ORESTS NEW SOUTH WALES CENTRAL REGION

NATIVE FOREST HARVESTING PLAN

Middle Brother State Forest – Compartments 239

1. Certification

This plan has been prepared in accordance with the Integrated Forestry Operations Approval issued under the Forestry and National Park Estate Act 1998.

Prepared by: Andrew Ford Harvest Planner	Reviewed by: Brent Bailey Harvest Planning Team Leader	Approved by: Kathy Jones Regional Manager
Signature: Andrew Ford	Signature:	Signature:
Date: 9/5/12	Date: 22/6/12	Date: 22/6/12.

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

2. Description of Proposal

Native forest timber harvesting, plantation thinning and associated road maintenance work.

Attachment 1: Site Safety Plan prescribes – describes safety requirements and MEEP for this harvesting operation.

Attachment 2: Operational Road Works Plan – outlines roading requirements for this harvesting operation.

Attachment 3: Standard Harvest Plan Conditions for Native Forest Operations Under the IFOA: Central Region

Attachment 4: Identification Guide for *Acacia courtii.*

3. Area Identification and Yield Estimates

State Forest	Compartments	Region	Management Area	Price Zone	Harvest Plan ID
Middle Brother	239	Central	Kendall	Kendall	3905

	Cpt 239
Event ID	14936
Gross Area	172 Ha
Net Harvest Area	154 Ha
Treatment Area	77 Ha
Estimated Yield	6900m^3
% NHA > 15°	45%
Estimated DC Class	1

4. Silviculture and Harvesting Prescriptions

Compartment History and Stand Condition

This compartment was harvested intensively and regenerated in the early 1950s. The stands were selectively harvested in the early 1980s and again in the early 1990s. There is also evidence of TSI treatments during this period. The compartment was most recently harvested using AGS silviculture in 2006. As a result, most of the stands within the compartment are mature, well spaced and suitable for end point harvesting. These stands are interspersed with gaps of young seedling regeneration. The mature stands within the net harvest area are generally uneven aged and will be regenerated over two harvesting events.

Harvesting Prescription

Stand type	% of net area	Example	Treatment (STS, AGS, or THIN) and Prescription
Dry and moist blackbutt stands, other moist forest types (RN17 types 37, 38, 45, 47, 48)	40%	Most areas shown as "General Management" on HPOM.	STS. Harvest intensively to remove poor quality stems and stand end point stems. Retain good quality seed trees[1] of preferred species at 30 - 40m spacing. Treat areas between seed trees to aid regeneration[2].
Dry forest types (RN17 types 60, 61 and 62)	10%	South of Dump 2	STS. Harvest selectively to remove merchantable products and create conditions suitable for regeneration. Retain good quality seed trees[1] of preferred species at 30 - 40m spacing.
Stands marked for future treatment	50%	"Future Treatment" Areas on HPOM	Retain for next event

Notes:

1. Retained seed trees must be mature, have good form and large, healthy crowns. Do not retain suppressed trees as seed trees.
2. Areas between seed trees should be treated to aid regeneration, including removal of shade-tolerant stems as far as practicable under the conditions of the IFOA and as market conditions allow.

IFOA Limits

STS BA limit (40%)	Sections of native forest will be retained unlogged within the NHA to ensure BA limits are not reached. The Harvest Planning Forester must be contacted if changes to this plan are proposed.

5. Special Conditions

Critical Boundaries

Private Property (PP) – The compartment adjoins private properties on the Southern and Western boundaries. Be aware of the boundaries. Harvesting must not impact on private property.

- Where the boundary is not fenced, the Supervising Forest Officer (SFO) must search for survey marks to positively identify the boundary location in the field.
- Any damage to fences caused by harvesting operations must be immediately repaired by the harvesting contractor.
- Harvesting debris must not be left within 5m of the boundary.
- Dust, noise and disturbance to neighbouring residents must be minimized. When working within 100m of private property boundaries, machinery (including chainsaws) operating hours should be limited to between 7am and 8pm Monday to Saturday, and 8am to 8pm on Sundays and Public Holidays. The SFO will monitor noise and dust resulting from the operation and take the appropriate action to minimise the effect on surrounding property owners.

National Park – The compartment adjoins Middle Brother National Park on the northern and western boundaries. For the purposes of timber harvesting, Stoney Creek Road, part of TV Road and Fords Road should be considered as the boundaries. No harvesting activities may take place to the north or west of these roads.

Haulage Pattern

All timber will be hauled out along TV Road. Note that all traffic must turn left onto the Pacific Highway. **Extreme caution must be exercised when entering the Pacific Highway.** Traffic travelling south must us use one of the u-turn bays along the highway.

