

LOCALITY MAP

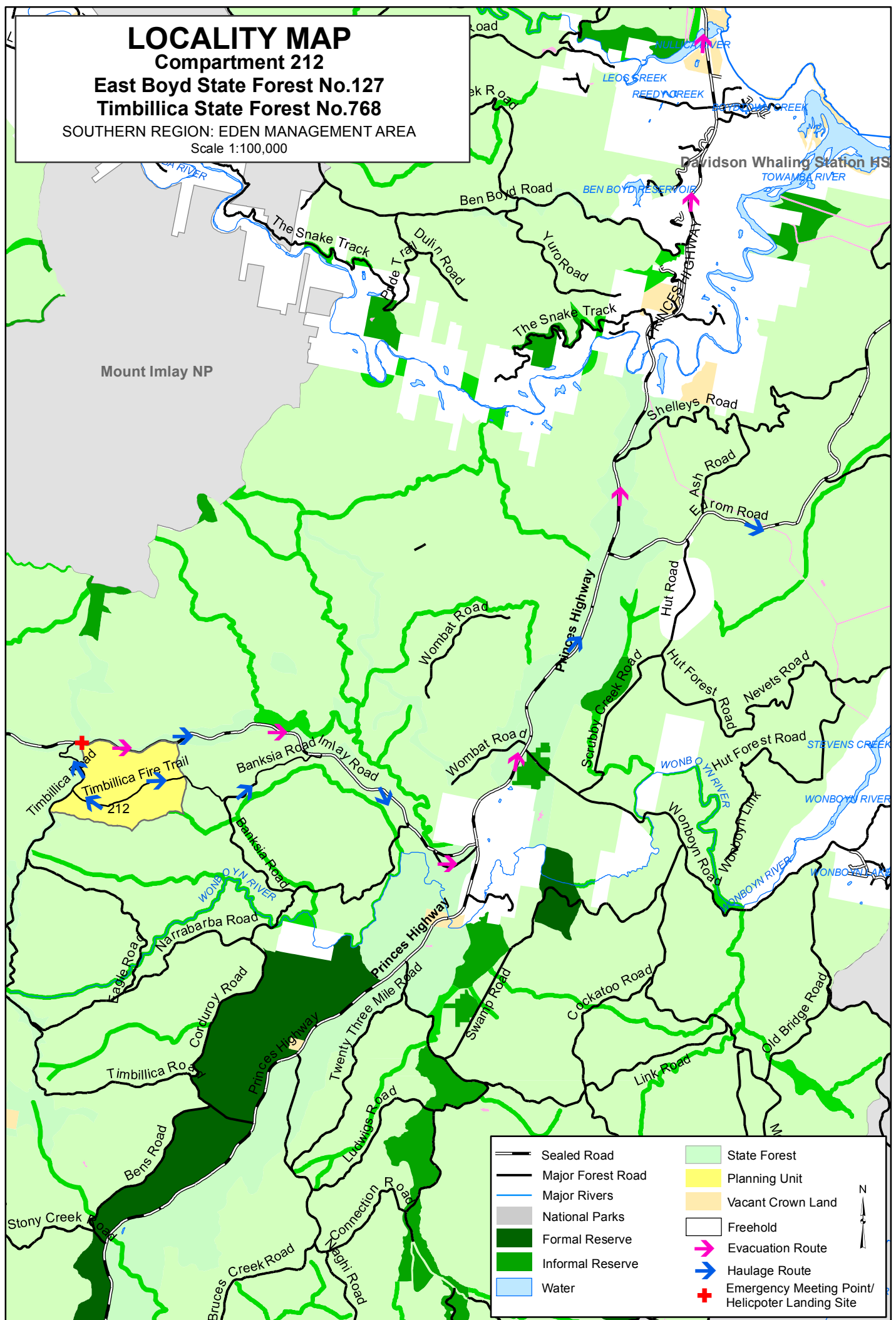
Compartment 212

East Boyd State Forest No.127

Timbillica State Forest No.768

SOUTHERN REGION: EDEN MANAGEMENT AREA

Scale 1:100,000



Prepared By: Shane Clohesy

Harvest Plan Operational Map

Compartment: 212

State Forest: East Boyd No.127 & Timbillica No.768

SOUTHERN REGION - Native Forests

Map Sheet: Mount Imlay No: 8823-4S



REGIONAL MANAGER APPROVAL

APPROVED: Daniel Tuan

DATE: 18/05/2011

BOUNDARIES

- ○ Compartment Boundary
- ○ Coupe Boundary

ROADS

- Sealed Road
- Major Forest Roads
- - Minor Forest Roads
- - DECC Licenced Existing Road (Major)
- - DECC Licenced Existing Road (Minor)

DUMPS & CROSSINGS

- ⊕ Loading Bay/Turning Circle

STREAM EXCLUSION ZONES (EPL IHC 1 & TSL)

- Mapped LIC Drainage
- 1st Order (10m each side)
- 2nd Order (20m each side)
- 3rd Order (30m each side)

NET HARVEST AREA

- FMZ 4 - Thinning
- FMZ 3B - Visual - Special Prescription 1
- FMZ 3B - Visual - Special Prescription 2

NON HARVEST AREA

- Harvesting Protection FMZ 3A Wildlife 50m each side
- Ridge & Headwater Habitat (40m total width)
- Slopes >30 (IHL 4)
- Rare Forest Ecosystem - Bega Dry Grass Forest
- Excluded Forest
- Rainforest & Southern Brown Bandicoot Habitat (indicative) + 20m Rainforest Buffer

FAUNA FEATURES

- ⊗ Sooty Owl
- ⊕ Powerful Owl
- ⊕ Yellow-bellied Glider (Heard)
- ★ Long Nosed Potoroo
- ⊗ Southern Brown Bandicoot

OTHER FEATURES

- ⊕ Emergency Meeting Point/ Helicopter Landing Site

N

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

741000E

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FORESTS NEW SOUTH WALES - SOUTHERN REGION HARVESTING PLAN NATIVE FOREST

East Boyd State Forest & Timbillica State Forest - Compartment 212

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 | Shane Clohesy | Endorsed By: Harvest Planning Team Leader | Kate Halton | Approved By: Regional Manager | Daniel Tuan |
| Signature | Shane Clohesy | Signature | Kate Halton | Signature | Daniel Tuan |
| Date | 11/05/2011 | Date | 11/05/2011 | Date | 11/05/2011 |

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 habitat quality class (indicative and SFO).

