# Coastal Integrated Forestry Operations Approval – Conditions

### Consultation draft May 2018



## **Coastal Integrated Forestry Operations Approval - Conditions**

**Consultation draft** 

May 2018



© 2018 State of NSW and Environment Protection Authority

The State of NSW and Environment Protection Authority are pleased to allow this material to be reproduced in whole or in part for educational and non-commercial use, provided the meaning is unchanged and its source, publisher and authorship are acknowledged.

The NSW Environment Protection Authority (EPA) has compiled this document in good faith, exercising all due care and attention. No representation is made about the accuracy, completeness or suitability of the information in this publication for any particular purpose. The EPA shall not be liable for any damage which may occur to any person or organisation taking action or not on the basis of this publication. Readers should seek appropriate advice when applying the information to their specific needs.

All content in this publication is owned by the EPA and is protected by Crown Copyright, unless credited otherwise. It is licensed under the <u>Creative Commons Attribution 4.0 International (CC BY 4.0)</u>, subject to the exemptions contained in the licence. The legal code for the licence is available at <u>Creative Commons</u>.

The EPA asserts the right to be attributed as author of the original material in the following manner: © State of New South Wales and the Environment Protection Authority 2018.

The final Coastal Integrated Forestry Operations Approval (IFOA) will be subject to further revisions following a comprehensive legal review, legislative changes being undertaken as part of the NSW Government Forest Industry Roadmap, and the outcomes of public consultation.

Published by: **NSW Environment Protection Authority** 59 Goulburn Street, Sydney NSW 2000 PO Box A290, Sydney South NSW 1232 Phone: +61 2 9995 5000 (switchboard) Phone: 131 555 (NSW only - environment information and publications requests) Fax: +61 2 9995 5999 TTY users: phone 133 677, then ask for 131 555 Speak and listen users: phone 1300 555 727, then ask for 131 555 Email: info@epa.nsw.gov.au Website: www.epa.nsw.gov.au Report pollution and environmental incidents Environment Line: 131 555 (NSW only) or info@epa.nsw.gov.au See also www.epa.nsw.gov.au ISBN 978 1 925790 34 4 EPA 2018P0793 May 2018 Printed on environmentally sustainable paper

### Contents

CHA	PTER 1 – SCOPE AND INTERPRETATION	1
1.	Protocols	1
Divis	ion 1 – Interpretation of the approval	1
2.	Definitions	1
3.	General interpretation rules	1
4.	Outcome statements	1
5.	Protocols	1
6.	Qualifying notes and headings	1
7.	Most stringent condition applies	2
8.	Relationship of this approval to other documents	2
9.	Scale of assessment	2
10.	References to radius exclusion zones	2
Divis	ion 2 – Terms of the approval	2
11.	Duration of approval	2
12.	Area to which approval applies	2
13.	Forestry operations covered by this approval	3
Divis	ion 3 – Conditions of the approval	4
14.	Purpose of this Division	4
15.	Conditions of approval for the purposes of s.69P of the Forestry Act	4
16.	Terms of the biodiversity conservation licence under the <i>Biodiversity Conservation Act</i> 2016	5
17.	Terms of the environment protection licence under the <i>Protection of the Environment</i> Operations Act 1997	6
18.	Terms of the fisheries licence under the Fisheries Management Act 1994	6
Divis	ion 4 – Objectives of the approval	6
19.	Objectives of this approval	6
20.	Objectives of biodiversity conservation licence	7
21.	Objectives of environment protection licence	7
22.	Objectives of fisheries licence	7
Divis	ion 5 – General conditions of the approval	7
23.	Forestry operations to be carried out competently	7
24.	Compliance with approval	8
25.	Authorised persons and subcontractors	8
26.	Site-specific biodiversity conditions	8
27.	Special provisions for research activities	9
28.	Special provisions requiring a review or amendment to the approval	. 10

29.	Felling, pushing or removing trees to comply with the Work Health and Safety Act 2011	11
30.	Forest management zoning	11
31.	Small quantity authorisations	11
32.	Small quantity authorisation conditions for firewood collection	12
33.	Native forest biomaterial for use in electricity generation	12
CHAF	PTER 2 – ADMINISTRATIVE CONDITIONS	13
34.	Protocols	13
Divis	ion 1 – Registers	13
35.	Operations register	13
36.	Compliance register	13
37.	Telephone complaints line	13
38.	Complaints register	13
Divis	ion 2 – Annual plans and reports	13
39.	Annual plan of forestry operations	14
40.	Environment protection licence annual return	14
41.	Annual report on timber volumes	14
Divis	ion 3 – Notification of harm	15
42.	Notification of harm – biodiversity incident	15
43.	Notification of harm – pollution incident	16
44.	Written reports – threatened species or pollution incident	16
Divis	ion 4 – Records	17
45.	Management of records	17
46.	Operational records	17
47.	Provision of information and records to the EPA or DPI	17
48.	Public availability of documents	17
Divis	ion 5 – Notices	18
49.	Delivery of notice	18
CHAF	PTER 3 – PLANNING CONDITIONS	19
50.	Protocols	19
Divis	ion 1 – Landscape level protections	19
51.	Local landscape area	19
Divis	ion 2 – Distribution of harvesting across the landscape	19
52.	Intensive harvesting limits	20
53.	Selective harvesting limits	21
54.	Mixed intensity harvesting limits	21
55.	Eden alternate coupe logging limits	21

Divis	ion 3 – Environmentally Significant Areas (ESAs)	22
56.	Category 1 ESAs and category 2 ESAs	22
57.	Wildlife habitat clumps in the local landscape area	23
58.	High conservation value old growth forest, rainforest, large forest owl landscapes and ridge and headwater habitat on unassessed land	24
59.	Ridge and headwater habitat	24
Divis	ion 4 – Pre-operational planning	24
60.	Pre-operational plans	24
CHA	PTER 4 – OPERATIONAL PLANNING AND IMPLEMENTATION	26
61.	Protocols	26
Divis	ion 1 – Planning assessments and surveys	26
62.	Road design and planning	26
63.	Targeted flora and fauna surveys	27
64.	Broad area habitat searches	27
65.	Incidental records of species and habitat features requiring protection	29
Divis	ion 2 – Habitat protection	29
66.	Heath and scrub	29
67.	Rocky outcrops and cliffs	29
68.	Threatened ecological communities	29
69.	Coarse woody debris protection	29
Divis	ion 3 – Retained trees	30
70.	Tree retention clumps	30
71.	Retained trees	30
72.	Koala browse tree retention (North)	31
Divis	ion 4 – Species-specific conditions for fauna	31
73.	Rufous Scrub-bird, Atrichornis rufescens	32
74.	Albert's Lyrebird, <i>Menura alberti</i>	32
75.	Marbled Frogmouth, Podargus ocellatus	32
76.	Philoria species and Pouched Frog, Assa darlingtoni (Southern meta-population)	33
77.	Booroolong Frog, Litoria booroolongensis (South)	33
78.	Northern Corroboree Frog, Pseudophyrne pengilleyi	34
79.	Hastings River Mouse, Pseudomys oralis	34
80.	Spotted-tailed Quoll, Dasyurus maculatus	34
81.	Bare-nosed Wombat, Vombatus ursinus	34
82.	Koala	34
83.	Bird nests and roosts	35
84.	Threatened frog – general	36