6. Forest Management Zoning

Zone	Management
FMZ 3A	Harvesting Exclusion • Underneath Rainforest exclusion on HPOM.
FMZ 4	General harvest area.
FMZ 8	Areas for further assessment • Mostly unmapped drainage lines. • Displayed as same colour as FMZ 4 on HPOM. • Managed under similar conditions to FMZ 4.

7. Cultural Heritage

Investigations were conducted during May 2012 by the Region's Aboriginal Cultural Heritage Officer (ACHO).

If any sites are identified in the course of harvesting operations, the **Harvesting Forester** must determine an appropriate interim exclusion zone pending an investigation by the ACHO.

8. Flora and Fauna

Refer to the Threatened Species Licence (TSL) Booklet for Conditions.

General TSL Prescriptions

- **SFO Mark Up Searches** – Conditions 5.1(h), 5.2 and 5.13 (general, koala and bird roost and nest searches) must be implemented. No or Koala star search triggers identified.
- **Tree Retention** –Regrowth Zone. Conditions 5.6 (c), (d), (e), (f) and (g) must be applied - Glossy Black Cockatoo feed trees.
- **Riparian Habitat Protection** – Condition 5.7 must be applied.
- **Ground Habitat protection** – Condition 5.17. No commercial firewood collection permitted in these compartments.

Site-Specific Conditions, Exclusion Zones & Modified Harvest Areas

Mapped exclusion areas occur for the following. Site-specific conditions must be implemented

Boundary Type	TSL Condition Number	Prescription Name	Prescription Summary
2, Accidental	5.04	Rainforest	Mapped Exclusion
3, Machinery	6.21	Large-footed Myotis	30m buffer on dams and permanent waterbodies
3, Machinery	6.25	Threatened Flora	*Acacia courtii* : Mapped exclusion, 20 m buffer on 90% of individuals.
4, Limited	5.11	Cliffs or Rocky Outcrops	20 m buffer on cliffs > 3m high
4, Limited	5.08	Ridge and Headwater Habitat	Mapped Exclusion 40m wide

9. Soils and Water Protection

Refer to Environmental Protection Licence (EPL) Booklet & Standard Plan Conditions

Site-Specific EPL conditions

Element	Conditions
Unmapped Drainage Lines	Best Management Practices for Unmapped Drainage Lines apply
Drainage Feature Protection	See HPOM for widths
Inherent Hazard Class	2
Dispersible Soils	No
Mass Movement	No
Seasonal Harvesting Exclusions	Nil.
Seasonal Burning Exclusions	Nil.
Log Dumps	Refer relevant conditions for IHC 2: Conditions 26, 27, 28, 30, 31 and 33 of EPL. Max. allowed soil disturbance for log dumps: rut depth 25cm, length 10m. (Forest Practices Circular 2008/4)
Snig Tracks	Refer to special conditions below.
Roads	See schedule 5 of EPL Booklet

Snig and Extraction Tracks

Element	Schedule 4 EPL Conditions
Technique	Conditions 38-40 Schedule 4 EPL
Drainage	Conditions 70-80 Schedule 4 EPL
Crossings	Conditions 42-68 Schedule 4 EPL Condition 5.7 TSL
Downhill Snigging	Condition 82 Schedule 4 EPL
Wet Weather	Condition 81 Schedule 4 EPL
Grade	Max grade must not exceed 25° except for short sections under certain circumstances. Refer to Cond 41 Sch 4 EPL
Rutting	Max allowed soil disturbance limits for snig / extraction tracks: rut depth 20cm, length 10m. (Forest Practices Circular 2008/4)

Special Conditions

Most of the soils in the compartment exhibit some degree of low wet bearing strength. This may present road and extraction track maintenance problems, particularly where the stone and rock content of the soil is low. For this reason, the following special conditions should be applied:

- Soil and groundcover disturbance should be kept to a minimum during harvesting operations.
- Drainage works should be implemented immediately following the completion of harvesting, as far as practicable.

10. Legal Conditions

This operation must comply with:

- Licence Conditions issued by Forests NSW under the Forestry Act (1916)
- State Forests of NSW Forest Practices Code - Part 2 Timber Harvesting in Native Forests 1999 and Forest Practices Code Part 4 Forest Roads and Fire Trails (1999).
- Integrated Forestry Operations Approval issued under part 4 of the Forestry and National Parks Estate Act 1998 (IFOA) as amended May 2003 including associated licences for Lower North East Region.
    - Threatened Species Conservation Licence (TSCL) issued under the Threatened Species Conservation Act (1995) as amended May 2003
    - Part 7 (Div 3) Fisheries Management Act (1994) as amended May 2003
- This operation is a non-scheduled operation under the Environment Protection Licence issued under section 55 of the Protection of the Environment Act 1997. This Harvesting operation including the roads and trails associated with harvesting are not licensed. All EPL conditions will be applied to harvesting operations, except for schedule 4 condition 6 relating to filter strips on unmapped drainage lines. The Best Management Practices detailed in Standard Harvest Plan Condition for Native Forest Operations in Central Region are to be applied to unmapped drainage lines.