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.

(b) Thinning of Regrowth Native Forest:

Overstocked advanced regrowth stands originating from past logging activities and wildfire events will be mechanically thinned under site specific silvicultural regimes aimed at retaining the highest quality future sawlogs. Thinning reduces the number of competing stems in a stand and concentrates the growth potential onto the remaining crop trees. This process will maintain the uniform age structure that characterises regrowth forests.

This operation will be licensed under the EPL with notification sent to the regulatory authorities as per clause 23 of 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 Flora, Fauna, Cultural Heritage, Riparian and other exclusion zones are explained within the relevant sections of this Harvest Plan and indicated on the HPOM.

Where practicable, snig track patterns should be designed to double as bare earth control lines to prevent fire entering specified burning exclusion zones and other tenures i.e. Smoky Mouse, Southern Brown Bandicoot & significant Cultural Heritage sites.

Where this is not practical, the SFO is to assess the need for a bare earth break to be constructed close to harvesting exclusion boundary and seek advice and approval from the Harvesting Forester for the additional earth works. Specific areas identified during the planning stage which require a mineral earth break are identified in the burning plan.

Area Identification and Yield Estimates

| State Forest | Compartment/s | Region | Management Area | Certification | Harvest Plan ID |
|------------------------|---------------|----------|-----------------|--------------------------|-----------------|
| East Boyd & Timbillica | 212 | Southern | Eden | AS4708:2007 ISO 14001 | 3717 |

| | Cpt 212 | Total |
|-----------------------------|---------|----------|
| Event ID | 14545 | N/A |
| Gross Area (ha) | 361 | 361 |
| Net Harvest Area (ha) | 166 | 166 |
| Estimated Yield Pulp (t) | 80t/ha | 13,280 t |
| Estimated Yield Sawlog (m3) | 200 m3 | 200 m3 |

Forests NSW – Southern Region Harvesting Plan HP_ED_212_10 Compartments 212

Attachment 1 – Site Safety Plan

SAFETY CONSIDERATIONS

Emergency Plan Information

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

☒ Good ☐ Poor ☐ Nil

Nearest reliable reception: Good reception on ridgetops.

- (b) **Forests NSW Radio from work site:** **Contractor Radio at work site:**

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

Junction of Anteater Road & Imlay Road.

1:100000 map sheet: Eden

MGA zone: 55

MGA Grid reference: E741791 N5876112.

Lat/Long for GPS: 37° 13' 47" S 149° 43' 31" E.

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

Junction of Anteater Road & Imlay Road.

1:100000 map sheet: Eden

MGA zone: 55

MGA Grid reference: E741791 N5876112.

Lat/Long for GPS: 37° 13' 47" S 149° 43' 31" 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 Wollongong.
2. Suburb (*State Forest name*): East Boyd SF & Timbillica SF
(Nearest town or named locality): Eden
(Nearest Ambulance station): Eden
3. Address: (*Nearest named State forest road*): Timbillica Road
4. Nearest Road Junction: Imlay Road and Timbillica 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 E742832 N5875337
 Lat/long for GPS: 37° 14' 12" S 149° 44' 14 " E.
8. Directions to navigate from Ambulance Station to meeting point:
 Directions from Eden:
 - Head South on the Princes Highway for approx. 24km to Imlay Road junction.
 - Turn right onto Imlay Road and travel for approx. 10km to Anteater 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.

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 intersections, road closure and traffic control measures |
| 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 Forests NSW 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 loading bays/turning circles | 1 | Refer to Forests NSW safety standard 1.3.9. Assess overhead hazard within two tree lengths of the loading bay. Assess risk, & if necessary remove hazard or relocate loading bay 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. |

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

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.

In addition to the above, when harvesting within two tree lengths of Imlay Road (the FMZ 3B area), this road must be temporarily closed in accordance with "TCP78_ImlayRd_Cpt212" which is attached to this plan. Forests NSW will provide suitably accredited traffic controllers to implement this Traffic Control Plan.