85.	Bat tree roost protection	. 36
86.	Flying-fox camps	. 36
87.	Subterranean bat roosts	.36
Divisi	ion 5 – Species-specific conditions for flora	.37
88.	Flora requiring the protection of all individuals	. 37
89.	Flora requiring the protection of mature individuals	. 37
90.	Flora road management plan	. 37
Divisi	ion 6 – Species management plans	.38
91.	Species management plans	. 38
Divisi	ion 7 – Burning	.38
92.	General obligations on burn planning	. 38
93.	Limits on the timing of burns	. 39
94.	Limits on the application of fire during pre-harvest burns and post-harvest burns	. 39
CHAF	PTER 5 – OPERATING CONDITIONS	.41
95.	Protocols	.41
Divisi	ion 1 – Overarching compliance obligations	.41
96.	Operational compliance	.41
97.	Plant and equipment	.41
Divisi	ion 2 – Management of ESAs	.42
98.	Category 1 ESAs	.42
99.	Category 2 ESAs	.42
100.	Accidentally felled trees	.43
101.	ESAs associated with drainage features	.43
Divisi	ion 3 – Riparian protection	.43
102.	Riparian exclusion zones	.43
103.	Riparian exclusion zones for ordered drainage features	.45
104.	Ground protection zones	.45
105.	Saturated soils	.46
106.	Wetlands	.46
Divisi	ion 4 – Roads	.46
107.	Roads	.47
108.	Drainage of roads	.47
109.	Wet weather restrictions	.47
110.	Road crossings	. 47
Divisi	ion 5 – Tracks	.48
111.	Drainage of tracks	.48
112.	Wet weather restrictions	.49

113. Track crossings	49
Division 6 – General soil and water operating requirements	50
114. Log dumps, borrow pits and gravel pits	50
115. Seasonality restrictions	51
116. Debris and spoil management	51
117. Inherent hazard level 4	51
118. Waste	52
<b>119.</b> Dust	52
Division 7 – Burning operations	52
<b>120.</b> Burning	52
CHAPTER 6 – MAPPING	53
121. Protocols	53
122. Identifying operational boundaries	53
123. Spatial datasets	53
124. Field mapping	54
125. Species data transfer to NSW BioNet	54
CHAPTER 7 – REGENERATION	55
126. Protocols	55
127. Regeneration	55
CHAPTER 8 – MONITORING CONDITIONS	56
128. Protocols	56
<b>129.</b> Monitoring program	56
SCHEDULE 1	57
130. Words and headings	57
131. Specific references	57
132. Register of protocols	58
SCHEDULE 2: REQUIREMENTS FOR FORESTRY OPERATIONS – HARVESTING	
	61
SCHEDULE 3: SPECIFIED CONDITIONS APPLYING TO RELEVANT LICENCES.	64

### **CHAPTER 1 – SCOPE AND INTERPRETATION**

#### 1. Protocols

1.1 The following *protocols* are referenced in Chapter 1:

Protocol
Protocol 4: Pre-operational plans
Protocol 5: Approvals for restricted activities
Protocol 27: Threatened ecological communities
Protocol 31: Species covered by the approval
Protocol 33: Work health and safety and accidentally felled trees
Protocol 34: Spatial datasets
Protocol 39: Definitions

### **Division 1 – Interpretation of the approval**

#### 2. Definitions

2.1 In this *approval* there are defined words and phrases. The definitions are set out in **Protocol 39: Definitions**. Where a defined word or phrase is used, it is printed in bold italics.

#### 3. General interpretation rules

3.1 This *approval*, including each *protocol*, are to be interpreted in accordance with **Part 1** of **Schedule 1**.

#### 4. Outcome statements

- 4.1 This *approval* must be interpreted in a manner that is consistent with achieving and giving effect to the *outcome statements*.
- 4.2 The *protocols* must be interpreted in a manner that is consistent with achieving and giving effect to the *outcome statements*.

#### 5. Protocols

- 5.1 *FCNSW* (Forestry Corporation of NSW) must comply with any applicable *protocol* where required by this *approval* or by another *protocol*.
- 5.2 A register of each applicable *protocol* is in **Part 2** of **Schedule 1**.

#### 6. Qualifying notes and headings

6.1 In this *approval*, including each *protocol*, headings, notes and *outcome statements* are provided to assist understanding and interpretation. They do not otherwise form part of this *approval* and are not on their own enforceable.

#### 7. Most stringent condition applies

- 7.1 If in a specific circumstance or location, more than one requirement of this *approval* or a *protocol* applies, then:
  - (a) the most stringent of the requirements must be complied with; or
  - (b) **FCNSW** must seek advice in writing from the **EPA** (NSW Environment Protection Authority) on what requirement must be applied.

#### 8. Relationship of this approval to other documents

- 8.1 Where there is an inconsistency or ambiguity between any term of this *approval* and any other document with which this *approval* requires compliance, then:
  - (a) the terms of this *approval* prevail to the extent of the inconsistency or ambiguity; and
  - (b) **FCNSW** must provide written notice to both the **EPA** and **DPI** (NSW Department of Primary Industries) within 15 days of becoming aware of the inconsistency or ambiguity.
- 8.2 Nothing in this condition authorises the carrying out of a *forestry operation* in breach of this *approval* or releases, waives, limits or reduces a duty or requirement of this *approval*.

#### 9. Scale of assessment

9.1 For all *forestry operations* that occur at a *coupe* scale, references in this *approval* that refer to *compartment*, should be applied to the *coupe* unless otherwise specified in this *approval*.

#### 10. References to radius exclusion zones

10.1 Where a condition of this *approval* refers to a radius *exclusion zone*, the *exclusion zone* must be centred on the *record*, *species* or *habitat feature* it is intending to protect, unless otherwise stated by this *approval*.

### **Division 2 – Terms of the approval**

#### **11.** Duration of approval

- 11.1 This *approval* commences on [date to be inserted].
- 11.2 This *approval* has effect for a period of 20 years from the *commencement date*, unless otherwise revoked by the *Ministers*.

