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**Responded At:** Jul 12, 2018 09:29:38 am **Last Seen:** Jul 12, 2018 09:29:38 am

IP Address: n/a

Q1. First name	Joe
Q2. Last name	SPARKS
Q3. Phone	not answered
Q4. Mobile	not answered
Q5. Email	
Q6. Postcode	
Q7. Country	not answered
Q8. Stakeholder type	Individual
Q9. Stakeholder type - Other	
not answered	
Q10. Stakeholder type - Staff	
not answered	
Q11. Organisation name	not answered
Q12. What is your preferred method of contact?	Email
Q13. Would you like to receive further information and updates on IFOA and forestry matters?	Yes
Q14. Can the EPA make your submission public?	Yes
Q15. Have you previously engaged with the EPA on forestry issues?	Yes
Q16. What parts of the draft Coastal IFOA are most imp	ortant to you? Why?

Q17. What parts of the draft Coastal IFOA do you think have a positive outcome on the management of environmental values or the production of sustainable timber? Why?

N/A see below

Q18. What parts of the draft Coastal IFOA do you think have a negative outcome on the management of environmental values or the production of sustainable timber? Why?

N/A see Below

Q19. What are your views on the effectiveness of the combination of permanent environmental protections at the regional, landscape and operational scales (multi-scale protection)?

N/A see below

Q20. In your opinion, would the draft Coastal IFOA be effective in managing environmental values and a sustainable timber industry? Why?

N/A see Below

#### Q21. General comments

Submission to NSW Coastal I.F.O.A By Joe Sparks Environment protection authority's bias in regulating forestry operations on NSW public lands. I have 20 years experience of monitoring of timber harvesting on public lands. During this time I've witnessed the licence conditions be eroded away by Environment Protection Authority 's sycophantic "regulation" of NSW Forestry Corporations over exploitation of this publicly owned natural resource, aside from raising serious questions about The NSW governments commitment to RULE OF LAW, These impacts of logging are complicated and diverse with a wide range of implications for forest management and our future, NSW citizens deserve to have un-biased assessment of the impacts on our forest as we need to be erring on the side caution in our handling of this precious public estate not upping harvesting intensity based on inaccurate information. I'm alleging that EPA is not fit to partake in the IFOA remake because of this bias. I table the following as examples of what I believe are innate bias on behalf of EPA. • IFOA "trial"........... Not really a trial! As part of the Regional Forest agreement "Renewal" EPA have supposedly run a trial of the proposed conditions at five different NSW locations. I managed to inspect two of these trail harvest areas and sent my complaint reports to the EPA it has taken them two years and some prompting to get them to respond to my allegation of breaches of licence conditions which include threatened species records and subsequent exclusions zones that were missing from harvest plans, harvesting of trees in exclusion zones and harvesting of habitat trees marked for retention. EPA have since reviled that they have issued a warning letter to SF regarding these breaches of licence and Subsequent inquiries revealed that this was the only official regulative infringement issued to SF for the five trail areas. Furthermore EPA's assessments of these areas reveal there was no real attempt to test the new condition "settings" during the trial with none of the trial harvesting occurring within 5m of drainage lines as proposed in the conditions..... Could this be an indicator that EPA/FC has never intended this to be a real "trail"..ie to be properly evaluated and calibrated, rather these trial areas were more intended to be "Show trails" executed to predefined parameters (that are well below the levels under new conditions) rather than test conditions. I quote from the EPA's trial of costal ifoa web page "FSNSW undertook all required threatened species per harvest surveys in accordance with the current IFOA survey requirements" This is particuly deceptive statement as while technically the wording in this statement is correct (to my knowledge) but in light of the fact that an official caution was issued by the EPA for not recording the locations or their exclusions on the harvest plan map? And this Breach was found by the public? Gladstone State forest operation: A study in pollution. Summary: 5 complaints regarding water pollution, over a period of one year, no official response from EPA, Breaches of the environment pollution licence continued to the end of harvest operation. Indicator: lack of commitment by the EPA in pursuing proper licence compliance .The breaches of licence by this operation are having real negative impacts on this catchment via diverse source pollution from forestry operation breaches and the Environment protection licence is "the" regulative instrument available to NSW government for protecting humans and the environment from polluting industries, they have failed to do that in this case. Five complaints, over a period of year the EPA are yet to respond officially to any of the breach reports, on the ground The governments regulator seemed tepid and weak hardly affecting the contractors commitment to breaching the licence. • Failure to interrupt, halt or impede Continued and persistent Breaches of Rufus Scrub Bird conditions. Summary: 3 instances of NSW Forestry Corporation breaching the survey requirements for this species, potentially ending with the harvest of the micro habitat. Indicator: no commitment to car values /commitment to