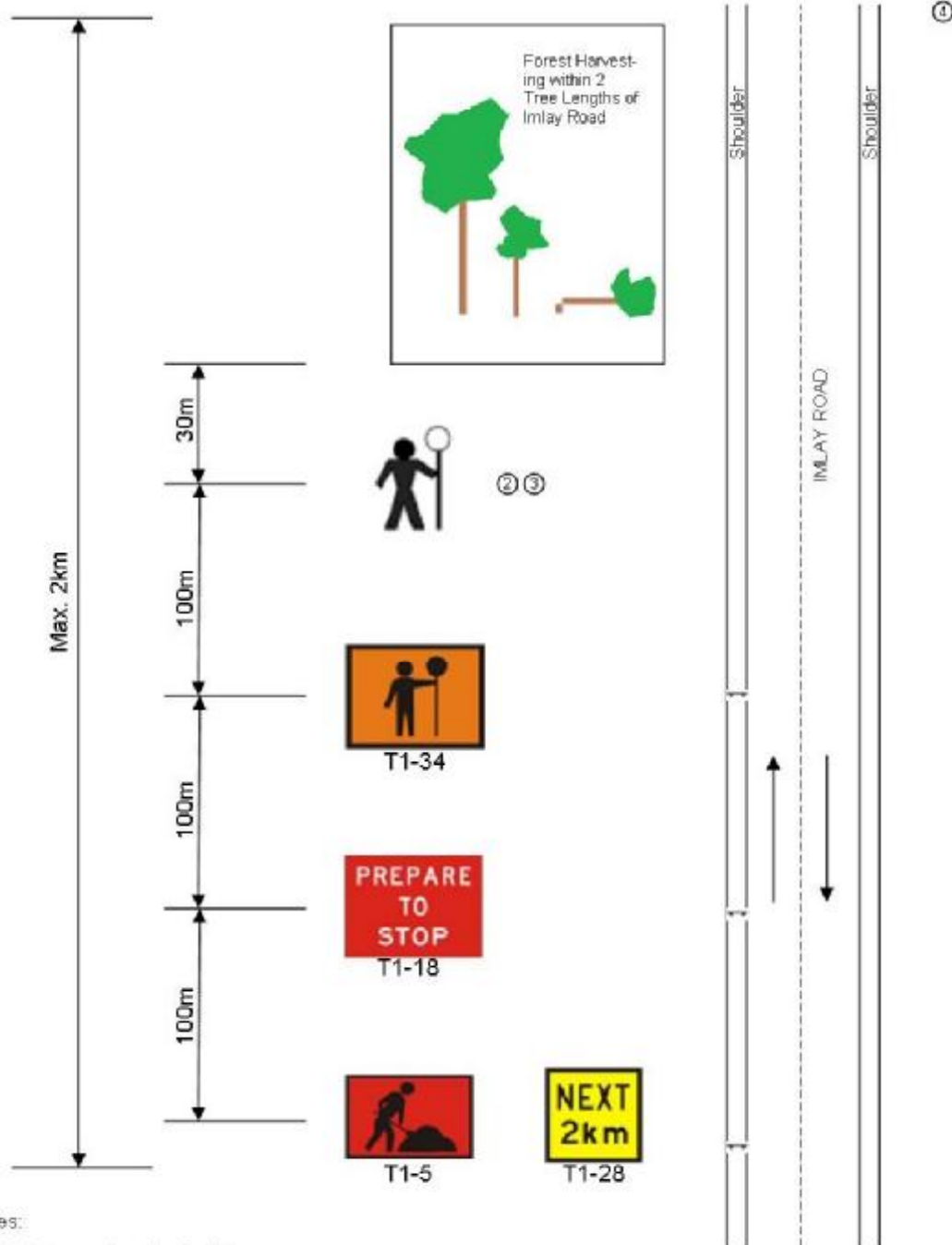
Warning of timber harvesting operations must be **displayed 200 metres either side** of all thoroughfare State Forest road approaches leading to areas where harvesting operations are in progress.

This plan assumes haulage from the compartment will be north via Timbillica Road then turning east onto Imlay Road (100km/hr speed limit) OR east via Timbillica Fire Trail and Banksia Road then turning east onto Imlay Road.

The intersection of Banksia Road and Imlay Road has been assessed as achieving a minimum sight distance of 200m on both approaches to the intersection. Therefore additional signage in accordance with a Traffic Control Plan is not required this intersection.

The intersection of Timbillica Road and Imlay Road has been assessed as achieving a minimum sight distance of 200m for vehicles travelling on Imlay road in an easterly direction, but not for vehicles travelling along Imlay Road in a westerly direction. Therefore prior to haulage commencing, a suitably qualified person must implement “TCP195_ImlayTimbillicaRds_eastern_approach” (attached to this harvest plan) at this intersection.

Forests NSW Southern Region Traffic Control Plan 78: Harvesting within 2 Tree Lengths of Imlay Road (modified from RTA Traffic Control at Work Site TCP 78)



Notes:

- ① Each stoppage less than 5 minutes.
- ② Traffic controllers to stop traffic for duration of work and then direct traffic past work area, once tree falling has ceased and any debris has been cleared from road.
- ③ Traffic controllers and tree faller to maintain radio contact so that no tree falling is occurring while traffic is let through.
- ④ Traffic control plan must be mirrored for the other direction of traffic.

