL snig track conditions) along boundary of the exclusion (after seeking approval from Operations Team Leader).	

SMOKE HAZARD AND MANAGEMENT: http://www.bom.gov.au/general/reg/smoke/nsw/index.shtml

Smoke / Hazard Reduction Signs required?:…….. YES NO (☑ tick to indicate)

Smoke Dispersion Forecasting via BOM utilised?..... YES NO (☑ tick to indicate)

Safety Considerations (pre-burn)		DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
Personnel	Names of fire crew documented daily.							
Visitors on site	Visitor on site induction carried out							
Neighbours notified	Documented in plan							
Traffic control	Traffic control signs to regulate traffic if required							
Smoke management:	Assessment of prevailing winds at the time of burn. Road side signs warning of smoke hazard.							

PRE-BURN PREPARATION ACTIVITIES AND RESPONSIBILITIES

Activity	**Specifications and tasks**	**Responsibility** (inc date)	**Signature**
Fuel monitoring	Regular monitoring prior to burning		
Weather monitoring	Conducted prior to and during burning operations.		
Trail preparation • Dozer/grader • Hand tools	Mineral earth control lines prepared prior to burning to contain fire within designated burning block.		
Neighbour liaison	Notification and communications documented.		
Liaison with fire & emergency authorities	"as above"		
Media releases	To advise local community of SF burning activities.		
Radio station notifications	"as above"		
Equipment	Ensure all required equipment is available.		
Communications	"as above"		
Visitor Safety	Burn is sign posted. All visitors to report to burn supervisor immediately		
Burn approval	Daily burn approvals given by delegated officers		

Supervisor to initial							

NOTIFICATION & RESOURCE REQUIREMENTS

Neighbours……. Contractors……. Lessees……....

Apiarists…….…. Shire FCO…….. Govt Agencies…….

Notification Register:

RFS (Rural Fire Service)

Name	Position	Phone Number	Notified
	FCO		

NEIGHBOURS: (Refer to compartment planning folder for details prior to burning)

Owner	Postal Address	Lot / Plan	Phone	Notification Letters sent	Reply Received

APIARISTS: (Refer to compartment planning folder for details prior to burning)

Name	Site Number/s	Phone Number	Notified

DAILY CREW SMEACS BRIEFING SHEET

(tick daily when briefed)

	DAY 1	2	3	4	5	6	7
SITUATION							
- Burn area to be treated (location, boundaries, control line types and exclusive areas)	£	£	£	£	£	£	£
- Burn area characteristics (e.g. terrain, forest cover, sensitive areas, etc)	£	£	£	£	£	£	£
- Burn area access by road class (checked beforehand, dead ends, watering points etc.)	£	£	£	£	£	£	£
- Fuel Loadings and fire behaviour prescriptions for the HRB area	£	£	£	£	£	£	£
- Staging areas.	£	£	£	£	£	£	£
- Expected weather	£	£	£	£	£	£	£
MISSION							
- Overall aim of the hazard reduction burn	£	£	£	£	£	£	£
- Site specific aims for sections of the HRB (eg, protection of patches of advanced regrowth, rainforest pockets, buildings, bridges, etc.)	£	£	£	£	£	£	£
- Secondary aim/s should the HRB escape	£	£	£	£	£	£	£
EXECUTION							
- Plant and manpower resources (FCNSW, RFS, OEH, others)	£	£	£	£	£	£	£
- Division of burn area into 'Sections'	£	£	£	£	£	£	£
- Starting points, starting times, finish times (start 'down wind' if possible)	£	£	£	£	£	£	£
- Safe 'approved' lighting patterns and directions	£	£	£	£	£	£	£
- Work down-slope, keeping below active fire (except where good fuel breaks occur)	£	£	£	£	£	£	£
- Location and activity of other burning crews	£	£	£	£	£	£	£
- Personal and crew safety - buddy system when lighting up	£	£	£	£	£	£	£
- Progress reports at pre-designated times	£	£	£	£	£	£	£
- Maintain awareness of other burning crews (do not light up below other burning crews)	£	£	£	£	£	£	£
- Expected fire behaviour, trouble points and contingency plans	£	£	£	£	£	£	£
- Actions to be taken in the event of an escape e.g. to pause the light-up	£	£	£	£	£	£	£
- End of burn debrief e.g. reporting areas requiring 'follow-up' patrols after burn	£	£	£	£	£	£	£
ADMINISTRATION							
- Reporting field fire weather to the office at regular times	£	£	£	£	£	£	£
- Receiving forecast weather reports from office	£	£	£	£	£	£	£
- Logistical support (fuel, food, water, heavy plant, back-up crews etc.)	£	£	£	£	£	£	£
CONTROL, COMMAND, COMMUNICATIONS							
- Chain of command (burn supervisor and sector bosses)	£	£	£	£	£	£	£
- Communications systems for fire-ground and command (UHF & VHF radios, mobile phones)	£	£	£	£	£	£	£
SAFETY							
- Medical Emergency Evacuation Plan & Site Safety Plan	£	£	£	£	£	£	£
- Areas of likely tree or limb falling hazards (methods to identify/mark hazards)	£	£	£	£	£	£	£
- Look up and look around procedure (for self and workmates)	£	£	£	£	£	£	£
- Location first aid kits and first aiders	£	£	£	£	£	£	£
- Pre-burn safety actions including 'Smoke Hazard' sign locations, traffic control plan etc	£	£	£	£	£	£	£
- Location of safety zones, and escape routes	£	£	£	£	£	£	£
- Safe parking of SF vehicles within the burn area and vehicle speeds during the burn	£	£	£	£	£	£	£
- Crew vehicles to have headlights and flashing beacons on where practicable	£	£	£	£	£	£	£
- Schedule adequate rest breaks and set appropriate work pace	£	£	£	£	£	£	£
- Ensure crews have access to supplies of drinking water	£	£	£	£	£	£	£
- Visitors to the site are inducted into the SSP	£	£	£	£	£	£	£