supposed core values of SFM Leading to real impacts on this species. Three complaints over the last eleven years regarding the deletion removal or oversight of RSBrecords (which are part of the licence trigger for search for RSB micro habitat) each time EPA spoke of proper regulation of these specific conditions and ensuring proper compliance these conditions in the future, the last incident was in Barrington tops where two Rufus scrub bird records were originally ignored by FC, after two years of FC have reluctantly excluded an area of micro habitat. • Failure ensure proper recording of breaches of licence by FC. Summary: There is no document or file where breaches of licence by forestry corporation are recorded or assessed from. The document mentioned in the licences does not exist, NSW Forestry Corp have subverted it to a point where it is not the document described in legislation. This subversion has been over seen by EPA. EPA have been lethargic and unenthusiastic when it comes to ensuring licence compliance when it comes to the non compliance register they have over seen Forestry being evasive and obstructive when dealing with my attempts to evaluate the accuracy of this document. This has recently culminated in me being completely refused public access to these documents despite planning documents being clearly highlighted as being publicly available under the IFOA. In Brothers state forest I found a breach of the EPL condition excluding operations from streams, this was a clear case of a tree being cut 2m in to a 20m stream exclusion may not seem like a lot but 20m is not a lot so 2m is 20% percent of the width of the exclusion, I make a report to forestry regarding potentially simple matter, Four months later I asked F.C for all the entry's in the noncompliance register for the brothers operation and there was no sign of this breach and FC state that it's not a serious enough breach to be bothered recording in the Non com register, I have complained to EPA, with little effect apart from them doing a field visit, to apparently confirm that the breach Forestry had admitted too was indeed a breach. Given epa's claim to under resourced this seems to be a waste of a field trip.

Q22. Attach your supporting documents (Document	
1)	
Q23. Attach your supporting documents (Document 2)	
Q24. Attach your supporting documents (Document 3)	

# **Official Caution**



FORESTRY CORPORATION OF NEW SOUTH WALES
Trading as FORESTRY CORPORATION
ABN 43 141 857 613
P.O. Box 168
WAUCHOPE NSW 2446

Attention: Mr James Jaggers

Notice Number

1550876

File Number

05653-2017

Date

10-May-2018

# OFFICIAL CAUTION

On 22 February 2017 the EPA conducted an inspection of logging operations in Lansdowne State Forest Compartments 193, 194 and 195. Compartment 194 was harvested under Integrated Forest Operation Agreements Remake (IFOA) trial conditions. Some harvesting treatments varied standard IFOA practices.

# **EPA Investigation Findings**

# **Giant Barred Frog**

Desktop analysis of the Harvest Plan Operational Map (IFOA Remake Trial Area Maps (1 and 2) and a review of the NSW wildlife ATLAS identified that seven (7) records of the Giant Barred Frog were missing and should have been included.

We understand that the areas surrounding (within 200 metres) the omitted Giant Barred Frog was not harvested as part of the trial harvesting event. These are in areas that identified for 'future treatment areas'.

# **Rocky Outcrops**

Field inspections identified specified forestry activities have occurred within boundaries of a marked rocky outcrop exclusion zone near dump 16 in compartment 193. Three trees were felled within this zone.

# Official Caution - Fail to include threatened species records on harvest plans

Official Caution for failure to comply with condition 3 a) of the Threatened Species Licence for the Lower North East Region. FCNSW failed to include seven (7) records of Giant Barred Frog (*Mixophyes iteratus*) to ensure species specific exclusion zones in compartment 194 of Lansdowne State Forest. Ommitted records located at 152.57209 -31.776397; 152.572103 -31.776407; 152.576723 -31.773844; 152.577763 -31.767559; 152.577858 -31.767542; 152.577744 -31.768077; 152.578444 -31.768677 (locations in GDA94 as per Atlas)

PO Box 63 Port Macquarie NSW 2444 Tel: (02) 55343000 TTY (02) 9211 4723 ABN 43 692 285 758 www.epa.nsw.gov.au

# Official Caution



This is an offence against section 133(4) of the *National Parks and Wildlife Act 1997* for contravening a threatened species licence condition.

# Official Caution - Conducted specified forestry activities within exclusion zone

EPA found that FCNSW failed to comply with condition 5.11 a) of the Threatened Species Licence for the Lower North East Region. Specified forestry activities were undertaken within a 20 meter exclusion zone of a rocky outcrop and cliff (mapped and buffered) in the vicinity of 459171/6486055 within compartment 193 of Lansdowne State Forest. Three trees were felled within the exclusion zone.

The harvesting activities are an offence against section 133(4) of the *National Parks and Wildlife Act* 1997 for contravening a threatened species licence condition.

# OFFICIAL CAUTION

It is an offence under section 133(4) of the *National Parks and Wildlife Act 1974* to contravene a condition of a Threatened Species Licence (TSL). This offence carries a maximum penalty of \$22000.

The EPA may prosecute a corporation for committing this offence.

The EPA has reasonable grounds to believe that FORESTRY CORPORATION OF NEW SOUTH WALES committed offences under section 133(4) of *National Parks & Wildlife Act 1974* Act by contravening conditions of the Threatened Species Licence:

- condition 3(a)
- condition 5.11(a)

These the alleged offences were contravened during the course of planning and undertaking forestry operations Lansdowne State Forest in 2015. Further, the EPA believes that there is sufficient evidence to prove the alleged offence.

In these circumstances the EPA considers it appropriate to issue FORESTRY CORPORATION OF NEW SOUTH WALES with this Official Caution for the alleged offence.

Please note that EPA will retain a copy of this Official Caution on file. If FORESTRY CORPORATION OF NEW SOUTH WALES commits an offence in future, EPA will take this into account and likely to consider the commencement of a prosecution.