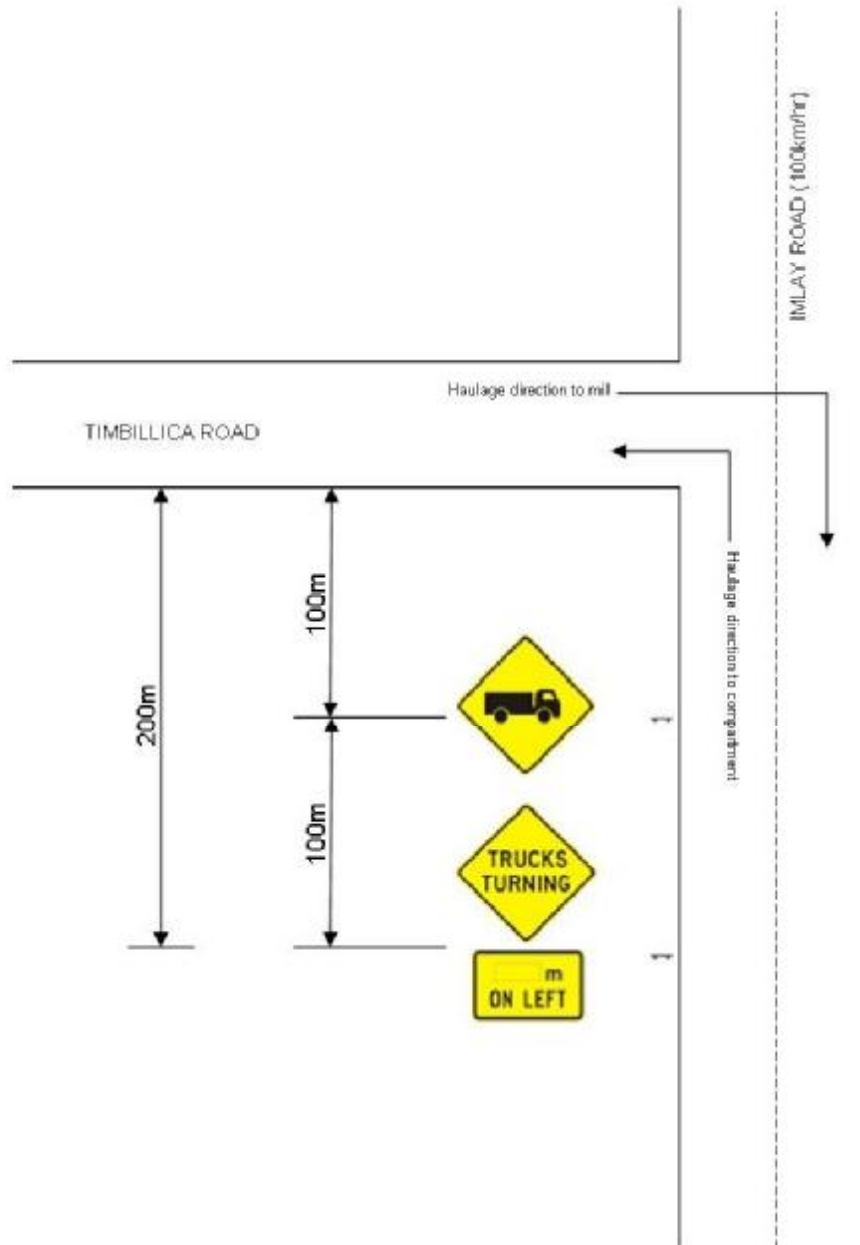
FREQUENTLY CHANGING WORK AREA

2 LANE/2 WAY

ADT < 3000

Prepared by Shane Clohesy, Red Card Certificate No. 5192033062 on 09/05/2011

Forests NSW Southern Region Traffic Control Plan 195: Timbillica-Imlay Road intersection (modified from RTA Traffic Control at Work Site TCP 195)



Notes:

- ① Log Haulage - intersection of Timbillica Road with Imlay Road (100km/hr). Sight distance restricted to <200m when travelling in an easterly direction towards mill.

LONG TERM USE
ADT < 1500, <20 Truck Movements, Sight Distance Restricted
Prepared by Shane Clohesy, Red Card Certificate No. 5192033062 on 09/05/2011

Silviculture and Harvesting Prescriptions

| Year | 1951 | 1972 | 1980 | 1981 | 1982 | 1993 | 1995 | 1996 | 2009 |
|------------------------|------|------|------|------|-------|------|------|-------|------|
| TSI | X | X | X | X | X | X | X | X | X |
| HR Burning | X | X | X | X | X | Ö | X | X | Ö |
| Wildfires | Ö | Ö | Ö | X | X | X | X | X | X |
| Logging m ³ | X | X | X | 5059 | 16875 | X | 5211 | 13237 | X |

Ö - applies, X – not applicable

| Compartment | No. of Sweeps | BA Average (m ² /ha) | BA Range (m ² /ha) |
|-------------|---------------|---------------------------------|-------------------------------|
| 212 | 20 | 33 | 6-26 |

The figures used are based on basal sweeps carried out during pre-planning on 25/02/11.

Within the FMZ 4 area, the stands to be harvested in compartment 212 are primarily even aged, resulting from regrowth after harvesting in 1981/82. The stands are predominately silvertop ash with some patches of stringybark (blue-leaved and yellow). These stands are considered to be overstocked. Thinning from below will reduce competition on retained stems and will accelerate the production of sawlogs.

The stands to be harvested within the visual strips are mature uneven aged forests with interspersed patches of fire regeneration. Predominately Silver-top Ash and Stringybark.

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

Silvicultural Planning

The current thinning operation is aimed at reducing competing stems whilst concentrating growth on the retained higher quality future sawlogs.

The mixed-age stands will be harvested in modified shelterwood silvicultural systems, with special prescriptions to protect the visual amenity of the forest.

Harvesting Prescription

| Stand type | % of net area | Area (refer to HPOM for details) | Treatment (% INT, THIN) |
|----------------------|---------------|---|---|
| Regrowth (even aged) | 84% | Majority of NHA (139.3ha) | <ul style="list-style-type: none"> Thinning from below. Refer to Standard Harvest Planning Conditions for more detail. |
| Mature (uneven aged) | 10% | Timbillica Road FMZ 3B Visual Strip Special Prescription (17ha) | <ul style="list-style-type: none"> Integrated (modified shelter-wood), limited to remove no more than 50% of the canopy. Spread retained trees evenly throughout harvest area and retain exceptional seed trees. Tree heads should be felled to avoid windrows and minimise the visual impact. |

| | | | |
|----------------------|----|---|---|
| | | | <ul style="list-style-type: none"> Patches of regeneration throughout this visual strip to be thinned as per normal thinning prescriptions. |
| Mature (uneven aged) | 6% | Imlay Road FMZ 3B Visual Strip Special Prescription (9.7ha) | <ul style="list-style-type: none"> Integrated (modified shelter-wood), limited to remove no more than 80% of the canopy. Spread retained trees evenly throughout harvest area and retain exceptional seed trees. Tree heads should be felled to avoid windrows and minimise the visual impact. Patches of regeneration throughout this visual strip to be thinned as per normal thinning prescriptions. |

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 harvesting operation is not permitted within 5 years from the completion of this harvesting event (integrated).

