LOCALITY MAP Western Region - Harvest Plan





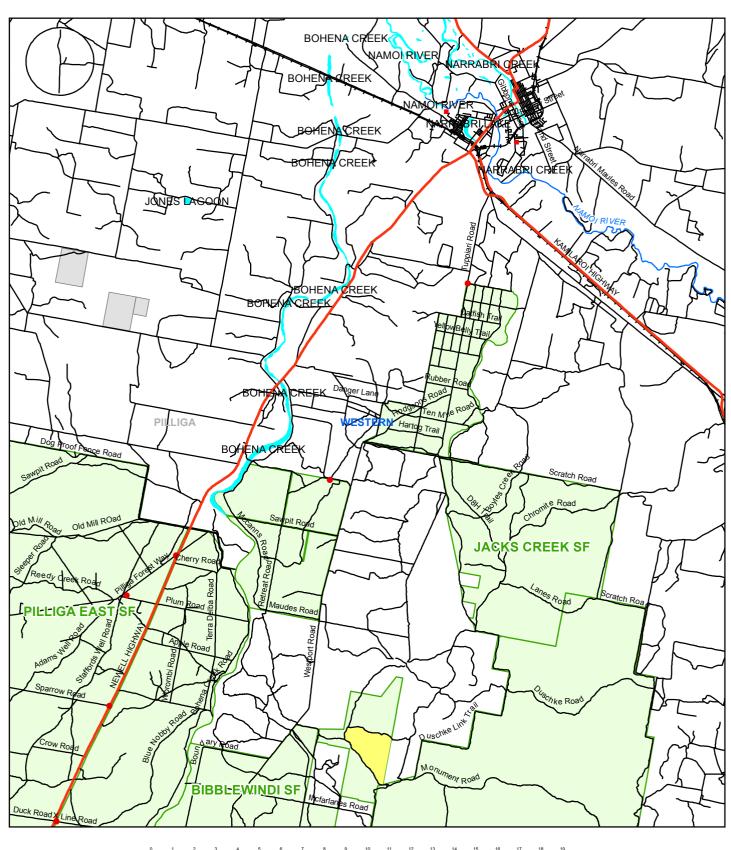
Management Area: PILLIGA

State Forest No: 712

Scale: 1:175,000

State Forest Name: Bibblewindi

Compartment: 759
Compartment Area: 314 ha



Kilometres

HighwayRoadsMajor Drainage

Compartment(s) of interest

State Forest

Locality
Heritage Sites

HARVEST PLAN OPERATIONAL MAP Forestry Western Region - Harvest Plan WBb 1603 Corporation Date: State Forest Name: Bibblewindi Compartment: 759 Approved: Scale: 1:20,000 759000 760000 761000 **Cpt 758** BIBBLEWINDI SF AN BAA Cpt 759 Cpt 789 PILLIGA EAST-SF 759000 760000 761000 0.25 0.5 2 Kilometers General Features Roads **Drainage Buffers** Non-Harvest Area Highway Road 50m Stream Buffer (5th Order) Special Protection (FMZ 1) Inventory/Research Plots 40m Stream Buffer (4th Order) Special Management (FMZ 2) 30m Stream Buffer (3rd Order) Harvesting Exclusion (FMZ 3A) Roads Class Log Dump (temporary) 20m Stream Buffer (2nd Order) Flora/Fauna Exclusion Units Operation 10m Stream Buffer (1st Order) ▲ Trig/Repeater Station Proposed Water Features Harvest Area Other Exclusions ✓ Contour Available for Harvesting (FMZ 4) Drainage EEC ✓ ✓ Transmission Line Modified Harvest Area (FMZ 3B) Dam Railway Wetlands Boundaries H Heritage Points Heath Compartment of Interest 1 AboriginalPoints State Forest Boundary NPWS This map is produced on the Geodetic Datum of Australia1994 (GDA 94) Map Grid of Australian (MGA) - Zone 55 NSW Topo Date Print: 1/08/2017