The issuing of this Official Caution does not prevent EPA from taking alternative enforcement action for the alleged offence, if it becomes apparent that an alternative response is more appropriate. The EPA will be targeting areas where the root causes identified in this investigation could result in similar non-compliances.

If you have any questions or wish to discuss this matter, please contact John Forcier, Operation Operations Officer at Port Macquarie on 02 5534 3000 or myself on (02) 9995 6706.



Yours sincerely

Tim O'Connell

**Acting Unit Head** 

**Forestry Operations Central & South** 

**Environment Protection Authority** 

Complaint regarding the non-compliance of Forestry Corporation's native timber harvest operation in Lansdowne State forest compartments 195, 194 and 193.

Report by Joe Sparks for North East Forest Alliance 01/03/2016

Summary of this report is that in this Trail harvest of conditions Forestry Corporation has failed to:

- Map the location of 7 known records of the Great Barred Frog and apply the required exclusions, resulting in drainage lines being logged.
- Properly and accurately map logging exclusion zones for large forest owls, resulting in at least two exclusion areas being damaged by logging.
- Identify areas of highly erodible soils and apply stronger erosion mitigation measures in accordance with their pollution license.
- Properly identify potential Aboriginal heritage with the harvest area.
- Properly apply erosion mitigation conditions to snig tracks and roads.
- Implement the required 20m buffer around rock outcrops.
- Correctly measure exclusion zone for the Golden-tipped Bat.
- Retain likely hollow-bearing trees with prescribed area for Stephen's Banded Snake.

# Alleged Breaches of license in relation to planning of this operation are:

- A. Failure to illustrate seven giant barred frog records on the harvest plan operation map (Fig 3) this is a breach of condition 3 documentation of the threatened species license (see appendix 1) the non inclusion of these records have been impacted by this operation as TSL condition 6.3 requires all 1<sup>st</sup> and 2<sup>nd</sup> order streams have a 30m (20m additional)l extension to their exclusions and protection zones within 200m of a record (appendix 1) and unmapped streams require a 10m exclusion with no unmapped drainage line logging allowed within 200m of record (appendix 4, condition of harvest plan)
- B. Failure to illustrate at all (in part) and clearly illustrate forest owl protections zones on the harvest plan operational map, this is a breach of condition 3 documentation of the threatened species license (appendix 1) As a result these protection zones have been impacted by harvesting (breach of condition 6.9 of threatened species license (appendix 2) as the Forest owl protections of the first and second order streams east of dump 19 do not have Owl Protection zones shown at all (items 1,2 and 3 below), and other Owl Protection Zones within the compartments are not "adequately indicated" on the harvest plan operational map.

C. Areas of dispersible soil are not mapped on the harvest plan operational map (Environment Protection License Condition 11.2 (see appendix 3) there are I three areas of a sandy type soil associated with the conglomerate geology observed within the harvest area that have not been mapped as dispersible these are to the North west of dump 15 around and West of dump 16 and West of dump 19.

It's disappointing in Forestry Corporation's lack of care in the planning of this operation. In relation to the forest owl protection zones this is a disregard for protection of these areas in both the planning and harvest stages of this operation, this is all the more troublesome in the context that this operation is a "IFOA trial area" and this supposedly has been the most intensely scrutinized operations in the state by both forestry and the regulators, given this my findings do not bode well for the compliance of operations under the "remade" IFOA conditions.

Alleged Physical Breaches observed during my inspection conducted on January the 25<sup>th</sup> and the 26<sup>th</sup> locations of these positions are numbered on the map in fig 1 below.

Large forest owl protections (landscape) and area of intense logging east of dump 19

In regard to items 1, 2 and 3, below (trees cut with in owl protection zone and within a 1<sup>st</sup> order mapped stream exclusion) I present the following possibility's in regard explanation of responsibility for these breaches, either forestry corporations GPS tracking/mapping on the harvest machinery is not accurate enough to prevent breaches of license occurring or this breach is the result of a deliberate act by harvesting personnel.

- 0459594/6484870 tree cut and vegetation cleared 8.5 meters from a mapped drainage line, clearing within 10m of mapped drainage line. Also Tree cut and vegetation cleared 1.5m into Owl landscape protection (TSL condition 5.7 Riparian Habitat Protection o) and 6.9 Powerful Owl Ninox strenua, Masked Owl Tyto novaehollandiae, Barking Owl Ninox connivens c) and EPL schedule 4 DRAINAGE FEATURE PROTECTION FOR NATIVE FORESTS table1)
- 2. 0459569/6484879 tree cut at 9 meters from mapped drainage line also 1 meter in to Owl landscape protection. (TSL condition 5.7 Riparian Habitat Protection o) and 6.9 Powerful Owl Ninox strenua, Masked Owl Tyto novaehollandiae, Barking Owl Ninox connivens c) and EPL schedule 4 DRAINAGE FEATURE PROTECTION FOR NATIVE FORESTS table1)
- 0459535/6484877 tree cut at 9 meters from mapped drainage line also 1 meter in to Owl landscape protection. (TSL condition 5.7 Riparian Habitat Protection o) and 6.9 Powerful Owl Ninox strenua, Masked Owl Tyto novaehollandiae, Barking Owl Ninox connivens c) and EPL schedule 4 DRAINAGE FEATURE PROTECTION FOR NATIVE FORESTS table 1)