The thinning harvesting operation is in accordance with IFOA Part 1 Condition 5 (6) and Part 5 (1).

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.

Logs harvested from the Imlay Road Visual Strip must be forwarded through Excluded Forest to loadings bays 2 and 14. A maximum of 3 forwarder tracks are to be utilised through coupe 20 to forward to loading bay 2. All timber extracted through coupe 3 to loading bay 14 must be forwarded via a single track. The intention is to minimise damage to the regeneration in the Excluded Forest to ensure maximum value from the next thinning operation in these areas.

Note that loading bays 2 and 14 are also located within Excluded Forest. Loading bay size must be kept to a minimum and damage to regeneration around these loading bays must be avoided where possible.

Noxious Weeds / Pests / Hygiene Requirements

There are no known weeds or pests requiring special hygiene measures in this compartment.

Permanent Growth and Research Plots

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

Rocky Terrain

Rocky terrain may be encountered within the net planned area.

Construction of side cut snig tracks should be avoided in areas of rocky terrain.

Where construction of side cut snig tracks in rocky terrain is unavoidable the location of the side cut tracks must be approved by the SFO prior to construction.

Southern Brown Bandicoot Permanent Monitoring Site

A permanent Southern Brown Bandicoot Monitoring site is located within compartment 212. Infrared cameras are permanently set up in this location.

The SFO is to liaise with the Regional Ecologist prior to the commencement of operations within compartment 212 to determine the exact location of monitoring site.

Forest Management Zoning

FMZ 3A (Harvesting Protection), FMZ 3B (Visual) and FMZ 4 (General Management) occur within the compartment. Refer to HPOM for more detail.

FMZ 4 (General Management) – Normal prescriptions apply.

FMZ 3A (Harvesting Protection) – 100m total width. All harvesting is excluded from these areas. Prescribed burning is only permitted in these areas where fire does not conflict with underlying protection zones e.g. rainforest, cultural heritage etc. (Refer to cultural heritage flora and fauna sections of this plan and the standard harvest plan conditions for more detail).

FMZ 3B (Visual) Special Prescription – Visual protection zones exist adjacent to Timbillica Road and Imlay Road. Harvesting is permitted in these zones under the modified conditions detailed in the harvesting prescription section.

IFOA Required Approval of Forestry Activities

Approvals have not been obtained for snig track construction and/or use and log haulage in FMZ 3A. If the SFO identifies the need for harvesting related activities to occur within FMZ 3A during the operation, the Planning Forester must be contacted to seek Regional Manager approval.

All areas of Rainforest and Rare Non-Commercial Forest Ecosystems require prior DECCW approval and 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 Planning Forester to obtain the necessary approval.

Cultural Heritage

Cultural Heritage - There are no Cultural Heritage sites within the compartment. All relevant representatives have been consulted &/or inspected Compartment 212. 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.

The results of the database search and pre-harvest surveys resulted in the following consideration of flora & fauna issues shown in the table below:

| Prescription | Species |
|--|--|
| General prescriptions: | Glossy Black-Cockatoo (<i>Calyptrorhynchus lathami</i>) (Desktop Review), Eastern False Pipistrelle (<i>Falsistrellus tasmaniensis</i>) (Desktop Review), Greater Broad-nosed Bat (<i>Scoteanax rueppellii</i>) (Desktop Review) |
| Species specific prescriptions: | Powerful Owl (<i>Ninox strenua</i>) (Desktop Review), Masked Owl (<i>Tyto novaehollandie</i>) (Desktop Review), Yellow-bellied Glider (<i>Petaurus australis</i>) (Desktop Review), Long-nosed Potoroo (<i>Potorous tridactylus</i>) (Desktop Review), Spotted-tailed Quoll (<i>Dasyurus maculatus</i>) (Desktop Review), Giant Burrowing Frog (<i>Heleioporus australiacus</i>) (Desktop Review), Stuttering Frog (<i>Mixophyes balbus</i>) (Desktop Review), Sooty Owl (<i>Tyto tenebricosa</i>) (Desktop Review). |
| Site specific prescriptions: | Gang Gang Cockatoo (<i>Callocephalon fimbriatum</i>) (Desktop Review) |
| Flora specific prescriptions: | Nil |

All known flora and fauna information has been considered by the Regional Ecologist in consultation with the Forest Planner in applying general and site specific prescriptions for the protection of the above species. It is acknowledged that 0 of the 12 species listed above were recorded during pre-harvest surveys. All species are adequately protected under their relevant prescriptions and do not require additional measures.

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 | Habitat Trees/ 2ha | TSL Condition | Recruitment Trees/ 2ha | TSL Condition | Protection of Retained Trees | TSL Condition | Stag Retention (only if safe) | TSL Condition | Significant Food Resource | TSL Condition |
|-----------------|--------------------|---------------|------------------------|---------------|------------------------------|---------------|-------------------------------|---------------|---------------------------|---------------|
| High | 12 | 5.6f)i | 12 | 5.6g)i | 0 | 5.6k | 0 | 5.6i | 0 | 5.6 j |
| Medium | 8 | 5.6f)ii | 8 | 5.6g)ii | 0 | 5.6k | 0 | 5.6i | 0 | 5.6 j |
| Low | 4 | 5.6f)iii | 4 | 5.6g)iii | 0 | 5.6k | 0 | 5.6i | 0 | 5.6 j |

0 - 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 | Yes (Indicative) |
| Rare Forest Ecosystems | 5.5 | Yes |
| Riparian Protection Zones | 5.7 | Yes |
| Ridge & Headwater Habitat | 5.8 | Yes – 80m strip occurs within FMZ 3A and is not shown on HPOM. 40m strip shown on HPOM. |
| Wetlands | 5.9 | No |
| Heath and Scrub | 5.10 | No |
| Rocky Outcrops and Cliffs | 5.11 | No |
| Southern Brown Bandicoot | Species Management Plan | Yes (indicative) |

General Threatened Flora and Fauna Prescriptions

| Feature | Records in 212 | 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 |
| Significant Subterranean Roost Protection | No | 5.14.3 |
| Protection of flying-fox | No | 5.14.4 |

| Feature | Records in 212 | Licence conditions under the TSC Act |
|---------------------------|------------------|--------------------------------------|
| Camps | | |
| 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 Supervising Forester. The Harvesting Plan must be amended to include additional prescriptions if necessary.