FORESTRY CORPORATION OF NEW SOUTH WALES- WESTERN REGION **NATIVE FOREST HARVESTING PLAN WBb 1603**

Refer: FPC 2010/01

Bibblewindi State Forest - Compartment 759

Certification

under th	e Forestry and N	ed in accordance wi ational Park Estate	Act 1998. The	Standard	Harvest Pla	an Condition	
		n Western Region -					
	Darren Worrell	///	s Irvine		By: Andrev	v O'Brien	
	ant Harvesting	Environment & Deso	urce Manager	Senior Mar	nager		
Signature	abover	Signature	_	Signature	HUB	ne.	+
Date	<u>2181</u> 2017	Date 23_13	2/2017	Date		2017	
corresponding Locality this app	onding approval da and forest type ma roval.	e Harvest Plan Ope ate displayed on the aps are included for ING (SUPERVISING F	map, verifying information on	final appro- ly and do n	ved version ot form a pa	art of	
have be	en briefed on the ion and operation	ved a copy of the Haraconditions of the all control as explained	Plan. I unders	stand the r	equirement	s for	
SUPER	VISING FOREST	OFFICER:					
Signatur	e:		Date:				
PRE-OP	ERATIONAL BRIEF	ING (LICENSEE/CON	TRACTOR ACK	NOWLEDG	MENT)		
License	e/contractor hav	commence unde e received a forma vided to commenc	I pre-operation			the NSW	
I confirm	that I have receiv	ed a copy of this Ha	rvest Plan and	I that:			
	understand the co	onditions of the Plan					
_ (vant people not prese e aspects of the Plan V officer.				ing	
Signatu	re:	Name	:	Date:			
Position	:		Licence No:				
	Principal licensee/co	ntractor/other (explain)					
Signatu	re:	Name	:	Date:			
Position	:		Licence No:				
	Principal licensee/co	ntractor/other (explain)					
Brigalow N	andewar IFOA Harvest P	ian Ver. 3.2	May 2015			Page 1	

Description of Proposal

Broombush (*Melaleuca uncinata*) will be harvested under regulation of the Integrated Forest Operations Approval for Brigalow-Nandewar Region (B-N IFOA).

Broom will be harvested by hand and tied into bundles. Bundles will be carried to the dump using a soft tyred off-road vehicle to minimise soil disturbance. It will then be removed from the forest by truck.

Natural regeneration is planned. No after-harvest burning or planting is proposed.

No construction, reopening or upgrading of roads solely for broombush harvesting is permitted (cl 242(1)). A bush track may only be constructed, re-opened or up-graded through a stand of broombush if the majority of the shrubs comprising the stand are less than 3 metres high and not senescent. (242(2))

It is not proposed to conduct road works as part of this operation. If required, existing roads and tracks will be maintained in accordance with the <u>Standard Harvest Plan</u> Conditions for Native Forest Operations in Western Region – Brigalow Nandewar v3.2.

Attachment 1: Site Safety Plan prescribes the safety requirements and Medical Emergency Evacuation Plan for this harvesting operation.

Area Identification and Yield Estimates

State Forest	Compartment/s	Region	Management Area	Harvest Plan ID
Bibblewindi	759	Western	Pilliga	54793

COMPARTMENT	759
Plan Cpt Event ID	124201
Gross Area (ha)	164 ha
Net Available Harvest Area (ha)	162 ha

Silviculture and Harvesting Prescriptions

The operational area has a history of broombush harvesting, with reliable records going back mid 1970's. The area is largely comprised of broombush. There is a narrow strip of woodland containing white cypress, narrow-leaved ironbark, and bull oak forest types in the northwest portion of the operational area. Broombush harvesting in the planned area has occurred previously in the mid 1970's and small sections in 1997 with the last broombush harvest occurring in 1999.

The table below depicts the history of the operational area.

Year	1979/80	1997-2000	2006
HR Burning	Х	X	$\sqrt{}$
Wildfires	Х	X	X
Broom harvest	Х	V	

 $\sqrt{-}$ applies, X – not applicable

Silvicultural Planning

Broombush (brush) is to be harvested in accordance with the IFOA as it reaches commercial size. Best quality, hand-packing brush is harvested while stems are thin and straight. Machine-packing can utilise thicker and branchier stems. This operation will produce mainly hand-packing quality brush.

Silvicultural prescriptions will be applied during the operation which will encourage natural regeneration throughout the compartment. This will allow for the next cut to occur in 7-10 years' time. However, if the harvest area appears to be regenerating poorly, it may be necessary to conduct a post-harvest burn to promote regrowth.