- 4. 0459582/6484866 sediment from snig track enters drainage line.
- 5. 0459561/6484869 sediment exits snig track (toward drainage line) snig, (track is un-drained for 40m at 13 degrees not a directly breach but a contributor to sediment flow)
- 6. 0459614/6484773 incised cut in snig track by a high water flow along track.
- 7. 0459618/6484744 snig track un-drained for 34m at 21 degrees (EPL 71 table 1 (25 m)
- 8. 0459595/6484724 snig track un-drained for 46 m at 13 degrees (not a breach but flows on to above breach)
- 9. 0459678/648798 tree felled 10m in too owl exclusion (6.9e) of TSL)
- 10. 0459681/6484779 sediment from snig track in item 7 and 8 entering second order stream



Above Snig track not properly drained (item 7)

- 11. 0459146/6484734 rock over hang with high potential as indigenous heritage site (north facing roomy overhang with sign of fire place) possible breach of IFOA aboriginal heritage conditions
- 12. 0459153/6485982 tree cut 12.5 meters from rocky out crop (TSL 5.11 b)
- 13. 0459153/6485980 tree cut 13.5 meters from rocky out crop (TSL 5.11 b)
- 14. 0459149/6485988 tree cut 12 meters from rocky out crop(TSL 5.11 b)
- 15. 0459171/6486056 tree cut in mapped rocky out crop (breach of conditions of harvest plan for exclusion zones)
- 16. 0459173/6486045 tree cut in mapped rocky out crop and incised snig track (breach of conditions of harvest plan for exclusion zones)
- 17. 459006/6484639 snig track though mapped rocky-out crop (Did this snig require a IFOA crossing permission from EPA?)



Above Rock overhang (item 11)

# Road drainage breaches

- 18. 0459475/6484754 drainage rollover not working because of inadequate construction.
- 19. 0459460/6484743 drainage roll over not working because of inadequate construction.
- 20. 0459436/6484734 drainage roll over not working because of inadequate construction.

- 21. 0459389/6484726 drainage roll over not working because of inadequate construction.
- 22. 0459152/6486090 150m of road un-drained for 150m at 9 degrees causing significant incised flow toward drainage line. EPL schedule 4 c) road drainage table1 road should be drained at 65m.



Road drainage (item 22)

Trees cut within 30m Giant Barred Frog stream.

Since the inception of the TSL conditions for golden tipped bat and stuttering frog forestry's mapping of unmapped streams has improved significantly so much so that that these so called "unmapped drainage lines" are now clearly and accurately being "mapped" on the harvest plan maps so to continue Harvest of these areas, Forestry are clearly over looking their real impact on these threatened species by harvesting these areas.

- 23. 0459805/6484524 tree cut 12 meters from drainage line.
- 24. 0459791/6484527 tree cut 11m from drainage line
- 25. 0459790/6484538 tree cut 15 m from DL
- 26. 0459781/6484546 tree cut 17m from DL

#### Stephens banded snake buffer.

My observation is that forestry have made no attempt to abide by this condition (6.6 a) all hollow bearing trees >60 cm DBH must be retained within 100m of record (see appendix 1).

There was no sign (marking or other) of protection of trees greater than 60cm DBH+. I did observe 6 stumps that measured over 78 cm and I allege that two of these in all likely hood would have had hollows present (given their size and extent of rot in the stump) and there for should have been protected from harvesting.

- 27. 0460368/6484824 tree cut 100cm diameter at stump height
- 28. 0460333/6484818 tree cut 87 cm at stump height

#### Others:

- 0460399/6484869 tree cut 80cm diameter at stump height (SH=60cm)
- o 0460424/6484821 tree cut 78 cm dia SH
- o 0460368/6484795 tree cut 80cm in dia SH
- 0460353/6484795 seed tree retained > 80cm DIA at DBH

o 0460414/6484759 tree cut 80 cm at stump height



100cm stump within the Stephens banded snake buffer (item 27)

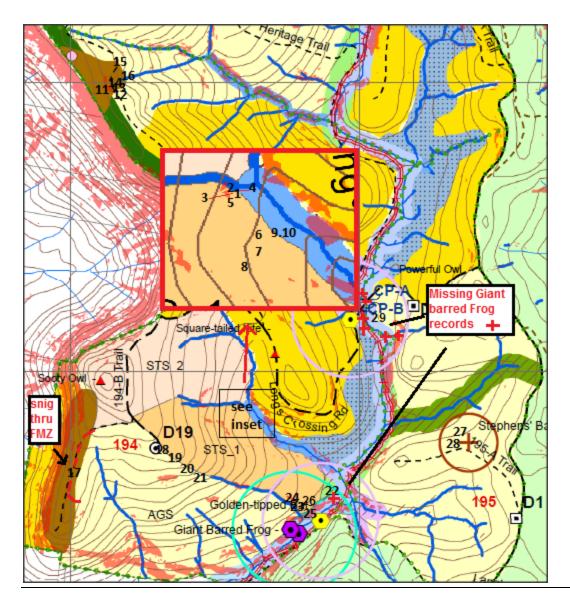
# Golden tipped bat exclusion.