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 212 | Licence conditions under the TSC Act or relevant Site-specific prescription |
|---|----------------|---|
| Giant Burrowing Frog <i>Heleioporus australiacus</i> | No | Species Management Plan |
| Stuttering Frog <i>Mixophyes balbus</i> | No | 6.2 |
| Powerful Owl <i>Ninox strenua</i> , Masked Owl <i>Tyto novaehollandiae</i> , Sooty Owl <i>Tyto tenebricosa</i> | No No No | 6.3 |
| Southern Brown Bandicoot <i>Isodon obesulus</i> | Yes | Species Management Plan |
| Long-nosed Potoroo <i>Potorous tridactylus</i> | Yes | 6.7 |
| Spotted tailed Quoll <i>Dasyurus maculatus</i> | No | 6.10 |
| Yellow-bellied Glider <i>Petaurus australis</i> | Yes | 6.13 |
| Gang-gang Cockatoo <i>Callocephalon fimbriatum</i> | No | Refer to Condition 5.13(a), (d) & (f) for Glossy Black Cockatoo. |

Fisheries Licence Conditions

There is no Class 1 or Class 2 aquatic habitat within the harvest area. The fisheries licence does not apply to 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 | 1 |

| | |
|-----------------------------------|-----------------------------------|
| Dispersible Soils | No |
| Mass Movement | No |
| Seasonality Harvesting Exclusions | No |
| Seasonality Burning Exclusions | No |
| Loading Bays | 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 |

Prescribed streams

There are no prescribed streams within the compartments.

Turning Circle/Loading Bays

16 loading bays are indicated on the HPOM. Field location of loading bays 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.

Expected Felling/ Extraction & Loading Method

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

Drainage Feature Crossings

No snig track drainage line crossings are approved for use on drainage features. (Refer to HPOM).

Mass Movement

Compartment 212 is not in an area identified as having a potential for mass movement. No specific prescriptions relating to mass movement/snigging are required.

Suitability of existing log dams and gully stuffers

There are no known log dams or gully stuffers on snig track 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 | 6.8km | Yes |
| New Roads | 0 | N/A |
| Existing Crossings | 0 | N/A |
| New Crossing | 0 | N/A |
| Borrow & Gravel Pits | 0 | N/A |

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

The roading and crossing works must be undertaken, by contractor or Forests NSW staff, prior to the commencement of harvesting activity in the area served by the road or crossing. Forests NSW will supervise and pay for the maintenance works.

Roads that are not EPA Licensed (refer to HPOM) are not to be used by log trucks. They may be used with SFO approval for snagging or extraction provided they are drained to appropriate specifications. **Refer to EPL Schedule 5 – Operating Conditions for Roads.**

Legal Conditions

In 2001, the Commonwealth and NSW Governments signed a Southern 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 1916, and
- Forestry & National Park Estate Act 1998

The latter Act provides for the Southern Forest Agreement and Southern Integrated Forest Operations Approval (IFOA), both approved by NSW Government Ministers in May 2002. 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 (1916)
- 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 in Southern Region.*
- *The Protocol for Fuel Management - Eden Management Area.*

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 Compartment 212 in East Boyd/Timbillica 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 Forester or his/her delegate.

| Position | Name | Signature | Date |
|----------|------|-----------|------|
| | | | |
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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 Shape Exists | 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 | | | | |

Weekly and Bi-weekly inspection

| Item Inspected | Insert dates of inspection | | | | | | | | | | | |
|------------------------|----------------------------|-----------------|--------|-----|-----------------|-----|-----------------|-----|--------|-----|--------|-----|
| | Week 1 | | Week 2 | | Week 3 | | Week 4 | | Week 5 | | Week 6 | |
| | 1st | 2 nd | 1st | 2nd | 1 st | 2nd | 1 st | 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 | 2 nd | 1st | 2nd | 1 st | 2nd | 1 st | 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. _____
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Weekly and Bi-weekly inspection

| Item Inspected | Insert dates of inspection | | | | | | | | | | | |
|------------------------|----------------------------|-----------------|---------|-----|-----------------|-----|-----------------|-----|---------|-----|---------|-----|
| | Week 13 | | Week 14 | | Week 15 | | Week 16 | | Week 17 | | Week 18 | |
| | 1st | 2 nd | 1st | 2nd | 1 st | 2nd | 1 st | 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. _____
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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 | 2 nd | 1st | 2nd | 1 st | 2nd | 1 st | 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

[illegible]

| |
|------------------------------|
| SFO Notes (continued) |
|------------------------------|

[illegible]

| |
|------------------------------|
| SFO Notes (continued) |
|------------------------------|

[illegible]

| |
|------------------------------|
| SFO Notes (continued) |
|------------------------------|

[illegible]

| |
|------------------------------|
| SFO Notes (continued) |
|------------------------------|

[illegible]

Clearance Certificate

COMPARTMENTS: 212

EAST BOYD SF & TIMBILLICA SF, SOUTHERN REGION

ToSupervising 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 machinery, equipment and vehicles have been checked and are free of noxious weeds, diseases and pests;
- (j) all accumulated litter has been disposed of properly;
- (k) all filter and buffer strip requirements have been complied with;
- (l) all snig track, extraction track and temporary logging road drainage has been installed satisfactorily and other required rehabilitation work has been completed;
- (m) all necessary repairs to damaged roads, signs, fences and other structures have been carried out.
- (n) _____ **(insert quantity) rubber flaps have been recovered in a satisfactory condition and reported to Operations Branch for collection.**

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/Spacing | | | |
| Post Harvest Silviculture | | | |

Actual area harvested (record on attached HPOM)

Give reasons for harvestable areas that were not harvested (eg. Too steep, defective timber). Make reference to map.