Harvesting Prescription

Stand type	% of net area	Area (refer to HPOM for details)	Treatment
Fire-regenerated broombush	10%	Throughout comp't 759	Thin according to specifications below.
Coppice regrowth broombush from last harvest	90% NHA	Throughout comp't 759	Thin according to specifications below

Broombush (that is, *Melaleuca uncinata*) must not be harvested from a shrub that is more than 3 metres high or less than 0.5 metres high. (237(1))

Broombush must not be harvested from more than 70% of the total number of individual broombush shrubs between 0.5 metres and 3 metres high in the compartment or other tract of land covered by this operational plan. (237(2))

The Supervising Forest Officer will ensure that all relevant retention and silvicultural prescriptions are met during harvesting operations.

The operation must, as far as practicable, not damage individual plants of good form regeneration or sapling size of white cypress or ironbark, especially where there are few others nearby.

Marking

The area will be marked to identify no-harvest exclusion zones and ecologically significant areas only. The Supervising Forest Officer will monitor and mark these areas off when needed.

4. Special Conditions

Critical boundaries

The compartment is bounded by a combination of roads, fences and drainage lines. Refer to the HPOM for more detail. Apart from drainage feature protection zones, marking of the compartment boundaries is not proposed.

Private Property

The planned area is bounded by private property and fencing to the east. No damage is to occur to theses fences.

National Park

There are no national parks or formal reserves adjoining the planning area.

Research / Inventory Plots

As shown on the HPOM, there are no research or inventory plots in this Compartment.

Leases/OPs

The area is covered by an Occupation Permit for beekeeping. In particular:

- Apiary Sites. A 20m buffer must be applied around each bee hive encountered.
- <u>Fences</u>. No fence may be damaged except at places approved by the Supervising Forest Officer. Any damage to a fence by the Contractor must be immediately reported to the lessee via the Supervising Forest Officer and fixed immediately by the Contractor.

Transmission Lines/Cables/Pipelines

There are no known transmission lines/cables/pipelines in the planned area.

Forest Management Zoning Conditions

FMZ 4 'General Management' occurs within the compartment (shown on HPOM). Normal harvesting prescriptions apply in this area.

Cultural Heritage Conditions

There are no cultural heritage sites (Aboriginal or non-Aboriginal) known in this compartment. If a site that might be a cultural heritage site is found:

- Its location must be promptly reported to the Forestry Office via Supervising Forest Officer.
- A 20m no-harvest zone must be applied around this site until advised otherwise

Flora and Fauna Conditions

The SFO must search for threatened species and mark-up the block as per the <u>Standard Harvest Plan Conditions for Native Forest Operations in Western Region. – Brigalow Nandewar v3.</u>

Mark-up Conditions

Refer to <u>Standard Harvest Plan Conditions for Native Forest Operations in Western Region. – Brigalow Nandewar v3</u> for prescriptions.

Harvesting of broombush (Melaleuca uncinate) Conditions

Refer to <u>Standard Harvest Plan Conditions for Native Forest Operations in Western</u> <u>Region. – Brigalow Nandewar</u> v3 for prescriptions.

Site-Specific Conditions, Exclusion Zones & Modified Harvest Areas

Blakely's red gum may occur in the adjoining area, with some areas potentially qualifying as Box Gum Woodland EEC. Where such areas are encountered when marking up, field staff must refer to Schedule 8 Parts 1 and 2 of the Brigalow-Nandewar IFOA (as per Attachment 1 of the <u>Standard Harvest Plan Conditions for Native Forest Operations in Western Region. – Brigalow Nandewar v3</u>) to determine the appropriate marking and operational strategies. Where the area is determined **not** to be Box Gum Woodland EEC, it should be treated as per the rest of the operation. Where the area **is** determined to be Box Gum Woodland EEC, the harvest planning forester must be consulted regarding Clauses 270-273 of the Brigalow-Nandewar IFOA. The extent and location of such EECs must also be GPS mapped so that a written record of such may be recorded as per IFOA Clause 260.

There are no known areas of heath, rocky outcrops, cliffs and/or endangered ecological community (EEC) occurring within the net operational area that need additional harvest exclusions or modified harvesting zones implemented.

The SFO should watch out for any of these areas that may occur.

Refer to <u>Standard Harvest Plan Conditions for Native Forest Operations in Western Region. – Brigalow Nandewar v3</u> for prescriptions.

Species Known or Likely to Occur

Records of D.tricolor (dated 2011), P.cobarensis (dated 2011) and T.linearis (dated 2012) occur within 2km of the compartment boundary. There are no records within the operational area. This operation is restricted to broombush as identified on the Harvest Plan Operational map. However, staff and harvesting crews must be vigilant for the presence of individuals of these plants during mark-up and harvesting. A 20m buffer is to be applied to any of the above plants/assemblages encountered, and the harvest planning forester must be notified of the sighting.