#### 12. Area to which approval applies

- 12.1 This *approval* applies to *State Forest* and other *Crown-timber land* within the *Coastal IFOA Region*.
- 12.2 This *approval* does not apply to and does not authorise any *forestry operations* in:
  - (a) any land that is part of the *National Park Estate* or conservation areas, namely:
    - i. a wilderness area declared under the Wilderness Act 1987;
    - ii. land reserved under the *National Parks and Wildlife Act 1974* or acquired by the Minister administering that Act under Part 11 of the Act;
    - iii. any land dedicated or set apart as a flora reserve under the Forestry Act 2012; or

- iv. any land dedicated or reserved under the *Crown Lands Act 1989* or the *Crown Land Management Act 2016* for similar public purposes for which land is reserved, declared or listed under other Acts referred to in this condition;
- (b) any land classified as *Forest Management Zone* 1 in accordance with the document *Managing our Forests Sustainably: Forest Management Zoning in NSW State Forests* (State Forests of NSW, December 1999) and as mapped in the *spatial dataset* titled 'ForestManagementZones';
- (c) any land that is an *authorised plantation* within the meaning of the *Plantations and Reafforestation Act 1999*; or
- (d) any land that the *Ministers* have agreed this *approval* may be amended to exclude its application to, that:
  - i. has been classified as Forest Management Zone 2 or Forest Management Zone 3A in accordance with the document Managing our Forests Sustainably: Forest Management Zoning in NSW State Forests (State Forests of NSW, December 1999) and as mapped in the spatial dataset titled 'ForestManagementZones'; or
  - ii. forms part of, or comprises, an area of land proposed as wilderness and has been considered under Section 7 of the *Wilderness Act 1987* as being eligible (but for this *approval*) for identification as wilderness;
- (e) any land shown by diagonal hatching on a map referred to in **Part 3** of **Schedule 1**.

#### 13. Forestry operations covered by this approval

13.1 The *forestry operations* authorised by this *approval*, subject to the *forestry operations* being carried out in accordance with this *approval*, are:

#### (a) *harvesting operations*:

- i. that are either:
  - a. selective harvesting for the production of timber;
  - alternate coupe logging in the Eden alternate coupe logging zone, so long as it is not used for the sole purpose of producing timber for fencing, sleepers, firewood or craftwood; or
  - c. *intensive harvesting* in the *intensive harvesting zone*, so long as it is not used for the sole purpose of producing timber for fencing, sleepers, firewood or craftwood; and
- ii. that comply with the timber specifications in Part 1 of Schedule 2; and
- iii. that comply with the limits specified in **Table 8** of **Schedule 2** that:
  - a. are carried out in an area specified in Table 8 of Schedule 2; and
  - b. comply with the criteria specified in Table 8 of Schedule 2 for that area; and
- iv. that are carried out in an area where the maximum volume of *timber product* specified in **Table 8** of **Schedule 2** for that area has not been met or exceeded in the financial year in which the *harvesting operations* are carried out; and
- v. that do not exceed 2200 hectares of *State Forest* or other *Crown-timber land* subject to *intensive harvesting* in any financial year; and

- vi. where the combined area of all selective harvesting, intensive harvesting and alternate coupe logging per financial year in a management zone does not exceed the maximum annual harvest area limit, and where the portion of that combined area that is subject to intensive harvesting in that financial year does not exceed half of that maximum annual harvest area limit;
- (b) roading;
- (c) forest products operations conducted within 18 months of the completion of harvesting operations covered by this approval;
- (d) **burning operations** if:
  - i. *FCNSW* have nominated that this *approval* will apply as referenced in the *operational plan* prepared in accordance with **Protocol 4: Pre-operational plans**; and
  - ii. it is a *pre-harvest burn* conducted within one year before the commencement of *harvesting operations* covered by this *approval*, or within such other period as approved under condition 28.3 of the *approval* and Protocol 5: Approvals for restricted activities; or
  - iii. **post-harvest burn** conducted within two years after the **completion** of **harvesting operations** covered by this **approval**;

Note: if burning operations are not nominated to apply to this approval, the requirements of the Rural Fires Act 1997 and the Bush Fire Environmental Assessment Code must be applied.

- (e) the following activities where the purpose is to promote *regeneration* within the area to which this *approval* applies:
  - i. mechanical soil disturbance;
  - ii. *replanting*;
  - iii. seeding; or
  - iv. activities prescribed by a *regeneration rehabilitation plan* as approved by the *EPA*.

### **Division 3 – Conditions of the approval**

<u>Consultation note</u>: Licence and legislation references in this part of the approval will be updated following consultation to reflect any changes to native forestry legislation being prepared as part of the series of regulatory reforms outlined in the NSW Forest Industry Roadmap.

#### 14. Purpose of this Division

- 14.1 The purpose of this Division is to:
  - (a) set out the conditions of this *approval* that have effect as *Forestry Act Conditions*; and
  - (b) set out the terms of each of the licences specified in section 69T (1) of the *Forestry Act*, which terms have effect as each of those licences (and the conditions of those licences) respectively.

#### 15. Conditions of approval for the purposes of s.69P of the Forestry Act

15.1 This *approval* contains the conditions subject to which the *forestry operations* are to be carried out.

- 15.2 The conditions of this *approval* that have effect as *Forestry Act Conditions*, are set out in:
  - (a) those conditions specified for the Forestry Act Conditions in Schedule 3; or
  - (b) the requirements of this **Chapter 1** and **Protocol 39: Definitions** to the extent that they relate to the application and interpretation of the terms described in this condition.

#### 16. Terms of the biodiversity conservation licence under the Biodiversity Conservation Act 2016

- 16.1 The terms of the licence under the **BC** Act are set out in:
  - (a) those conditions specified for the *biodiversity conservation licence* in Schedule 3; or
  - (b) the requirements of this **Chapter 1** and in **Protocol 39: Definitions** to the extent that they relate to the application and interpretation of the terms described in this condition; and
  - (c) have effect as a licence (and the conditions of a licence) granted under the **BC Act**.
- 16.2 The *biodiversity conservation licence* authorises *FCNSW* and any *authorised person*, to carry out any *forestry operation* in accordance with the *approval* that is likely to result in one or more of the following:
  - (a) *harm* to any *protected animal*;
  - (b) *harm* to any *animal* that:
    - i. is, or is part of a *threatened species* or *threatened ecological community*; and
    - ii. is listed or considered by Protocol 31: Species covered by the approval or Protocol 27: Threatened ecological communities;
  - (c) the *picking* of any *protected plant*; or
  - (d) *harm* to any *plant* that:
    - i. is a threatened species or threatened ecological community; and
    - ii. is listed or considered by Protocol 31: Species covered by the approval or Protocol 27: Threatened ecological communities;
  - (e) damage to habitat (other than a declared area of outstanding biodiversity value) of any of the following which is listed or considered by Protocol 31: Species covered by the approval or Protocol 27: Threatened ecological communities:
    - i. protected animal;
    - ii. threatened species; or
    - iii. threatened ecological community.
- 16.3 The *biodiversity conservation licence* does not authorise *FCNSW* or any *authorised person* to carry out any *forestry operation* that is likely to result in one or more of the following:
  - (a) damage to a declared area of outstanding biodiversity value;
  - (b) *harm* to an *animal* or the *picking* of a *plant* that is part of a *threatened ecological community* that is not described in **Protocol 27: Threatened ecological communities**; or

(c) *harm* or to an *animal* or *picking* of a *plant* that is an extinct species or a species extinct in the wild, or part of a *collapsed ecological community* listed in Schedule 3 of the *BC Act*.

