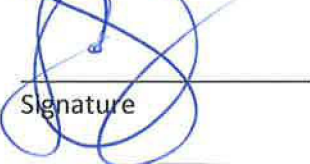
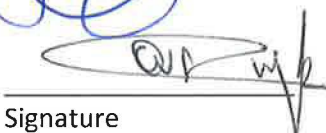


**FORESTRY CORPORATION NEW SOUTH WALES  
HARVESTING PLAN NATIVE FOREST**

**Queens Lake State Forest – Compartment 10**

**Certification**

This plan has been prepared in accordance with the Integrated Forestry Operations Approval issued under the Forestry and National Park Estate Act 1998 and addresses significant aspects and impacts in the planning process. The Standard Harvest Plan Conditions for Native Forest Operations in Central Region apply to this operation.

Prepared by	<u>SARAH GORMLEY</u> Planning Forester	 Signature	<u>8/7/2015</u> Date
Approved	<u>DIRK VAN DIJK</u> Planning Supervisor	 Signature	<u>8/7/2015</u> Date

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

**Description of Proposal**

This is a plan for Integrated Harvesting of Native Forest and associated road works.

This operation is not scheduled, and will not be licenced under the EPL.

Attachment 1: Site Safety Plan prescribes describes safety requirements and Medical Emergency Evacuation Plan (MEEP) for this harvesting operation. Also includes Appendix 1: Rural Roads Strategy Communication Procedure

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

Attachment 3: Standard Harvest Plan Conditions for Native Forest Operations

Attachment 4: Operational Forms

**Area Identification and Yield Estimates**

State Forest	Compartments	Management Area	Price Zone	Harvest Plan ID
Queens Lake	10	Kendall	Kendall	10611

	10	Total
PlanCptID	20877	
Gross Area (ha)	161	161
Net Harvest Area (ha)	131	131
Estimated Yield (m3)	5388	41m <sup>3</sup> /ha

**Silviculture and Harvesting Prescriptions**

These compartments have a long history of forest management, including Timber Stand Improvement (TSI) in the 1950's and 60's. Small operations were conducted for mining timber in the mid-1970's, then harvesting for high-value products followed during the 1980's and 90's. This compartment is one of 5 Silvicultural Demonstration Areas within Hardwood Forests Division, and has received a range of treatments over the years. An integrated operation occurred in 2000, when over half the area was STSed, and the remaining area was harvested by STS, or a combination of STS, AGS & thinning. Hazard reduction burning as well as wildfires have occurred regularly.

The most recent event was an integrated harvesting operation conducted in 2007. The silvicultural treatment included approximately 33% STS in the southern, steeper areas, and 67% AGS in the north

of the compartment. The resultant forest has sections of mature forest at stand-end point, ready for a final harvest, as well as regeneration from previous harvests. The majority of these compartments are comprised of medium-high quality Blackbutt (moist and dry), interspersed with smaller sections of mixed hardwood. Mature Blackbutt seed trees must be left in these areas of mixed hardwood wherever they exist to ensure Blackbutt regeneration.

### Silvicultural Planning

The intent of this harvesting operation is to harvest end-point groups of mature areas of forest, to create conditions suitable to achieve regeneration of the harvested areas. This will be done using AGS where AGS was used in the previous harvest, and STS in the previous STS tracts.

Where areas exist with good regeneration, care should be taken to minimise damage wherever practicably possible.

Following this harvesting event, the harvested areas will be left until regeneration from this event, and previous logging events, is ready for first thinning in approximately 15 years. This will be the final harvest in the current WSA.

### Harvesting Prescription

Stand type	Net area (ha)	Example	Treatment (%STS,AGS,THIN)
Mature Regrowth Blackbutt previously AGSed	44	Camp Ridge Road	<ul style="list-style-type: none"> <li>AGS</li> <li>Remove all trees within each opening, and ensure adequate ground disturbance to create suitable seed-bed</li> <li>Minimise damage to successfully regenerated gaps using direction felling and snig track design</li> <li>Trees should be felled into unstocked gaps to encourage an opportunity for regeneration</li> <li>Retain seed trees on the edge of AGS openings</li> </ul>
IFOA Remake Trial Areas	43	Southern end of cpt	<ul style="list-style-type: none"> <li>As described in IFOA Remake Trial HP conditions</li> <li><b>Do not harvest this area under this plan</b></li> </ul>
Future Treatment Area	44		<ul style="list-style-type: none"> <li>Do not harvest</li> </ul>