There are no other known records of threatened fauna, flora or habitat features present within the planning area that require prescriptions within this plan.

Contractors and supervisory staff must immediately report any sightings of Schedule 1 and 2 species to the Supervising Forester. The Harvesting Plan must then be amended to include additional prescriptions if necessary.

Fisheries Licence Conditions

Applicable Fisheries Licence conditions are detailed in the Brigalow – Nandewar IFOA. Refer to <u>Standard Harvest Plan Conditions for Native Forest Operations in Western Region. – Brigalow Nandewar v3</u> for prescriptions.

Soil and Water Protection Conditions

Applicable Environmental Protection Licence conditions are detailed in the Brigalow – Nandewar IFOA. Refer to <u>Standard Harvest Plan Conditions for Native Forest Operations in Western Region. – Brigalow Nandewar v3</u> for prescriptions.

Site-specific EPL conditions – The following features may occur within the planned area. Refer to operational map for more detail.

Elements	Conditions
Unmapped Drainage Lines	5m Drainage Feature Protection Zone
1 st order mapped drainage line or mapped drainage depression	10m Drainage Feature Protection Zone
2 nd order mapped drainage line or mapped drainage depression	20m Drainage Feature Protection Zone
3 rd order mapped drainage line or mapped drainage depression	30m Drainage Feature Protection Zone
4 th order mapped drainage line or mapped drainage depression	40m Drainage Feature Protection Zone
5 th order mapped drainage line or mapped drainage depression	50m Drainage Feature Protection Zone

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.

There are 3 existing drainage feature crossings proposed to be used during this operation as shown on the Operational Map. No upgrading works are proposed for these crossings.

Road Works Conditions

Existing roads, tracks and crossings will be maintained in accordance with the <u>Standard Harvest Plan Conditions for Native Forest Operations in Western Region. – Brigalow Nandewar v3</u>.

Legal Conditions

This operation may only proceed while this operational plan, the relevant site safety plan and the <u>Standard Harvest Plan Conditions for Native Forest Operations in Western</u> Region – Brigalow Nandewar v3 are held on site.

This operation must comply with the following:

Standard Harvest Plan Conditions for Native Forest Operations in Western Region. – Brigalow Nandewar
Licence conditions issued by Forests NSW under the Forestry Act (1916).
Forest Practices Code, Part 2, Timber Harvesting In Native Forests (4 th edition 1999).
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:

- Threatened Species Conservation Licence (TSCL) issued under the Threatened Species Conservation Act 1995
- Fisheries Management Licence issued under Part 7 (Div 3) Fisheries Management Act 1994
- Environmental Protection Licence (EPL) issued under the Protection of the Environment Operations Act 1997.

SFO FEATURE USAGE RECORD - LOG DUMPS

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

Dump number	Start date	Finish date	Easting*	Northing*	**Temporary track drainage Required?	Comment

^{*} GPS coordinates in MGA 1994 Zone: 55

^{**} If a downhill extraction track enters a log dump from the uphill side, then at the end of each day on which it is used during a logging operation, a drainage structure must be in place on the extraction track within 40 metres of the log dump, on its uphill side.

Supervising Forest Officer's Notes

Date (dd/mm/yy)	Authorisation given / hazard identified / instruction made / comments	Licensee/contractor acknowledgment
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Certificate Of Clearance To Move From Current Compartment(s)			
To:, Supervising Forest Officer.			
I request approval to move my logging crew and all associated machinery from Compartment(s) inState Forest to the next area in accordance with Section 5.5 of the Forest Practices			
Code Part 2 Timber Harvesting In Native Forests.			
I certify that:			
all permanent roads, trails and mitre drains have been cleared of harvesting debris;			
butt damage to retained trees has been kept to acceptable limits;			
all trees marked for removal have been felled;			
utilisation limits have been satisfactorily met;			
stump heights conform to requirements;			
all hanging trees have been brought down;			
all log dump sites have been satisfactorily restored as required;			
harvesting debris is not accumulated around retained trees;			
all accumulated litter has been disposed of properly;			
all modified harvesting conditions have been complied with;			
all snig track and road drainage has been installed satisfactorily and other required rehabilitation work has been completed;			
all necessary repairs to damaged roads, signs, fences and other structures have been carried out.			
I believe that I have met all my obligations under the conditions of the Timber Licence that applies to the area just completed and any N&PW Act Licence that applies to the area just completed, as stated in this Harvest Plan.			
Signature: Licence No:			
Date:			
Licensee/Contractor			
As a result of inspections of the logging operations carried out in accordance with this Harvest Plan, I am satisfied that, to the best of my knowledge, the harvesting licensee/contractor responsible for this harvesting operation has satisfactorily completed all work. Approval is given for her/him to remove her/his machinery and equipment and leave the area/commence operations in another harvesting plan area, being:			
Compartment(s):, in State Forest.			
This clearance does not release the licensee/contractor from any obligation to undertake any remedial work if deficiencies, found during any inspections of the area made within 12 months of the date of this post-harvesting inspection, are shown to have resulted from inadequate practices during the harvesting operation.			
Date of last inspection of the area by the Supervising Forest Officer:			
Supervising Forest Officer, date:			
Signature Name			