11. Pre-Operational Briefing

I acknowledge that I have received a copy of the Harvesting Plan for Compartment 239 in Middle Brother 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 Forest Planner or his/her delegate.

Position	Name	Signature	Date

Acacia courtii

Vulnerable species

FAMILY
FABACEAE - MIMOSOIDEAE

HABIT
Tall shrub or weeping tree 7–10 m high; bark smooth and grey, later black and furrowed; branchlets dark maroon brown, with pale lenticels.

MAJOR IDENTIFYING FEATURES
Weeping habit; spikes of pale yellow flowers; linear, woody pods with slight restrictions between seeds.

CONFUSING SPECIES
A. orites occurs well north of *A. courtii*; *A. maidenii* has golden-hairy peduncles and broader adult phyllodes with a gland 5–12 mm above the base; *A. obtusifolia* has phyllodes with blunt tips and glandular, resinous margins; *A. longifolia* has spikes of long yellow flowers and broader phyllodes; *A. floribunda* has 1 or 2 longitudinal nerves; *A. longissima* has narrower phyllodes with fewer than 6 longitudinal nerves.

LEAVES
Phyllodes green, dull, flattened, linear. 8–11 c, long, 4.5–9 mm wide, tapered gradually towards the apex and base, usually 6–7 longitudinal veins present, margins reddish when fresh, a small gland present on the upper margin 0.5–4 mm above the phyllode stem.

INFLORESCENCE
Pale yellow spikes, single or paired in the axils of the phyllodes, 3–6.5 cm long, the peduncles glabrous; flowers 25–44 spaced out along the rachis, the flowers in clusters of 3 or 4.

FLOWERS
Flowers with 4 small sepals and petals, pale yellow to white; stamens 3–5 mm long. Flowers November – January.

FRUIT/SEED
A straight or curved pod, linear, constricted slightly between the seeds, woody, thick, 12.5–18 cm long, 3.5–4 mm wide. Seeds 8–11 per pod; glossy brown, 6–7 mm long, 2–3 mm wide.

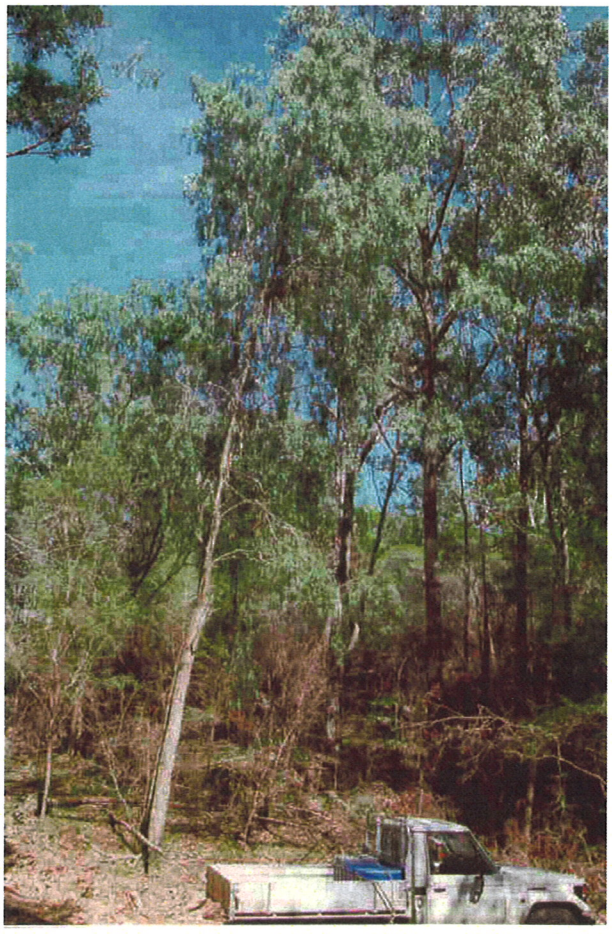
HABITAT
Likely habitat: Occurs on steep, dry, rocky, north-west to west-facing ridges on microgranite, in stony loamy to clayey soils, in mixed dry sclerophyll forest, often under a canopy of White Mahogany and Grey Gum, from ridge tops to lower slopes.

Additional known habitat details:

SEASONAL SURVEY
Not required.

DISTRIBUTION
Recorded from the Laurieton and Kew area. Present in Middle Brother SF, Middle Brother NP and on South Brother Mountain. Possibly in Kippara SF.

RESERVED POPULATIONS
Dooragan NP, Middle Brother NP.



Acacia courtii