Post Logging Basal Area sweeps

| Dump No# | Sweep 1 | Sweep 2 | Sweep 3 | Sweep 4 | Average |
|-----------------|---------|---------|---------|---------|-----------------------|
| | | | | | |
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| | | | | | |
| | | | | | |
| Post BA Average | | | | | m ² /ha |
| Pre BA Average | | | | | 33 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 | |

| | |
|-------------------|---------------------|
| APPENDIX 1 | ROADING PLAN |
|-------------------|---------------------|

Summary of Roading Requirements

| | |
|--|-------|
| Length of existing roads/trails to be maintained | 6.8km |
| Length of new roads to be constructed | N/A |
| Number of existing crossings to be maintained | 0 |
| Number of new crossings to be constructed | 0 |
| Length of road >10° | 0 |
| Mass movement prescriptions apply | No |
| Dispersible soil conditions apply | No |
| Seasonality provisions apply | No |

| |
|---|
| CHECKLIST OF WORKS REQUIRED ON ROADS & CROSSINGS |
|---|

| Road/Crossing Name | Works Required | Date Started | Date finished | Signature |
|---|--|--------------|---------------|-----------|
| Timbillica Road (ForestsNSW Responsibility) | Check inlets and outlets of existing pipes. Ops/SFO Comments: | | | |
| Timbillica Fire Trail (Contractors Responsibility) | Reinstate mitres and replace rollovers with rubber flaps as per EPL requirements. Reshape road pavement and clear vegetation (up to 3m) on either side of road where necessary to facilitate unobstructed truck movement. Ops/SFO Comments: | | | |
| 212/1 Rd (Contractors Responsibility) | Clear and reshape road pavement. Clear vegetation (up to 3m) on either side of road where necessary to facilitate unobstructed truck movement. Replace rollovers with rubber flaps as per EPL requirements. Ops/SFO Comments: | | | |
| 212/2 Rd (Contractors Responsibility) | Clear and reshape road pavement. Clear vegetation (up to 3m) on either side of road where necessary to facilitate unobstructed truck movement. Replace rollovers with rubber flaps as per EPL | | | |

| | | | | |
|---|--|--|--|--|
| | <p>requirements.</p> <p>Ops/SFO Comments:</p> | | | |
| <p>212/3 Rd</p> <p>(Contractors Responsibility)</p> | <p>Clear and reshape road pavement.</p> <p>Clear vegetation (up to 3m) on either side of road where necessary to facilitate unobstructed truck movement.</p> <p>Replace rollovers with rubber flaps as per EPL requirements.</p> <p>SFO to monitor localised batter slumping near junction with Timbillica Fire Trail and carry out any erosion mitigation measures if required.</p> <p>Ops/SFO Comments:</p> | | | |
| <p>212/4 Rd</p> <p>(Contractors Responsibility)</p> | <p>Reshape road pavement.</p> <p>Clear vegetation (up to 3m) on either side of road where necessary to facilitate unobstructed truck movement.</p> <p>Replace rollovers with rubber flaps as per EPL requirements.</p> <p>Ops/SFO Comments:</p> | | | |
| <p>212/5 Rd</p> <p>(Contractors Responsibility)</p> | <p>Reshape road pavement.</p> <p>Clear vegetation (up to 3m) on either side of road where necessary to facilitate unobstructed truck movement.</p> <p>Replace rollovers with rubber flaps as per EPL requirements.</p> <p>Ops/SFO Comments:</p> | | | |
| <p>212/6 Rd</p> <p>(Contractors responsibility)</p> | <p>Reshape road pavement.</p> <p>Clear vegetation (up to 3m) on either side of road where necessary to facilitate unobstructed truck movement.</p> <p>Replace rollovers with rubber flaps as per EPL requirements.</p> | | | |

| | | | | |
|--|---|--|--|--|
| | Ops/SFO Comments: | | | |
| 212/7 Rd (Contractors responsibility) | Reshape road pavement. Clear vegetation (up to 3m) on either side of road where necessary to facilitate unobstructed truck movement. Ops/SFO Comments: | | | |
| 212/8 Rd (Contractors responsibility) | Reshape road pavement. Clear vegetation (up to 3m) on either side of road where necessary to facilitate unobstructed truck movement. Ops/SFO Comments: | | | |

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.