29. 0460064/6485240 tree cut 22m from edge of embankment (SFO measured from incised channel) Clearing to 16m from top of embankment.

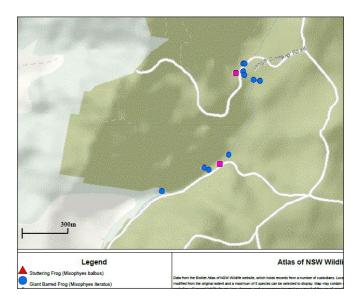
This is a clear case of forestry ignoring the top of "top of embankment" component of the TSL condition 6.20 a) (see appendix 1) when marking up this compartment.

To expand its my observation that forestry are measuring all exclusion zones in relation to all (suitable) streams in compartments I inspect this is especially relevant to first order streams as where the measurement is taken have can have dramatic outcome on the actual effectiveness of the exclusion in preventing pollution of waters. (Items 1,2 and 3 in this complaint are another example of this )





Above Fig 1 Harvest plan map show locations of alleged breaches numbered 1-29.



Above Fig 2 map showing all the Giant barred frog records affecting this operation.

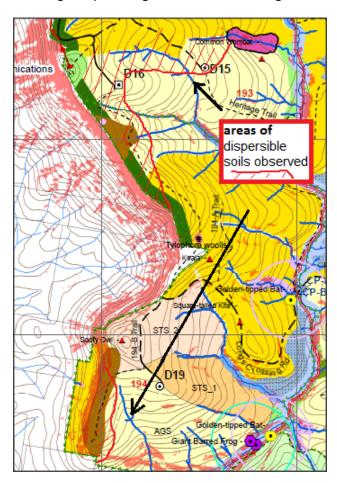


Fig 3 areas of dispersible soil observed.

Appendix 1.

Condition 3. Planning Documentation

a) SFNSW must prepare planning documentation that demonstrates that operational planning has taken account of the requirements of the conditions of this licence. This must include showing all exclusion zones, buffer zones and protection zones on the relevant harvesting plan operational map, except where the scale of the map does not allow small area features to be adequately represented; in which case the location of the zone should be adequately indicated. The harvesting plan operational map legend must, to the greatest extent practicable, indicate to which feature or species the exclusion or buffer zones relates.

# 6.3 Giant Barred Frog Mixophyes iteratus, Fleay's Frog Mixophyes fleayi, Stuttering Frog Mixophyes balbus

Where there is a record of *Mixophyes balbus, M. iteratus* or *M. fleayi* in a compartment or within 200 metres outside the boundary of the compartment, the following must apply:

- a) Exclusion zones of at least 30 metres wide must be implemented on both sides of all streams within 200 metres of the record.
- b) The width of exclusion zones must be measured from the top of the bank of the incised channel or, where there is no defined bank, from the edge of the channel.
- c) When ten of these sites for a particular species are recorded on SFNSW estate over a two year period separated by at least two kilometres within a 15 kilometres radius, SFNSW may apply to NPWS for a review of this condition.

#### 5.11 Rocky Outcrops and Cliffs

- a) Specified forestry activities are prohibited within areas of rocky outcrops and cliffs.
- b) In addition, exclusion zones of at least 20 metres wide must be implemented around all rocky outcrops more than 0.1 hectare (approx. 30 metres x 30 metres), and all cliffs.

#### 6.20 Golden-tipped Bat Kerivoula papuensis

Where there is a record of *Kerivoula papuensis* within a compartment or within 200 metres outside the boundary of the compartment, the following must apply:

- a) Exclusion zones at least 30 metres wide must be implemented on both sides of all first order streams and second order streams within a 200 metres radius of the record.
- b) The width of exclusion zones referred to in condition 6.20 (a) above must be measured from the top of the bank of the incised channel or, where there is no defined bank, from the edge of the channel.

### 6.6 Stephens' Banded Snake Holocephalus stephensii

Where there is a record of the Stephens' Banded Snake *Holocephalus stephensii* in a compartment or within 100 metres outside the boundary of the compartment, the following must apply:

- a) All hollow-bearing trees with a dbhob greater than 60 cm within 100 metres of the record/s must be retained;
- b) During harvesting operations, the potential for damage to these trees must be minimised by utilising directional felling techniques.

#### Appendix 2

# 6.9 Powerful Owl Ninox strenua, Masked Owl Tyto novaehollandiae, Barking Owl Ninox connivens

SFNSW has two options for protecting large forest owls in SFNSW estate. SFNSW must apply either the "Site Based Approach" or the "Landscape Approach".