HARVEST PLAN AMENDMENT RECORD				

	Amendment No. & type		Date Prepared	Amendment Details	All Copies Amended	Signature
Number	Major	Minor				
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Note: The purpose of this log is to track amendments to the Harvest Plan from time of first approval. All maps, Harvest Plans etc. are to be clearly identified with a version # and date so that changes to the Plan may be clearly identifiable. The Harvest Planner is responsible for ensuring all amendments are implemented, recorded and filed

Supervising Forest Officer's Hand-Over Acknowledgment

I confirm that I have received a copy of the Harvest Plan for the above Compartment. I have been briefed on the conditions of the Plan and the progress of the operation. I understand the requirements for supervision and operational control, as explained to me by the current SUPERVISING FOREST OFFICER.

Signature:		Date:	
	Incoming Supervising Forest Officer		
		Date:	
Position:	Incoming Supervising Forest Officer		
Signature:		Date:	
Position:	Incoming Supervising Forest Officer		
Signature:		Date:	
Position:	Incoming Supervising Forest Officer		
Signature:		Date:	
Position:	Incoming Supervising Forest Officer		
Signature:		Date:	
	Incoming Supervising Forest Officer		

RECORD OF INCIDENTAL THREATENED PLANT OR THREATENED FAUNA FEATURE SIGHTING

- For each occurrence/population sighted/identified, a separate form 5 must be filled out and provided to the Region Ecologist as soon as practicable. The details must also be recorded on this form in the Supervising Forest Officer's copy of the operational plan, with the date the separate form 5 went to the Ecologist.
- Some features or species require no further prescription but should still be recorded while other features or species require an immediate prescription and/or further survey before logging may continue in the vicinity.
- Locations of species/features recorded on this form should be noted on the operational map.
 IR form = incidental record form 5. ECO = Regional Ecologist

Species or features detected (include type, number, etc.)	Map datu	m GDA94 GA reference) Northing (7-digit)	Action taken	Date IR form
	Easting (6-digit)	Northing (7-digit)		given to ECO

Supervising Forest Officer's Post-Harvesting Notes

Record significant circumstances about harvesting this area. Draw or attach an annotated operational scale map.

ACTUAL AREA HARVESTED (by silvicultural treatment)

Treatment	code on	Area (ha)	REGEN QUALITY REGEN DENSITY					ITY	
	map	treated	Good	Fair	Poor	Dense	Fair	sparse	COMMENTS
THINNED	T1								
	T2								
RELEASED	R1								
	R2								
SALVAGE	S1								
	S2								
Not	NH1								
Harvested	NN2								
	NH3								

POSSIBLE N	EXT HARVES	Γ	Main product type	An	ticipated vo	lume
	C = cypress	H = hardwood	(put C or H in each relevant cell)	High	Medium	Low
			High quality large sawlog			
			High quality small sawlog			
			Low quality sawlog			
			Fencing/posts			
			Vineyard posts (cypress)			
			Residue			
Code on map	Comment		Habitat trees / Non-merchantable			
	□ 0 to 5 y	ears to next harvest			•	
		ears to next harvest				
		ears to next harvest				
		ears to next harvest				
		ears to next harvest				
Sites of soil er	rosion for attenti	on.				
Boundary con	npromised; neig	hbour issues resultin	g from logging or haulage.			
Operation ma	p errors for atter	ntion (e.g. forest type	e; roads) of appropriate staff (e.g. GIS	, Planner)		
		RVISING FOREST (DFFICER / FA / Forester			