Note: Failure to comply with the approval is an offence under section 2.14 (4) of the Biodiversity Conservation Act 2016.

- 17. Terms of the environment protection licence under the *Protection of the Environment Operations* Act 1997
- 17.1 The terms of the licence under the **POEO Act** are set out in:
  - (a) those conditions specified for the environment protection licence in Schedule 3; or
  - (b) the requirements of this **Chapter 1** and in **Protocol 39: Definitions** to the extent that they relate to the application and interpretation of the terms described in this condition; and
  - (c) have effect as a licence (and the conditions of a licence) granted under the **POEO Act**.
- 17.2 The *environment protection licence* authorises *FCNSW* and any *authorised person* for the purposes of the *POEO Act* to carry out any *forestry operation* in accordance with the *approval* that is a *scheduled* or *non-scheduled* forestry operation.
- 17.3 For the purposes of section 56 of the **POEO Act** the **environment protection licence** applies to the **premises**.
- 17.4 Except as may be expressly permitted in any other condition of the *environment protection licence*, a *forestry operation* must not *pollute waters* within the meaning of Section 120 of the *POEO Act*.

#### 18. Terms of the fisheries licence under the Fisheries Management Act 1994

- 18.1 The terms of the licence under Part 7A of the *FM Act* are set out in:
  - (a) those conditions specified for the *fisheries licence* in Schedule 3; or
  - (b) the requirements of this **Chapter 1** and in **Protocol 39: Definitions** to the extent that they relate to the application and interpretation of the terms described in this condition; and
  - (c) have effect as a licence (and the conditions of a licence) granted under Part 7A of the *FM Act*.
- 18.2 The *fisheries licence* authorises *FCNSW* and any *authorised person* to carry out any *forestry operation* in accordance with the *approval* that is likely to result in one or more of the following:
  - (a) harm to a threatened species, population or ecological community;
  - (b) damage to a *critical habitat*; and
  - (c) damage to a *habitat* of a *threatened species*, *population or ecological community*.

### **Division 4 – Objectives of the approval**

<u>Consultation note</u>: Licence and legislation references in this part of the approval will be updated following consultation to reflect any changes to native forestry legislation being prepared as part of the series of regulatory reforms outlined in the NSW Forest Industry Roadmap.

#### 19. Objectives of this approval

19.1 The objectives of this *approval* are:

- (a) the integration of regulatory regimes for:
  - i. environmental planning and assessment;
  - ii. the protection of the environment; and
  - iii. threatened species conservation; and
- (b) the implementation and monitoring of the *Principles of Ecologically Sustainable Forest Management (ESFM)* as they relate to *forestry operations*.

#### 20. Objectives of the biodiversity conservation licence

- 20.1 The objectives of the *biodiversity conservation licence* are:
  - (a) to set out the minimum measures required to be implemented to protect species, communities and their *habitats* from the impacts of *forestry operations*;
  - (b) to set out multi-scale protection measures that ensures sufficient and adequate *habitat* is provided at the site, *local landscape area*, and *management zone* scales;
  - (c) to set out measures for species or communities that require specific measures to ensure *habitat* is protected and maintained around known occurrences; and
  - (d) to ensure the ongoing monitoring, evaluation, reporting and improvement of the *biodiversity* conservation licence conditions to ensure its effectiveness in achieving the objectives of the approval and relevant outcome statements.

#### 21. Objectives of the environment protection licence

- 21.1 The objectives of an *environment protection licence* are:
  - (a) to ensure that practical measures are taken to protect the aquatic environment and *waters* from the impacts of *water pollution* caused by *forestry operations*; and
  - (b) to ensure the ongoing monitoring, evaluation, reporting and improvement of the *environment protection licence* conditions to ensure its effectiveness in achieving the objectives of the *approval* and relevant *outcome statements*.

#### 22. Objectives of the fisheries licence

- 22.1 The objectives of a *fisheries licence* are to:
  - set out the minimum measures required to be implemented to protect *threatened species*, populations, communities and *habitats* from the impacts of *forestry operations* and *associated activities*; and
  - (b) ensure the ongoing monitoring, evaluation, reporting and improvement of the *fisheries licence* conditions to ensure its effectiveness in achieving the objectives of the *approval* and relevant *outcome statements*.

### **Division 5 – General conditions of the approval**

#### 23. Forestry operations to be carried out competently

- 23.1 Every *forestry operation* must be planned, implemented and conducted:
  - (a) in accordance with the conditions of this *approval*;

- (b) in a competent manner; and
- (c) by a *suitably qualified person* and where relevant comply with the specific requirements in **Protocol 6: Suitably qualified persons training and experience.**

#### 24. Compliance with approval

24.1 *Forestry operations* covered by this *approval* must be carried out in accordance with this *approval*, including in accordance with any relevant *pre-operational plan*, during and at *completion* of a *forestry operation* in an *operational area*.

#### 25. Authorised persons and subcontractors

- 25.1 *FCNSW* must take all reasonable steps to ensure that each *authorised person* complies with this *approval*.
- 25.2 When *FCNSW* contracts any component of a *forestry operation* (in whole or part) to a third party, the contract must include a requirement that:
  - (a) the contractor must comply with this *approval*; and
  - (b) where there is an inconsistency or ambiguity between the contract and the conditions of this *approval*, the conditions of the *approval* prevail.

#### 25.3 **FCNSW** must:

- (a) provide every *authorised person* with ongoing information and training about their responsibilities under this *approval*;
- (b) take necessary actions to ensure that every *authorised person* understands the conditions of this *approval* that apply to any *forestry operation* prior to their involvement in any *forestry operations*;
- (c) ensure that when carrying out a *forestry operation,* every *authorised person* is both:
  - i. adequately supervised; and
  - ii. adequately monitored;
- (d) record the particulars of all supervisory and monitoring arrangements.