### IFOA Limits

IFOA limits for tree removal will be managed in this operation through adherence to the following:

Maximum number of AGS openings	<p>44 ha  <math>\rightarrow (44\text{ha} \times 22.5/100) / 0.25\text{ha} = 9.9\text{ha} \rightarrow 39 \times 0.25\text{ha} \text{ gaps}</math>            NOTE: Number of gaps can be increased as long as total area treated &lt;9.9ha.            Maximum gap size = 0.25ha <math>\rightarrow</math> 50m x 50m square or 56m diameter circle            Gaps are measured from the outer edge of adjacent canopy</p>
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### Special Conditions

#### National Park

Queens Lake Nature Reserve lies along the southern & western boundary.

**Spring Creek Road and Rock Road are to form the boundaries for the purposes of harvesting in this area.**

### **Traffic Management**

All traffic is to exercise extreme caution entering and exiting the compartments from/onto Houston Mitchell Drive **This road is well used by members of the public and receives a large amount of tourist traffic. Great care must also be used when turning to/from the Pacific Highway.**

Dirt and debris deposited onto sealed roads must be removed immediately.

### **Plus Trees/Special Trees**

There are a number of plus/elite trees in this compartment. There are also two Special Trees, ST 11 is a White Stringybark, and ST12 is a Christmas bush. Both are marked with a yellow sign, and the approximate location shown on the HPOM. All Special and Plus trees must be retained, and are not to be damaged during harvesting. All logging debris must be located at least 5m from the base of these trees.

### **Management of Filter Strips on Unmapped Drainage Lines**

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 as best management practice only, except for schedule 4 condition 6 relating to filter strips on unmapped drainage lines. Any breach of these conditions is not a breach of the Licence, but is a breach of the conditions of this Harvest Plan. The Best Management Practices detailed in **Appendix 3** of this Plan are to be applied to unmapped drainage lines.

### **Endangered Ecological Communities (EECs)**

Quaternary geology indicates that there are Alluvial Soils in these compartments. The EEC layer indicates there is potential EEC in this cpt (as shown on the HPOM), although this has not been verified. No EEC was recorded by the Ecologist, however if EEC is found during mark-up or harvesting, it must be excluded from harvesting. If there is any doubt, the area must be excluded until an assessment can be conducted by the Ecologist.

### **Crossing Management**

All drainage structures must be inspected by the HCCs for stability twice weekly during haulage operations over these crossings & recorded on Attachment 4: Operational Forms.

### **Dump Management**

At the commencement of use at each dump, topsoil must be stockpiled from the dump. When dump usage has been completed, the stockpiled topsoil must be re-spread over dump area.

Bark accumulated at the dump site should be dispersed back into the logging area where possible, and in heaps <2m<sup>3</sup>. All bark heaps must have a minimum of 5m mineral earth break around them, prior to the crew leaving the nearest dump site. If bark heaps are left on the dump, then individual heaps **MUST NOT** be located next to or under retained trees. Timber off-cuts must be stacked separately, and at a minimum of 5m from any bark heap.

### **Forest Management Zoning Conditions**

**FMZ 3A (Exclusions):** Rainforest, Scientific Research, Flora, Tourism/Recreation, Visual Aesthetics & Old Growth exclusions – not to be harvested.

**FMZ 4 (General Harvesting Prescription):** General Management & Scientific Research - Available for harvesting

### **Cultural Heritage Conditions**

Jollynose Peak is located in the far south-eastern corner of this compartment. As it is embedded in FMZ3A/Old Growth exclusions, it will not be impacted on by harvesting.

An Aboriginal site survey was performed by a Forestry Corporation Aboriginal Cultural Heritage Officer in February 2015.

If potential Aboriginal heritage sites are uncovered during harvesting operations, the ACHO must be contacted and an interim 20m buffer observed pending further inspection.

## Flora and Fauna Conditions

### Refer to TSL Booklet for Conditions

The HPOM displays records and features that require implementation of a site-specific condition.

### 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 Koala star search triggers were identified during pre-harvest surveys.
- **Tree Retention** –Regrowth Zone. Conditions 5.6 (d), (e) and (f), must be applied. Condition 5.6(g) Glossy Black Cockatoo feed trees. Greater Glider density is <1/ha.
- **Riparian Habitat Protection** – Condition 5.7 must be applied.
- **Ground Habitat protection** – Condition 5.17 commercial firewood collection permitted in these compartments.