- a) SFNSW must notify NPWS in writing within six months after the date of this licence which approach will be applied in each state forest.
- b) In general, SFNSW can choose to change from the Site Based Approach to the Landscape Approach after that date; however, SFNSW cannot change from the Landscape Approach to the Site Based Approach. SFNSW must notify NPWS of a change from the Site-based Approach to the Landscape Approach within ten working days of the change of approaches.
- c) Where a change from the Site Based Approach to the Landscape Approach has occurred, SFNSW should retain habitat previously retained in the Site Based Approach, where it is suitable habitat as defined in the Landscape Approach.
- d) Where information indicates that Greater Gliders occur at densities of more than one per hectare within any individual compartment (that is, a compartment identified by a compartment number and not a group of compartments) being planned for harvesting, and the compartment is within two kilometres of a Powerful Owl record, eight hollow-bearing trees per hectare must be retained within the net logging area of that compartment.
- e) The felling of trees across the boundary of an exclusion zone established under conditions 6.9.1 (b and h) and 6.9.2 (c) below is prohibited except where no more than six (6) trees containing timber logs are felled across the boundary in any 200 metre length of the boundary of the owl exclusion zones, whatever 200 metre length of boundary is considered.
- f) Condition 6.9 (e) is not breached where a tree is accidentally felled into an Owl exclusion zone. g) A tree that is accidentally felled into an Owl exclusion zone may be removed from the zone, but only if it contains a timber log. The tree may be removed even if the total number of trees removed in the harvesting operation concerned will, as a result, exceed the number calculated by applying the principle set out in condition 6.9 (e).

h) A tree that is felled into an Owl exclusion zone under condition 6.9 (e), or accidentally, may be removed only in accordance with the following rules:

i. the crown must be cut off from the trunk and left where it has fallen, except where the whole of the tree is lifted out of, or lifted and moved within, the zone using a mechanical harvester; ii. in removing the tree (or any logs into which it is cut), any disturbance to the ground and soil must be minimised as far as practicable.

#### TSL condition: 6.9.2 Large Forest Owls: Landscape Approach

(Note: The landscape approach attempts to ensure that a network of habitat is maintained within the area being planned. The landscape approach is most suitable for large forested areas, especially with numerous records of large forest owls. As part of this approach large areas of habitat are to be protected. Habitat to be retained is to be identified using habitat models. The condition provides a mechanism for apportioning habitat to be retained between the existing reserves and the production forest.) a) The planning area should be between 5,000 to 15,000 hectares in size. Smaller or larger planning areas should be avoided, but may be appropriate in particular circumstances. Where SFNSW uses smaller or larger planning areas, the justification for this must be clearly documented. This documentation must be kept on the relevant file and be made available on request by NPWS. b) The planning area can only contain public lands, private land must not be included. c) A minimum of 25% of the planning area must be retained as exclusion zones. Areas of statutory reserves can be used to meet the requirements of exclusion zones, where consistent with the requirements of condition 6.9.2 (d), (e) and (f) below. Other exclusion zones within SFNSW estate outside of statutory reserves (eg., high conservation value old growth forest, stream exclusion zones etc) can be used to meet the exclusion zone requirements, where consistent with the requirements of condition 6.9.2 (d), (e) and (f) below.

Appendix 3

#### EPL 11. Operational planning 11.2 In planning scheduled and non-scheduled forestry activities, State Forests must:

(a) take into account the matters identified in Schedule 2; and

(b) apply the soil erosion and water pollution hazard assessment model and identify the inherent hazard level of the compartment in accordance with Schedule 3; and

(c) identify whether there is a mass movement hazard in the compartment or roading area in accordance with Schedule 3; and

(d) identify whether there are any dispersible soils in the compartment or roading area in accordance with Schedule 3; and

(e) identify the seasonal restrictions in accordance with Schedule 3; and

(f) identify and adopt the suites of conditions contained within Schedule 4 which relate to each inherent hazard level, as well as those conditions in schedules 4 or 5 relating to or required to be developed for mass movement hazard, dispersible soils and seasonal restrictions; and

(g) identify site-specific conditions applying to the scheduled and non-scheduled forestry activities in accordance with schedules 2, 3, 4 and 5 of this licence.

Appendix 4

#### Copy from harvest plan: Boundary Type TSL Condition Number Prescription Name Prescription Summary

3, Machinery 6.03 Giant-barred or Stuttering Frog Mapped exclusion, 30 m buffer on mapped streams within 200 m of records and no UMDL within 200m of records. Revert to 10m UMDL EPL protection

Appendix 5

### TSL 5.7 Riparian Habitat Protection

a) Protection zones (hard) must be retained along the entire length of all streams and must have the minimum widths either side of the stream in accordance with Table 1. The width of the protection zone (hard) must be measured from the top of the bank of the incised channel or, where there is no defined bank, from the edge of the channel. Where there is no incised channel, the protection zone (hard) must be measured from the centreline of the drainage feature.

b) Protection zones (soft) must be retained along the entire length of all protection zones (hard) and must have a minimum width either side of the protection zone (hard) in accordance with Table 1. The width of a protection zone (soft) must be measured from the edge of the protection zone (hard) furthest from the stream.

c) The determination of stream order for the purposes of Table 1 must be carried out in accordance with Schedule 1 of this licence.

Table 1: Minimum protection zone (hard) and protection zone (soft) widths for streams (metres - measured along the ground surface).

Stream Order Protection zone (hard) Protection zone (soft)

1st Order 5 5

**2nd Order** 5 15

3rd Order 5 25

4th Order or greater 5 45

#### **Operations within protection zones (hard)**

d) Specified forestry activities, except road and snig track construction in accordance with conditions 5.7 (r to u) and road re-opening, are prohibited within the protection zone (hard).