#### 26. Site-specific biodiversity conditions

- 26.1 A *forestry operation* must not commence or must immediately cease in an *operational area* if, prior to or during a *forestry operation*, any of the following are identified or recorded within:
  - (a) 100 metres of an *operational area*:
    - i. any *threatened species* other than those listed in **Part 1, 2 or 3** of **Protocol 31: Species covered by the approval**; or
    - any *species* for which a preliminary determination has been made under Part 4, Division 3 of the *BC Act* to support a proposal to list the species as a *threatened species*; or
    - iii. any *species* for which a provisional listing has been made under Part 4, Division 4 of the *BC Act*, or

- iv. any **species** for which **FCNSW** has received a written notification that the **species** is new to science, and is eligible for listing as a **threatened species**;
- v. any extinct species or species extinct in nature;
- (b) five kilometres of an **operational area**, if there is a **record** or observation of an Eastern Quoll, Red-tailed Black Cockatoo, *Litoria piperata* or *Litoria castanea*.
- 26.2 If any *species*, *records* or observations described in condition 26.1(a) or 26.1(b) are identified or recorded, *FCNSW* must apply in writing to the *EPA* to obtain a *site-specific biodiversity condition* in accordance with condition 31.3 of **Protocol 31: Species covered by the approval**.
- 26.3 The *forestry operation* must not commence, or recommence, in the *operational area* identified in condition 26.1 until:
  - (a) a *site-specific biodiversity condition* has been obtained from the *EPA* for either the *record*, site or *species* and provided to *FCNSW*; or
  - (b) the **EPA** has otherwise provided written notice to **FCNSW** authorising the commencement or recommencement of the **forestry operation** in that area.
- 26.4 The *forestry operation* must be carried out in accordance with any *site-specific biodiversity condition* issued by the *EPA*.
- 26.5 A *site-specific biodiversity condition* previously issued by the *EPA* applies to the *record* or *records* of the *species* during any subsequent *forestry operation* applicable to the *site-specific biodiversity condition* unless:
  - (a) **Protocol 31: Species covered by the approval** has been amended to include the *species* in Part 1, 2 or 3 of condition 31.2 of that *protocol*; or
  - (b) the **EPA** has approved and issued **FCNSW** an alternative **site-specific biodiversity condition** for the **record** or **records** concerned.
- 26.6 Where a *site-specific biodiversity condition* previously issued by the *EPA* applies to the *record* or *records* of the *species*, then condition 26.1, 26.2 and 26.3 do not apply.

#### 27. Special provisions for research activities

- 27.1 If a *research activity* is intended to be undertaken that is inconsistent with the conditions of this *approval*, then prior to commencing any *forestry operations*:
  - (a) a report must be provided to the *EPA* in accordance with **Protocol 5: Approvals for** restricted activities;
  - (b) a *site-specific research condition* must be obtained from the *EPA* that:
    - i. specifies the conditions of the *approval* that are not required to be complied with for the duration of the *research activity*, or as specified by the *EPA*; and
    - ii. specifies *site-specific research conditions* that must be implemented in the *research activity area* for the duration of the *research activity*, or as specified by the *EPA*.
- 27.2 Where the *EPA* has approved a *research activity* and issued a *site-specific research condition*:
  - (a) the *forestry operation* must be carried out in accordance with the *site-specific research condition* issued by the *EPA*; and

- (b) unless otherwise specified in the *site-specific research condition*, all other conditions of the *approval* must be complied with.
- 27.3 At the *completion* of the approved *research activity*, any subsequent *forestry operation* in the *research activity area* must be implemented in accordance with the conditions of this *approval*.

#### 28. Special provisions requiring a review or amendment to the approval

- 28.1 Notwithstanding that the *Ministers* may exercise their powers under the *Forestry Act* to amend this *approval* at any time, an outcome, condition or multiple conditions of the *approval* must be reviewed if either the *EPA*, *FCNSW* or *DPI* demonstrate that:
  - (a) condition(s), objectives or outcomes are not being consistently achieved during the implementation of this *approval*;
  - (b) the practical application or enforcement of a condition(s) results in the consistent inability to effectively implement, or regulate, it;
  - (c) new information, an alternative method, procedure, technique or approach to a condition(s) would achieve an improved outcome; or
  - (d) the monitoring program under Chapter 8 of the approval identifies, or considers, the conditions are not effective or not delivering the intended objectives or outcomes of this approval or a condition.
- 28.2 A review under condition 28.1 must:
  - (a) consider all available information; and
  - (b) within six months of being initiated, or as otherwise approved by the *EPA*, result in:
    - i. a report outlining the outcome of the review, if it is agreed that no changes are to be made to this *approval*; or
    - ii. an amendment(s) to a *protocol*; or
    - iii. a recommendation for amendment(s) to this *approval* being made to the *Ministers*.
- 28.3 If applying a condition of this *approval* at a specific site would result in a perverse environmental outcome, or if in a specific and unique circumstance *FCNSW* would not be able to comply with the conditions of this *approval*, *FCNSW* can:
  - (a) submit a report to the *EPA* in accordance with **Protocol 5: Approvals for restricted** activities; and
  - (b) obtain a *site-specific operating condition* from the *EPA* prior to commencing any *forestry operation* that:
    - i. specifies the conditions of the *approval* that are not required to be complied with for the duration of the *forestry operation* at a specific site, or as specified by the *EPA*; and
    - ii. specifies *site-specific operating conditions* that must be implemented at the specific site for the duration of the *forestry operation* in that area, or as specified by the *EPA*.
- 28.4 Where the **EPA** has issued **FCNSW** a site-specific operating condition:
  - (a) the *forestry operation* must be carried out in accordance with the *site-specific operating condition* issued by the *EPA*; and

- (b) unless otherwise specified in the *site-specific operating condition*, all other conditions of the *approval* must be complied with.
- 28.5 Any subsequent *forestry operation* in the area to which the *site-specific operating condition* applies must be implemented in accordance with the conditions of this *approval*, unless otherwise stated in the *site-specific operating condition*.
- 29. Felling, pushing or removing trees to comply with the Work Health and Safety Act 2011
- 29.1 *FCNSW* may only fell, push or remove *dead standing trees*, trees, or vegetation more than three metres inside any *ESA* (Environmentally Significant Area) or within any *ESA* associated with a *threatened species* if:
  - (a) such felling, pushing or removing is necessary in order to comply with the WHS Act, and
  - (b) **FCNSW** ensures that it complies with:
    - i. documentation and notification requirements in **Protocol 33: Work health and safety** and accidentally felled trees and **Protocol 5: Approvals for restricted activities** prior to any felling, pushing or removing; and
    - ii. all other requirements for assessment and approval of the felling, pushing or removing contained in any applicable legislation.
- 29.2 Nothing in this *approval* limits *FCNSW's* obligations under the *WHS Act* or requires *FCNSW* to breach its obligations under the *WHS Act*.

#### 30. Forest management zoning

- 30.1 In carrying out, or authorising the carrying out of, any *forestry operation* in *State Forests*, *FCNSW* must give effect to the document entitled, *Managing our Forests Sustainably: Forest Management Zoning in NSW State Forests* (State Forests of NSW, December 1999).
- 30.2 Any amendment to the following must be made in accordance with the process detailed in **Protocol 34: Spatial datasets**:
  - (a) a zone set out in the document *Managing our Forests Sustainably: Forest Management Zoning in NSW State Forests* (State Forests of NSW, December 1999); or
  - (b) the *spatial dataset* called 'ForestManagementZones' as held by *FCNSW*.