Day 1 - Burn Supervisor……Date…….. Day 2 - Burn Supervisor……Date……..
Day 3 - Burn Supervisor……Date…….. Day 4 - Burn Supervisor……Date……..
Day 5 - Burn Supervisor……Date…….. Day 6 - Burn Supervisor……Date……..
Day 7 - Burn Supervisor……Date…….. Day 8 - Burn Supervisor……Date……..
Day 1 - Burn Supervisor……Date…….. Day 2 - Burn Supervisor……Date……..
Day 3 - Burn Supervisor……Date…….. Day 4 - Burn Supervisor……Date……..
Day 5 - Burn Supervisor……Date…….. Day 6 - Burn Supervisor……Date……..
Day 7 - Burn Supervisor……Date…….. Day 8 - Burn Supervisor……Date……..

EMPLOYEE IDENTIFICATION

EMPLOYEE	NAME	PROOF OF ACCREDITATION (E.g. FCNSW RECORDS)	DATE	SUPERVISOR OR RELEVANT AGENCY SIGNATURE
Incident Controller				
Burn Supervisor				
Crew Leader				
Crew Leader				
Crew Member				
Crew Member				
Crew Member				
Crew Member				
Crew Member				
Crew Member				
Crew Member				
Crew Member				

PERSONNEL AND EQUIPMENT REQUIREMENTS

Resource	State Forests	NPWS	Brigades	Contract Coordinator Signature
Incident Controller				
Crew Leaders				
Crew Members				
Tankers				
Slip – on Units	1+			
Dozer	n/a			
Helicopter	n/a			
Radios – handheld UHF	1 per person			
Weather monitoring equip.	1 per crew			

BURNING OPERATIONS RECORD

Forecast Weather and Indices (Obtain from Office)

See attached daily weather forecasts and relevant indices obtained from the Bureau of Meteorology.

Near Ground Fuel Moisture Content Readings

Control Line/Feature	Date	Location (Include GPS reading)	Fuel Moisture Content (%)

Burn Site Weather Readings

Take daily on site readings (hourly if possible) and note un-forecast weather changes.

Date	Time	Temp (°C)	RH (%)	Wind Direction	Wind Sp. (km/h)	FDI	FMC %	COMMENTS

FIRE BEHAVIOUR

		PREDICTED			*ACTUAL*		
Date	Time (hrs)	Flame Height (m)	ROS (m/hr)	Assessment Method	Flame Height (average)	ROS (m/hr)	Comments

Ignition details – DATE (s)……..

Type: Aerial / Ground **Method:** Contour / Ridge / Road edge / Top disposal **Pattern:** Line / Spots

Incendiary Capsules used: _____ (aerial ignition only)

Ignition details – DATE (s)……..

Type: Aerial / Ground **Method:** Contour / Ridge / Road edge / Top disposal **Pattern:** Line / Spots

Incendiary Capsules used: _____ (aerial ignition only)

Ignition details – DATE (s)……..