RECORD OF BASAL AREA SWEEPS OF ALL RETAINED STEMS - 10cm dbhob or larger

Date	Before or	Category		Comp	oonent	
(and GPS grid ref optional)	after harvest		All trees	White cypress	Ironbark	Other species
	Before	merchantable				
	OR	pre-merch				
	After	non-merch				
		total				
trees marked for (circle	correct one): ret	ention / removal				
	Before	merchantable				
	OR	pre-merch				
	After	non-merch				
		total				
trees marked for (circle	correct one): ret	ention / removal				
	Before	merchantable				
	OR	pre-merch				
	After	non-merch				
		total				
trees marked for (circle	correct one): ret	ention / removal				
	Before	merchantable				
	OR	pre-merch				
	After	non-merch				
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trees marked for (circle	correct one): ret	ention / removal				
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	OR	pre-merch				
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trees marked for (circle	correct one): ret	ention / removal				
	Before	merchantable				
	OR	pre-merch				
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		total				
trees marked for (circle	correct one): ret	ention / removal				
	Before	merchantable				
	OR	pre-merch				
	After	non-merch		•		
		total				
trees marked for (circle	correct one): ret	ention / removal				

BA is measured at 1.3m above the ground, and does not include stems less than 10cm diameter at that point.

Operational plan distribution and amendment control sheet ('DACS')

Date approved by RM	Plan number	See page header	State Forest or Property/County	See page header
Date Environment & Resources Manager review is required			Compartment or Parish/Portion or Lot/DP	See page header

Amendment: Normally the supervising Forester would amend the Office, Forester and SFO copies on explaining the amendment to the SFO, and should annotate the Amendment record (Form 11) in them. The SFO (or Forester as applicable) should amend the bush crew copy/copies when explaining it to the bush operators, and should annotate the Amendment record (Form 11) in it/them.

Plan copy	Name of recipient	Delive	ry to rec	ipient			А	mendm	ent affe	cted in p	lan copi	ies			Plan	recall
		Method H = hand E = email M = mail	Date done	By (initials)	Date done	By (initials)	Date done	5 By (initials)	Date received	Date destroyed						
RO		W - mail														
Ops Centre																
Supervising Forester																
SFO																
Bush crew supervisor																
Contractor																
Customer																
														_		

CERTIFICATION OF COMPLETION OF THE OPERATION

This checklist is intended to comprise the top page in the planning documentation folder / wallet

Region: see page header	State Forest OR see page header County/parish
Management see page header Area:	Compartment OR see page header Portion, lot/DP, property
Tick when Documentation	Comment

Tick when added to set	Documentation		Comment	
1. 🗌	Data search results – flora and fauna			
2. 🗌	Data search results – indigenous cultura			
3. 🗌	Data search results – non-indigenous cu	ıltural heritage		
4. 🗌	Copy (if any) of the flora/fauna survey re the original survey data sheets)	eport(s) (Ecologist retains		
5. 🗌	Copy (if any) of the indigenous cultural and original data	heritage survey report(s)		
6. 🗌	Copy (if any) of the non-indigenous report(s) and original data sheets	cultural heritage survey		
7. 🗌	Records of consultation with regulators, consent, concurrence, etc (eg individual Act consent, concurrence from RLPB)	al s120 TSL, Native Veg		
8. 🗌	Records of consultation with lessees an	d/or permittees		
9. 🗌	Records of consultation with stakeholde	rs and the community		
10. 🗌	Copies of notifications sent (eg neighbo	urs, Lands)		
11. 🗌	Environmental impact assessment			
12. 🗌	Due diligence checklist (form 10.1)			
13. 🗌	Quality control checklist (form 10.2)			
14. 🗌	Operational plan with signed approval p	ages		
15. 🗌	The Distribution Control Sheet for the pl	an		
16. 🗌	The Amendment Control Sheet for the p	lan		
17. 🗌	Copies of all revisions of and amendme	nts to the plan		
18. 🗌	Supervising Forest Officer's copy of the (form 4), incidental records (eg forms 5, post-harvest notes (form 6), other notes	20, 22), briefing records,		
19. 🗌	Completed clearance certificate (form 7)	- only harvesting		
identified The releva	ontains all documents associated with pla in the table above and is complete for int ant information from them has been trans	ernal/external audit purpose ferred to the compartment	es; history data set; <i>a</i>	
	on's geodatabase has been updated for t	•	peration.	Data
Position		Signature		Date
Comment				