#### 31. Small quantity authorisations

- 31.1 A *small quantity authorisation* issued by *FCNSW* under section 45 of the *Forestry Act* must:
  - (a) impose a condition of the *small quantity authorisation* that prohibits the removal of *timber products* and *forest products* from *ESAs*;
  - (b) contain a map clearly identifying the location of any ESA in the area covered by the small quantity authorisation where the removal of timber products and forest products is prohibited; and
  - (c) ensure the conditions of the *small quantity authorisation* are complied with.
- 31.2 In issuing any *small quantity authorisations*, *FCNSW* must:
  - (a) assess the cumulative impacts of issuing *small quantity authorisations* in each *operational area*; and

(b) grant and impose conditions on all *small quantity authorisations* to ensure practical steps are taken to minimise any cumulative impacts of *forestry operations* authorised by *small quantity authorisations* in that *operational area*.

#### 32. Small quantity authorisation conditions for firewood collection

- 32.1 Firewood may only be collected from an area that is:
  - (a) within 20 metres of either side of a *road*, as measured from the outer edge of the *road surface*; or
  - (b) within 20 metres of the outer edge of a *log dump*.
- 32.2 Only timber that has fallen or has already been felled may be collected.
- 32.3 Timber with a diameter greater than 40 centimetres must not be collected or damaged.
- 32.4 Any part of a tree or log of any diameter that contains a hollow(s) of any diameter must not be collected or damaged.

#### 33. Native forest biomaterial for use in electricity generation

- 33.1 *Native forest biomaterial* for use in electricity generating works must only be sourced from areas subject to *harvesting operations* covered by this *approval* in the previous 18 months.
- 33.2 Records of *native forest biomaterial* sourced from *harvesting operations* must be kept, and submitted to the *EPA*, in accordance with **Chapter 2 Division 2** of this *approval*.

### **CHAPTER 2 – ADMINISTRATIVE CONDITIONS**

#### 34. Protocols

34.1 The following *protocols* are referenced in Chapter 2:

Protocol		
Protocol 1: Registers		
Protocol 2: Annual plan of forestry operations		
Protocol 3: Operational tracking		
Protocol 35: Data and information management		

#### Outcome statement for Chapter 2 of this approval

Transparent, comprehensive and accessible information and records are maintained relating to forestry operations covered by this approval.

### **Division 1 – Registers**

#### 35. Operations register

- 35.1 *FCNSW* must keep and maintain an *operations register* in accordance with condition 1.2 of **Protocol 1: Registers**.
- 35.2 A *forestry operation* must not commence unless it has been identified on the *operations register*.

#### 36. Compliance register

36.1 *FCNSW* must keep and maintain a register of every incident of non-compliance with the conditions of this *approval* in accordance with condition 1.3 of **Protocol 1: Registers**.

#### 37. Telephone complaints line

- 37.1 *FCNSW* must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to *forestry operations* conducted at the *premises*.
- 37.2 *FCNSW* must notify the public of the existence, purpose and telephone number of the telephone complaints line.

#### 38. Complaints register

- 38.1 FCNSW must:
  - (a) record all complaints that it receives that allege *harm* or non-compliance with a condition of this *approval* caused by *forestry operations* in the *complaints register*; and
  - (b) maintain the *complaints register* in accordance with condition 1.4 of **Protocol 1: Registers**.

### **Division 2 – Annual plans and reports**

Consultation note: Licence and legislation references in this part of the approval will be updated following

consultation to reflect any changes to native forestry legislation being prepared as part of the series of regulatory reforms outlined in the NSW Forest Industry Roadmap.

#### 39. Annual plan of forestry operations

- 39.1 At the *commencement date* and on or before 20 June in each year that this *approval* has effect, *FCNSW* must prepare and submit to the *EPA* and *DPI* a 12-month *annual plan* in accordance with **Protocol 2: Annual plan of forestry operations** for the following financial year.
- 39.2 An *annual plan* must include the content, and location and time period of each aspect of a *forestry operation* required by **Protocol 2: Annual plan of forestry operations**.

#### 40. Environment protection licence annual return

- 40.1 *FCNSW* must complete and supply to the *EPA* an annual return in the approved form comprising:
  - (a) a Statement of Compliance;
  - (b) a Monitoring and Complaints Summary;
  - (c) a Statement of Compliance Licence Conditions; and
  - (d) a Statement of Compliance Requirement to Prepare Pollution Incident Response Management Plan.
- 40.2 The annual return must be signed by an employee of *FCNSW* not below the rank of General Manager.
- 40.3 At the end of each *reporting period* the *EPA* will provide *FCNSW* with a copy of the form, which must be completed and returned to the *EPA*.
- 40.4 An annual return must be prepared in respect of each *reporting period*.
- 40.5 *FCNSW* must submit an annual return to the *EPA* by registered post (or other method as approved by the *EPA*) not later than 60 days after the end of the *reporting period*.
- 40.6 *FCNSW* must retain a copy of each annual return submitted to the *EPA*, for at least four years after the annual return was required to be submitted to the *EPA*.
- 40.7 For each licence fee period set by the relevant legislation, *FCNSW* must pay an administrative fee to the *EPA*.
- 40.8 Where the **environment protection licence** is revoked, **FCNSW** must prepare an annual return in respect to the **reporting period** commencing on the first business day of the **reporting period** and ending on the date that the revocation of the **environment protection licence** takes effect.

#### 41. Annual report on timber volumes

- 41.1 Within 90 days after the end of each financial year, *FCNSW* must submit an *annual timber and biomaterial report* to the *EPA* that demonstrates how it complies with limits on *harvesting operations* contained in condition 13 and Division 2 of Chapter 3 of this *approval* and includes, but is not limited to, the following details for each *State Forest compartment* or other *Crown-timber land* where *forestry operations* occurred during the financial year:
  - (a) Area information:
    - i. Coastal IFOA Subregion;
    - ii. management zone;

- iii. local landscape area;
- iv. State Forest name or Crown-timber land name;
- v. compartment number, and coupe number (if relevant);
- vi. regrowth zone or non-regrowth zone;
- vii. harvesting zone (intensive harvesting, selective harvesting, mixed intensity harvesting or alternate coupe logging);
- viii. the total net harvest area of the compartment (in hectares);
- ix. area of the net harvest area subject to selective harvesting (in hectares);
- x. average retained **basal area** in the **harvested area** subject to **selective harvesting** (square metres per hectare);
- xi. area of the net harvest area subject to intensive harvesting (in hectares); and
- xii. area of the net harvest area subject to alternate coupe logging (in hectares).
- (b) Volume information:
  - i. the volume of *high quality large sawlogs* and *large veneer logs* (in cubic metres);
  - ii. the volume of *high quality small sawlogs* and *small veneer logs* (in cubic metres);
  - iii. the volume of *poles*, *piles* and *girder logs* (in cubic metres);
  - iv. the volume of *low quality logs* (in tonnes);
  - v. the volume of *pulpwood logs*, export and domestic (in tonnes);
  - vi. the volume of other *timber products* sold (including firewood, fencing, wood-chop blocks) (in tonnes);
  - vii. the volume of *heads and offcuts* (in tonnes); and
  - viii. the volume of *native forest biomaterial* sold for electricity generation (in tonnes).