- e) Trees must not be felled into the protection zone (hard)
- f) Condition 5.7 (e) is not breached where a tree is accidentally felled into the protection zone (hard).
- f1) A tree that is accidentally felled into a protection zone (hard) may be removed from that zone if it contains a timber log. For the avoidance of doubt, the whole tree may be removed even though the timber product that any part of the tree will produce is not a timber log.
- f2) The following rules apply to the removal of the accidentally felled tree:
- i. the crown must be cut off from the trunk and left where it has fallen unless the whole of the tree is lifted out of, or lifted and moved within, the zone using a mechanical harvester; ii. the wheels or tracks of any harvesting machinery used to remove the accidentally felled tree (or any logs into which it is cut) must remain outside the protection zone (hard). Where harvesting machinery has entered the adjoining protection zone (soft) to fell a tree within the net logging area it may also be used to remove the accidentally felled tree, but only if its wheels or tracks remain wholly within 5 metres of the boundary between the protection zone (soft) and the net logging area;
- iii. the wheels or tracks of harvesting machinery that is within a protection zone (soft) may not be moved or repositioned solely for the purpose of removing the accidentally felled tree. (In other words, they may be moved or repositioned only if this is necessary for a purpose related to accessing trees in the net logging area.) The restrictions on the operation of the harvesting machinery set out in condition 5.7 (p) (such as the requirement to use walkover techniques) apply to the operation of the machinery to remove the accidentally felled tree or logs into which it has been cut.
- g) SFNSW must document the date on which the tree was accidentally felled into the protection zone (hard) and its location.
- h) Harvesting machinery including mechanical harvesters must not enter the protection zone (hard), except for the construction and use of a road crossing or snig track crossing in accordance with conditions 5.7 (r to u) below.
- i) Trees located within the protection zone (hard) must not be felled, except for the purpose of removing vegetation that is in the area of a proposed road crossing or snig track in accordance with section 5.7 (r to u) below.

#### Operations within protection zones (soft)

- j) Specified forestry activities, except road and snig track construction in accordance with conditions 5.7 (r to u) and road re-opening, are prohibited within the protection zone (soft).
- k) Trees may be felled into a protection zone (soft).
- 1) Where a tree is felled into a protection zone (soft), then the crown must not be removed from the protection zone (soft) except where the whole of the tree is lifted out of, or lifted and moved within, the zone using a mechanical harvester.
- m) Harvesting machinery that has entered the protection zone (soft) for the purpose of felling a tree within the net logging area may also be used to remove a tree that has been felled into the protection zone (soft).
- n) However, the wheels or the tracks of the harvesting machinery may not (to any significant extent) be repositioned or moved solely for the purpose of removing the tree felled into the protection zone (soft). (In other words, they may be moved or repositioned only if this is also necessary for a purpose related to accessing trees in the net logging area under condition 5.7 (p).) The restrictions on the operation of the machinery set out in condition 5.7 (p) also apply to the operation of the machinery to remove the tree felled into the protection zone (soft).
- o) Trees located in a protection zone (soft) must not be felled, except for the purpose of removing vegetation that is in the area of a proposed road crossing or snig track in accordance with section 5.7 (r to u) below.
- p) Harvesting machinery is permitted to operate in a protection zone (soft) for the purposes of felling a tree within the net logging area that contains a timber log where:
- i. the technique of directional felling could not be used to fell the tree so that it falls outside the protection zone (soft) and within the net logging area;
- ii. the only practicable method of felling that tree so that it falls outside the protection zone (soft) is to enter the protection zone (soft) with harvesting machinery and fell the tree; iii. the tree is felled away from the protection zone (soft);
- iv. the wheels or tracks of harvesting machinery remain wholly within 5 metres of the boundary of the protection zone (soft) with the net logging area;
- v. the use of the harvesting machinery only involves the use of walkover techniques and minimises to the greatest extent practicable skewing of machine tracks; and
- vi. the harvesting machinery operates with any blades, rippers or similar attachments positioned so that they do not disturb the ground, vegetation and soil.
- q) Harvesting machinery must not operate in a protection zone (soft) when the soil is saturated.

#### **EPL DRAINAGE FEATURE PROTECTION FOR NATIVE FORESTS**

6. Filter strips, protection zones and operational zones must be retained along all drainage lines, prescribed streams and watercourses as required in Table 1 and Table1a. They must have a minimum width determined in accordance with Table 1 and Table1a.

Table 1: Minimum filter strip, protection zone and operational zone widths for mapped and unmapped drainage lines, prescribed streams and watercourses in native forests in Inherent Hazard Level 1 and 2 (metres - measured along the ground surface).

Stream Order Filter Strip Protection Zone Operational Zone

Unmapped 5 5 10 1st Order 5 5 10 2nd Order 5 15 10 3rd Order 5 25 10 4th Order or greater

5 45 10

Table 1a: Minimum filter strip and operational zone widths for mapped and unmapped drainage lines, prescribed streams and watercourses in native forests in Inherent Hazard Level 3 (metres - measured along the ground surface).

Stream Order Filter Strip Operational Zone

Unmapped 10 10 1st Order 10 10 2nd Order 20 10 3rd Order 30 10 4th Order or greater 50 10

7. The determination of stream order for the purposes of Table 1 and Table 1a must be carried in accordance with Part B of Schedule 2 of this licence.

8. Filter strips must be retained around all wetlands and swamps and must have a minimum width in accordance with Table 2.