Type: Aerial / Ground **Method:** Contour / Ridge / Road edge / Top disposal **Pattern:** Line / Spots

Incendiary Capsules used: _____ (aerial ignition only)

Ignition details – DATE/s

Type: Aerial / Ground **Method:** Contour / Ridge / Road edge / Top disposal **Pattern:** Line / Spots

Incendiary Capsules used: _____ (aerial ignition only)

POST BURN ASSESSMENT

Estimated burn coverage (% of net area):……..**%**

Estimated burn coverage:…….**ha**

Fine fuel reduced to an average of :…….**t/ha**

Estimated area of crown scorch :……. **%**

OPERATIONAL PERFORMANCE REVIEW

Burn complete?	**Yes/No**
Follow up action required ?	**Yes/No**
Burn contained within planned boundaries?	**Yes/No**
Burn coverage objective met?	**Yes/No**
Fine fuel reduction objective met?	**Yes/No**
Environmental prescriptions met?	**Yes/No**
Threatened Species License conditions met?	**Yes/No**
Fisheries License conditions met?	**N/A, fisheries licence not triggered for this operation**

Remedial Action required (if any)**:**_____

_____

_____

_____

Remedial works certified complete.

Work Supervisor_____ Date:_____

Comments:_____

_____

_____

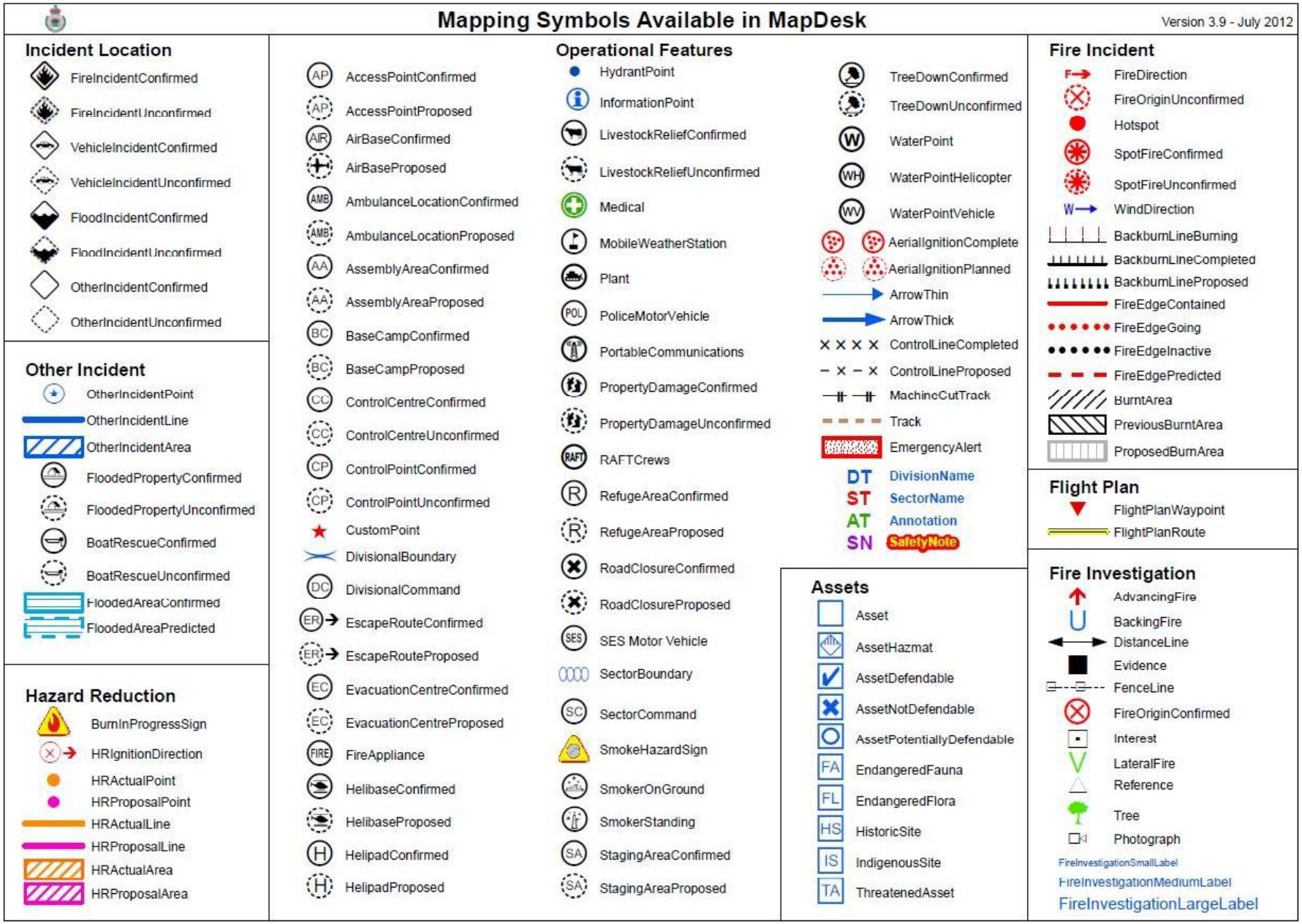
_____

_____

_____

_____

Attach additional pages as required


Mapping Symbols Available in MapDesk
Version 3.9 - July 2012
Incident Location
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FireIncidentUnconfirmed
VehicleIncidentConfirmed
VehicleIncidentUnconfirmed
FloodIncidentConfirmed
FloodIncidentUnconfirmed
OtherIncidentConfirmed
OtherIncidentUnconfirmed
Other Incident
OtherIncidentPoint
OtherIncidentLine
OtherIncidentArea
FloodedPropertyConfirmed
FloodedPropertyUnconfirmed
BoatRescueConfirmed
BoatRescueUnconfirmed
FloodedAreaConfirmed
FloodedAreaPredicted
Hazard Reduction
BurnInProgressSign
HRIgnitionDirection
HRActualPoint
HRProposalPoint
HRActualLine
HRProposalLine
HRActualArea
HRProposalArea
AccessPointConfirmed
AccessPointProposed