### **Division 3 – Notification of harm**

#### 42. Notification of harm – biodiversity incident

- 42.1 If a *forestry operation* causes an incident where there is *reportable harm* to a *threatened species* or *threatened ecological community* (unless otherwise permitted by the *approval*), then *FCNSW* must:
  - (a) notify the EPA or DPI immediately after FCNSW becomes aware of the incident;
  - (b) provide written notification of the incident to the *EPA* or *DPI* within seven days after the date that notification has been made under this condition; and
  - (c) prepare, keep, test and implement an incident response management plan in consultation with the *EPA*.

#### 43. Notification of harm – pollution incident

- 43.1 If a *pollution incident* occurs which causes, or threatens, *material harm to the environment*, *FCNSW* or an *authorised person* conducting that *forestry operation*, must, for the purpose of fulfilling a duty to notify under Part 5.7 of the *POEO Act*, notify each relevant authority listed in section 148(8) of the *POEO Act*, immediately after the *authorised person* becomes aware of the incident, and in the case of *FCNSW* immediately after *FCNSW* becomes aware of the incident.
- 43.2 **FCNSW** must provide written notification of the **pollution incident** to each relevant authority listed in section 148(8) of the **POEO Act** within seven days after the date that notification has been made under condition 43.1.
- 43.3 In accordance with Part 5.7A of the **POEO Act**, **FCNSW** must prepare, keep, test and implement an incident response management plan in consultation with the **EPA**.

#### 44. Written reports - threatened species or pollution incident

- 44.1 Where an *authorised officer* of the *EPA* or *DPI* suspects on reasonable grounds that an incident, or an alleged incident, has occurred at the *premises* and it has caused, is causing or is likely to cause *reportable harm* as per condition 42 of the *approval*, or *material harm* as per condition 43 of the *approval* (whether the *harm* occurs on or outside of the premises), the *authorised officer* may request that *FCNSW* supply the *EPA* and *DPI* with a written report of the incident (or alleged incident).
- 44.2 If a request is made by an *authorised officer* of the *EPA* or *DPI* under condition 44.1, *FCNSW* must make all reasonable inquiries in relation to the incident (or alleged incident) and supply the requested report to the *EPA* and *DPI* within such time as may be specified in the request.
- 44.3 A request by an *authorised officer* of the *EPA* or *DPI* under condition 44.1 may require a report which includes any or all of the following information:
  - (a) the cause, time and duration of the incident;
  - (b) the type, volume and concentration of every pollutant discharged as a result of the incident (if relevant);
  - (c) the extent, *species* or *habitats* associated with the incident (if relevant);
  - (d) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the incident;
  - (e) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the incident, unless the licensee has been unable to obtain that information after making reasonable efforts;
  - (f) action taken by the licensee in relation to the incident, including any follow-up contact with any complainants;
  - (g) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an incident; and
  - (h) any other relevant matters.
- 44.4 If the *EPA* or *DPI* is not satisfied with a written report supplied under condition 44.1, the *EPA* or *DPI* may make a written request to *FCNSW* to supply further details in relation to the incident (or alleged incident). *FCNSW* must provide such further details to the *EPA* and *DPI* within the time specified in the request.

### **Division 4 – Records**

#### 45. Management of records

- 45.1 Except where otherwise specified in this *approval*, each operational record, document and register required by the *approval*, and each entry in them, must be kept for at least five years after:
  - (a) for a record or document, the action or event that caused the record or document to be created took place; or
  - (b) for a register, the last entry was made in the register.
- 45.2 Except as otherwise specified in this *approval*, if any detail in a record, document or register required to be kept by this *approval* is incorrect, *FCNSW* must correct that detail within seven days of becoming so aware.
- 45.3 Each record, document and register required by the *approval*, and each entry in them, must be maintained and produced in a legible form.

#### 46. Operational records

- 46.1 *FCNSW* must maintain a history record for each *forestry operation* that occurs in each *compartment* and must include:
  - (a) type of *forestry operation*;
  - (b) type of harvesting operation (intensive harvesting, selective harvesting, mixed intensity harvesting or alternate coupe logging);
  - (c) pre-operational plan;
  - (d) area subject to *forestry operations*;
  - (e) volume of *timber products* and *forest products* removed;
  - (f) results of *regeneration* and stocking assessments.
- 46.2 The history record referred to in condition 46.1 must be updated within three months of the *completion* date of the *forestry operation*.
- 46.3 *FCNSW* must maintain and update operational tracking records each week, of each *forestry operation* that occurs in each *operational area*, in accordance with **Protocol 3: Operational** *tracking*.

#### 47. Provision of information and records to the EPA or DPI

47.1 Copies of information, records, documentation registers and *spatial datasets* associated with this *approval* must be made available to the *EPA* and *DPI* upon request, or as otherwise specified by the *approval*.

#### 48. Public availability of documents

- 48.1 Copies of information, records, documents, registers and *spatial datasets* associated with this *approval* must be made publicly available otherwise stated in this *approval*, or its release is inconsistent with the *Government Information (Public Access) Act 2009*.
- 48.2 **FCNSW** must make copies of all information, records, documents, registers and **spatial datasets** associated with this **approval** publicly available on the **FCNSW** website, or provided upon request to

the public, or via *FCNSW*'s information line, within a reasonable timeframe, or within the timeframes required by the *approval*.

- 48.3 All *spatial datasets* must be provided to the *EPA* to be made publicly available via the *NSW Environmental Data Portal* or via an alternative approach as agreed to by the *EPA* in writing.
- 48.4 Where the document or record referred to in condition 48.1 comprises *spatial datasets*, archived *spatial datasets*, and associated metadata, *FCNSW* must apply any relevant requirements for publication in **Protocol 35: Data and information management**, with the stricter or more specific requirement prevailing.
- 48.5 If *FCNSW* receives a written direction from *OEH* (Office of Environment and Heritage) that specified information or documents that reveal the location of a *threatened species* are not to be disclosed, then:
  - (a) condition 48.1 does not apply; and
  - (b) FCNSW must not disclose or provide the specified documentation or information to any person who is not directly involved in the planning or the conduct of the forestry operations except where there is a specific legal obligation to disclose or provide the documentation or information arising from legislation or an order of the Court.

### **Division 5 – Notices**

#### 49. Delivery of notice

49.1 A notice or other written direction or communication required or permitted to be given to the **EPA** or **DPI** under this **approval** must be delivered by email, except where this **approval** specifies a different method of delivery.

### **CHAPTER 3 – PLANNING CONDITIONS**

#### 50. Protocols

50.1 The following *protocols* are referenced in Chapter 3:

Protocol
Protocol 4: Pre-operational plans
Protocol 5: Approvals for restricted activities
Protocol 7: Harvesting limits
Protocol 8: Local landscape areas
Protocol 22: Wildlife habitat and tree retention clumps
Protocol 24: Identification of old growth on unassessed land
Protocol 25: Identification of rainforest on unassessed land
Protocol 26: Identification of large forest owl exclusion zones on unassessed land
Protocol 29: Ridge and headwater habitat
Protocol 40: Transitional arrangements

### **Division 1 – Landscape level protections**

#### Outcome statement for Division 1 of Chapter 3 of this approval

Forest areas are allocated to logical landscape scale units to ensure conservation and timber production outcomes are adequately considered across the landscape.