The Tree Marking code is shown in **Attachment 3: Standard Harvest Plan Conditions for Native Forest Operations in Central Region**.

### Site-Specific Conditions, Exclusion Zones & Modified Harvest Areas

Boundary Type	TSL Condition Number	Prescription Name	Prescription Summary
1, Solid		Endangered Ecological Community	Mapped exclusion - Swamp Sclerophyll Forest on Coastal Floodplain, potential layer provided. Potential layer must be used as exclusion boundary unless field assessment is undertaken.
2, Accidental	5.04	Rainforest	Mapped Exclusion
3, Machinery	5.14	Bat tree Roost	Mapped Exclusion 30m on roost site
4, Limited	5.03	HCVOG	Mapped Exclusion
5, Modified	6.17g (i)	Yellow-bellied Glider Tree Retention	Tree retention requirements 15 feed trees within 100m, sap feed tree detection
5, Modified	6.17g (ii)	Yellow-bellied Glider Tree Retention	Tree retention requirements 15 feed trees within 200m, heard call detection

## Soils and Water Protection Conditions

This is a Non-scheduled forestry activity. As such, this harvesting operation, including the roads and trails associated with harvesting, are not licenced. All EPL conditions will be applied to harvesting/roading operations as best management practice only, except for schedule 4 condition 6 relating to filter strips on unmapped drainage lines. The Best Management Practices detailed in **Attachment 3: Standard Harvest Plan Conditions for Native Forest Operations in Central Region** are to be applied to unmapped drainage lines. **Un-mapped Drainage Line harvesting is permitted.**

**Refer to EPL Booklet & Standard Plan Conditions**

**Site-specific EPL conditions:** This table contains the information that determines which site-specific conditions apply.

Elements	Conditions
Inherent Hazard Class	IHC1
Unmapped Drainage Lines	BMP for UMDL apply
Drainage Feature Protection	See HPOM for widths
Dispersible Soils	No
Mass Movement	No
Slope limits	30°
Seasonal Harvesting Exclusions	No
Seasonal Burning Exclusions	NA
Log Dumps	Must be located outside filter strips, protection zones and buffer strips
Roads	See schedule 5 of EPL Booklet

### Snig & Extraction Tracks:

Elements	Conditions
Technique	Conditions 38-40 Schedule 4 EPL
Drainage	Conditions 70-80 Schedule 4 EPL
Crossings	Conditions 42, 45-68 Schedule 4 EPL Condition 5.7 TSL
Downhill Snigging	Condition 82 Schedule 4 EPL
Wet Weather	Condition 81 Schedule 4 EPL
Rutting	Maximum allowed soil disturbance Snig/Extraction tracks = depth 20cm / length 10m (Forest Practices Circular 2008/4)

### Legal Conditions

This operation must comply with:

- Standard Harvest Plan Condition for Native Forest Operations in Central Region
- Licence Conditions issued by Forests NSW under the Forestry Act (2012)
- 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 March 2013 including associated licences for Lower North East Region.
  - Threatened Species Conservation Licence (TSCL) issued under the Threatened Species Conservation Act (1995)
  - Fisheries Licence (FL) issued under section 220ZW of the Fisheries Management Act (1994)
  - Environment Protection Licence No. 3957 LNE issued under section 55 of the Protection of the Environment Operations Act 1997 (EPL).

**Note: The EPL conditions are applied as Best Management Practice only in this compartment.**







# HCC Post Logging NOTES

**LOCATION** SF: \_\_\_\_\_

**CPT NO:** \_\_\_\_\_

Record any circumstances of significance relating to the harvesting of this compartment.  
Please draw or include any annotations on an attached operation scale map.

Actual area harvested (record on map)

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

Silvicultural treatment undertaken;

Treatment	Area Treated	Number of AGS gaps	Comments
Australian Group Selection			
Single Tree Selection			
Thinning			

Possible next cut (*tick appropriate boxes*)

Main product type	Anticipated volume		
	H	M	L
High quality large sawlog			
High quality small sawlog			
Low Value			
Poles/piles/girders			
Veneer			
Pulpwood/chipwood			
Habitat			
Non-merchantable			

Time to next harvest
0 to 5 years
5 to 10 years
10 to 20 years
20 to 30 years
30 plus years

Noxious or environmental weed problems;

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High levels of feral animal use;

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Sites of soil erosion for attention;

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Boundary compromised; neighbour issues resulting from logging or haulage;

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Operation map errors (e.g. forest type; roads) to appropriate staff i.e. GIS, Planner etc, for attention;

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