AirBaseConfirmed
AirBaseProposed
AmbulanceLocationConfirmed
AmbulanceLocationProposed
AssemblyAreaConfirmed
AssemblyAreaProposed
BaseCampConfirmed
BaseCampProposed
ControlCentreConfirmed
ControlCentreUnconfirmed
ControlPointConfirmed
ControlPointUnconfirmed
CustomPoint
DivisionalBoundary
DivisionalCommand
EscapeRouteConfirmed
EscapeRouteProposed
EvacuationCentreConfirmed
EvacuationCentreProposed
FireAppliance
HelibaseConfirmed
HelibaseProposed
HelipadConfirmed
HelipadProposed
Operational Features
HydrantPoint
InformationPoint
LivestockReliefConfirmed
LivestockReliefUnconfirmed
Medical
MobileWeatherStation
Plant
PoliceMotorVehicle
PortableCommunications
PropertyDamageConfirmed
PropertyDamageUnconfirmed
RAFTCrews
RefugeAreaConfirmed
RefugeAreaProposed
RoadClosureConfirmed
RoadClosureProposed
SES Motor Vehicle
SectorBoundary
SectorCommand
SmokeHazardSign
SmokerOnGround
SmokerStanding
StagingAreaConfirmed
StagingAreaProposed
TreeDownConfirmed
TreeDownUnconfirmed
WaterPoint
WaterPointHelicopter
WaterPointVehicle
AerialIgnitionComplete
AerialIgnitionPlanned
ArrowThin
ArrowThick
ControlLineCompleted
ControlLineProposed
MachineCutTrack
Track
EmergencyAlert
DT DivisionName
ST SectorName
AT Annotation
SN SafetyNote
Assets
Asset
AssetHazmat
AssetDefendable
AssetNotDefendable
AssetPotentiallyDefendable
EndangeredFauna
EndangeredFlora
HistoricSite
IndigenousSite
ThreatenedAsset
Fire Incident
FireDirection
FireOriginUnconfirmed
Hotspot
SpotFireConfirmed
SpotFireUnconfirmed
WindDirection
BackburnLineBurning
BackburnLineCompleted
BackburnLineProposed
FireEdgeContained
FireEdgeGoing
FireEdgeInactive
FireEdgePredicted
BurntArea
PreviousBurntArea
ProposedBurnArea
Flight Plan
FlightPlanWaypoint
FlightPlanRoute
Fire Investigation
AdvancingFire
BackingFire
DistanceLine
Evidence
FenceLine
FireOriginConfirmed
Interest
LateralFire
Reference
Tree
Photograph
FireInvestigationSmallLabel
FireInvestigationMediumLabel
FireInvestigationLargeLabel