ATTACHMENT 2

POST-HARVEST BURNING PLAN



6.08.01 Bush Fire Mapping Symbols

DTG refers to *Date Time Group* which uses the two digits for the date and 24 hour time, eg 10:51hrs on 4 November would be: **04 1051**

| NAME | | SYMBOL | | NOTES | |
|---|--|-----------------------------------|---------|--|--|
| PREDICTED (fire edge) | | | | Show DTG | |
| GOING (fire edge) | | | | Show DTG | |
| CONTAINED (fire edge) | | | | Show DTG | |
| PROPOSED (control line) | | X—X—X—X—X— | | Draw on far side of feature | |
| COMPLETED (control line) | | X+X+X+X+X+X+ | | Show DTG | |
| PROPOSED (backburn) | | | | Draw on near side of feature | |
| COMPLETED (backburn) | | | | Show DTG | |
| BACKBURN BURNING IN | | | | Lines show depth of burn at DTG | |
| RED – FIRE | | BLACK – CONTROL LINES | | BLUE – WRITING & SYMBOLS | |
| △ Strategic or Tactical Significance | | ○ Command, Control & Coordination | | □ Logistics Related | |
| | | | | ◇ Assets to be Protected | |
| Fire Origin | | Red | | Show DTG | |
| Fire Direction | | Blue | F → | Show DTG | |
| Wind Direction | | Blue | W → | Show DTG | |
| Spot Fire | | Red | * | Isolated fire ahead of main fire | |
| Burnt Area | | Black | | Burnt area (if old, show month and year) | |
| Aerial Ignition | | Red | ::: ::: | Proposed path to be treated | |
| Divisional Boundary | | Blue | X | Use geographical names | |
| Sector Boundary | | Blue | OOOOO | Use alphabetical names | |
| Refuge Area | | Blue | | Blue | |
| Control Centre (Incident Management Team location) | | Blue | | Blue | |
| Divisional Command | | Blue | | Blue | |
| Sector Command | | Blue | | Blue | |
| Helipad | | Blue | | Blue | |
| Water Point Vehicle (Firefighting water supply) | | Blue | | Blue | |
| Ambulance Location | | Blue | | Blue | |
| Threatened Property | | Blue | | Blue | |
| Historic Site (Building or Structures) | | Blue | | | |

The use of colours is optional.

PLANNING INFORMATION

LGA: Bega Valley

Fuel Management Zone & Proposed Burn Summary

Refer to area identification and silviculture and harvesting prescription sections of harvest plan. **Season:** Winter / Spring

Zone 3B (Post-Harvest)

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:** 7 (subject to area assessment). **Scorch Height:** 0.6 x dominant tree height – Post Log
10m – Broad Area

Max Fuel Moisture Range: 12-25% **Max Rate of Spread:** < 300m/hr. **Average Flame height:** up to 4m – Post Log
<1 – 2m – Broad Area

Fuel Reduction Objectives: 60 -80% of net area to be burned. **Reduce fine fuels to:** manageable levels - Post Log
4 – 8t/ha – Broad Area

BURN AREA INFORMATION

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)

Terrain: 1%>30°, 6.2% @ 25°-30°, 21.8% @ 20°-25°, 55% @10°-20°, 16% @ 0°-10° slope.

Time since last burn: 1993 – south of Timbillica Fire Trail & 2009 – north of Timbillica Fire Trail

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 SFO 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.**

BURN OBJECTIVES

- To reduce fuel loads to 4-8 tonnes/ha. (assisting future fire suppression)
- A burn coverage between 40-60%
- To contain fire within designated boundaries.
- To observe and record data, assisting in future high fuel load and advanced regrowth area burns.
- To minimise crown scorch; not exceeding 10% of dominant and co-dominant crowns.
- To minimise defect damage to retained regrowth stems.

ENVIRONMENTAL PRESCRIPTIONS

FLORA AND FAUNA:

Refer to Flora and Fauna sections of the Harvest plan document. H & R trees should be raked around if the risk of burning is high. Logging slash collected around retained trees should not be burnt.

SOIL, WATER & AQUATIC HABITAT:

Refer to sections Soil and Water Protection section of the Harvest plan document.

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

ABORIGINAL CULTURAL HERITAGE:

Refer to Cultural Heritage section of the Harvest plan document. Significant sites, e.g. scar trees, groove stones, should be raked around to prevent fire damage. Where practically possible, 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 |
|---|------------------------------|----------------------|
| Imlay Road | Nil | |
| Timbillica Road | Nil | |
| Timbillica Fire Trail | Nil | |
| Unnamed 3 rd Order Stream on southern boundary. | Check fuel moisture content. | |
| Check for trees that could burn down and fall over any boundary roads and wet down or rake around as necessary | | |
| PROPOSED Description of each control line | Description of Work Required | Completed Yes /No |
| Additional Control Lines may be required where snig track network is not adequate along the eastern and south-eastern boundaries. | Nil | |

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

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

Smoke Dispersion Forecasting via BOM utilised?..... YES NO (**R** 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. | | | | | | | |

| | | | | | | | |
|-----------------------|--|--|--|--|--|--|--|
| Supervisor to initial | | | | | | | |
|-----------------------|--|--|--|--|--|--|--|

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 <ul style="list-style-type: none"> D3 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 | | |

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 (FNSW, RFS, DEC, 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..... |

EMPLOYEE IDENTIFICATION

| EMPLOYEE | NAME | PROOF OF ACCREDITATION (Eg. FNSW 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 | SFO Signature |
|---------------------------|---------------|------|----------|---------------|
| Incident Controller | | | | |
| Crew Leaders | | | | |
| Crew Members | | | | |
| Tankers | 1 | | | |
| 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

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 |
|------|------|--------------|-----------|-------------------|--------------------|-----|----------|----------|
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FIRE BEHAVIOUR

| | | <i>PREDICTED</i> | | | <i>ACTUAL</i> | | |
|------|------------|---------------------|---------------|----------------------|---------------------------|---------------|----------|
| Date | Time (hrs) | Flame Height (m) | ROS (m/hr) | Assessment Method | Flame Height (average) | ROS (m/hr) | Comments |
| | | | | | | | |
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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? | Yes/No |

Remedial Action required (if any): _____

Remedial works certified complete.

Work Supervisor _____ Date: _____

Comments: _____

Attach additional pages as required