#### C. ROAD DRAINAGE

- 7. Roads must be drained in accordance with the conditions of this schedule during and upon the completion of forestry activities.
- 8. Road drainage structures must be located, constructed and maintained in such a way that they will have sufficient capacity to convey the peak flow from a 1:5 year storm event. The determination of the peak flow must be carried out in accordance with Part C of Schedule 2.
- 9. Water flow or potential water flow along a road surface or table drains, or both must not exceed the distances specified in Table 1. The maximum distance of water flow or potential water flow along roads and table drains is determined by measuring the grade of the road and referring to the maximum distances specified in Table 1. (For example this could be achieved by one of the following techniques or a combination thereof:
- a) outfall drainage;
- b) relief pipes;
- c) mitre drains,
- d) crossbanks: and
- e) spoon drains)

Table 1: Maximum distance of water flow or potential water flow along road surfaces and table drains (metres).

Road Grade (degrees) Maximum

Distance (metres)

Road Grade

(degrees)

Maximum

Distance (metres)

1 250 8 70 2 200 9 65 3 150 10 60 4 125 11 55 5 100 12 50

6 90 13 45

7 80 14 & 15 40

#### DRAINAGE OF EXTRACTION TRACKS AND SNIG TRACKS

70. Snig track and extraction track drainage must be located and constructed to ensure that water flow or potential water flow does not occur on snig track or extraction track surfaces for distances exceeding those given in Table 3.

(For example this could be achieved by one of the following techniques, or a combination thereof:

- a) retain existing ground cover using walkover techniques;
- b) retain or cover track surface with slash and logging debris;
- c) construct or maintain track with outfall drainage; or
- d) constructed track drainage structures).
- 71. Where extraction tracks are used, existing groundcover must be retained by using walkover techniques, or cover the track surface with slash and logging debris. Where concentrated water flow or potential water flow occurs along bare ground in wheel ruts, State Forests must ensure that the distance of the water flow does not exceed those specified in Table 3.

Table 3: Maximum distance of water flow or potential water flow along snig track or extraction track surface (metres - measured along the ground surface).

Track Grade (degrees)

**Maximum Distance** 

(metres)

5 100

10 60

15 40

20 25

25 20 30 15

Table 3 may be interpolated to derive site-specific maximum spacings.

Lansdowne FCNSW/Statous-

IELD MONI	FIELD MONITORING – BOUNDARY	_	VT – Exclusion	FIELD MONITORING – BOUNDARY ASSESSMENT – Exclusion zone including wildlife clumps  IFOA Treatment: FCNSW EPA lead officer: L.Gvvvaa
tate Forest	State Forest: Lansdown	Q		Compartment: Start time Finish time
PA support	officer:	Harve	st operation s	EPA support officer:Harvest operation status Type of features:Type of features:
Location reference:	type waypoint on boundary	GPS  it waypoint on incursion	Photo reference ID	Details of field observations (nearest forestry operations; incursion; stumps inside; disturbance inside; stumps/snigs/disturbance near boundary, field marking of clumps)
A (start)	changed to		980 -	Stream  HI - unmapped to mapped  stream
A (finish) Length (m):	ž			C - 20
B (start)				
=	ř.			
B (finish) Length				
(m):			-	
C (start)	×			

Location reference:	Feature type	GPS waypoint on boundary	GPS waypoint on incursion	Photo reference ID	Details of field observations (nearest forestry operations; incursion; stumps inside; disturbance inside; stumps/snigs/disturbance near boundary, field marking of clumps)
D (start)					
D (finish)			,		
Length (m):					
E (start)					
E (finish)					
Length (m):					
F (start)					
F (finish)					
Length (m):					
G (start)				·	
G (finish) Length					
H (start)					
H (finish)					
Length					

start)	cation Featu ference: type
	ire
	GPS waypoint on boundary
	GPS waypoint waypoint on on incursion
	Photo Photo Details of field observations (nearest forestry operations; incursion; stumps inside; disturbance inside; stumps/snigs/disturbance near boundary, field marking of clumps)

Location Feature (	GPS wavpoint	GPS wavpoint	Photo	Details of field observations (nearest forestry operations; incursion; stumps inside; disturbance inside; stumps/snigs/disturbance
		on incursion	ID Conce	near boundary, field marking of clumps)
l (start)				
l (finish)				
Length (m):				
J (start)				
J (finish)				
Length (m):				
L (start)				
L (finish)				
Length (m):				
Total length (m) of boundary assessed	y assessed			OBSERVATIONS INCLUDING MORE DETAILS ABOUT INCURSION (SIZE, EXTENT OF DAMAGE/TYPE OF DAMAGE & ANY SENSITIVITIES OF SITE)
Total length (m) of incursions into "exclusion" zones	ns into "exclu	ision" zones	The state of the s	
Total number of different separate incursion	eparate incur	sion		
Number of trees felled in "exclusion" zones	exclusion" zor	nes de la companya d		
Number of trees felled across "exclusion" zones boundary	ss "exclusion	"zones boun	dary	
Estimated area (m2) disturbed inside "exclusion" zones	oed inside "ex	clusion" zon	<b>B</b> S	

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Difficulties/ease in field measuring:

Details of locations where forestry activities immediately outside EZ:

Details of locations where forestry activities in EZ area:

Observations about wildlife clumps (what were they protecting):