#### 51. Local landscape area

- 51.1 Prior to commencing a *forestry operation*:
  - (a) **FCNSW** must have developed and mapped the **local landscape area** in which the **forestry operation** is to take place in accordance with **Protocol 8: Local landscape areas**; and
  - (b) the *EPA* must have approved the *local landscape area* in accordance with condition 5.6 of **Protocol 5: Approvals for restricted activities**.
- 51.2 The location of a mapped *local landscape area* must not be changed, unless:
  - (a) FCNSW has applied to the EPA in accordance with Protocol 8: Local landscape areas; and
  - (b) the **EPA** has provided written approval of the change to the **local landscape area**.

### **Division 2 – Distribution of harvesting across the landscape**

#### Outcome statement for Division 2 of Chapter 3 of this approval

Harvesting is distributed across the landscape and over time, to support a mosaic of forest age-classes and maintenance of forest structure locally and across the landscape.

#### 52. Intensive harvesting limits

- 52.1 *Intensive harvesting* is only permitted within the *intensive harvesting zone*.
- 52.2 *Intensive harvesting* must be conducted in a minimum of three separate *intensive harvesting cycles* across the *net harvest area* of a *local landscape area*, where:
  - (a) the first *intensive harvesting cycle* must commence on the first day of the commencement of this *approval*; and
  - (b) each *intensive harvesting cycle* must occur over a 10-year period; and
  - (c) the maximum area that can be subject to *intensive harvesting* in a *local landscape area* in any single *intensive harvesting cycle* is no more than 33.3% of the *net harvest area* of that *local landscape area*; and

Note: Where intensive harvesting in any one intensive harvesting cycle is less than 33.3% of the net harvest area of the local landscape area, the remainder cannot be made up in subsequent intensive harvesting cycles.

- (d) the minimum time until completion of all *intensive harvesting cycles* of a *local landscape* area using *intensive harvesting* is 21 years from the commencement of the first *intensive harvesting cycle*; and
- (e) at the commencement of *intensive harvesting* in the third *intensive harvesting cycle*, a consolidated area that is a minimum of 15% of the *net harvest area* of that *local landscape area* must not have been subject to *intensive harvesting* in the previous 20 years, and
- (f) in any *local landscape area* where 50% or more of the *net harvest area* was subject to *intensive harvesting* prior to the commencement of the *approval*, a maximum of 60% of the *net harvest area* of the *local landscape area* not previously subject to *intensive harvesting* can be harvested in each of the first two *intensive harvesting cycles*.

Note: The application of these conditions must be informed by relevant guidelines.

- 52.3 The maximum size of each *coupe* in an *intensive harvesting zone* is 45 hectares or as otherwise specified in **Protocol 40: Transitional arrangements**.
- 52.4 There must be a period of at least 10 years between the completion of *intensive harvesting* in one *intensive harvesting coupe* and the commencement of *intensive harvesting* in an adjacent *intensive harvesting coupe*. If **Protocol 40: Transitional arrangements** stipulates a shorter period, the stipulated period can apply in relation to this condition and condition 52.5(a) and 52.6.
- 52.5 For the purposes of condition 52.4, 'adjacent' means:
  - (a) an *intensive harvesting coupe* directly adjoining a completed *intensive harvesting coupe*, which has been subject to *intensive harvesting* in the previous 10 years; or
  - (b) an *intensive harvesting coupe* which is separated from a completed *intensive harvesting coupe* by less than 40 metres of *ESA*; or
  - (c) the *intensive harvesting coupe* is separated from a completed *intensive harvesting coupe* by a directly adjoining area that has been *selectively harvested* in the previous 10 years, and the *selectively harvested* area has an average width of 200 metres or less.
- 52.6 **Selective harvesting** must not occur within the directly adjoining area described in condition 52.5(c) for a period of at least 10 years following the completion of *intensive harvesting* in the *intensive harvesting coupe*.

#### 53. Selective harvesting limits

- 53.1 *FCNSW* may conduct *selective harvesting* in the *net harvest area* of any area to which this *approval* applies.
- 53.2 In operational areas where selective harvesting is being applied:
  - (a) *harvesting operations* must not reduce the average *basal area* of the *harvested area* below a minimum of 10 square metres per hectare in the *regrowth zone*; or
  - (b) *harvesting operations* must not reduce the average *basal area* of the *harvested area* below a minimum of 12 square metres per hectare in the *non-regrowth zone*; and
  - (c) trees retained to meet **selective harvesting limits** must be scattered across the **harvested area**.
- 53.3 Retained average *basal area* must be implemented in accordance with **Protocol 7: Harvesting limits**.

#### 54. Mixed intensity harvesting limits

- 54.1 In *local landscape areas* in the *intensive harvesting zone* where both *intensive harvesting* and *selective harvesting* are, or are intended to be, applied:
  - (a) FCNSW must prepare tract maps that identify areas planned for intensive harvesting or selective harvesting prior to commencement of any forestry operation in that local landscape area; and
  - (b) condition 52 must apply to *intensive harvesting* within the *intensive harvesting tract*, and
  - (c) condition 53 must apply to **selective harvesting** within the **selective harvesting tract** and to **selective harvesting** in the **intensive harvesting tract**.
- 54.2 Where the area of an *intensive harvesting tract* in a *local landscape area* is less than 45 hectares, *FCNSW* is not required to apply condition 52.2 of this *approval*.
- 54.3 In a *local landscape area* where more than 25% of the *net harvest area* is planned for *intensive harvesting* and more than 30% of the *net harvest area* is planned for *selective harvesting* during any single *intensive harvesting cycle*, then:
  - (a) **FCNSW** must obtain a *site-specific limit condition* for that *local landscape area* from the **EPA** in accordance with **Protocol 7: Harvesting limits**; and
  - (b) any *site-specific limit condition* issued by the *EPA* must be applied and complied with.

#### 55. Eden alternate coupe logging limits

- 55.1 *Alternate coupe logging* is only permitted within the *Eden alternate coupe logging zone*.
- 55.2 *Alternate coupe logging* must take place in at least two separate *harvesting operations* across the *compartment*.
- 55.3 In any one *harvesting operation*, the number of *coupes* harvested is no more than:
  - (a) half of the total number of *coupes* plus one additional *coupe* (where there is an even number of *coupes* within the *compartment*); or
  - (b) half of the total number of *coupes* plus an additional half a *coupe* (where there is an odd number of *coupes* within the *compartment*); and

- (c) the area harvested comprises no more than 60% of the *base net area* of the *compartment*, and
- (d) each *coupe* in which *harvesting operations* are to be carried out will adjoin at least one *coupe* that is not to be *harvested*.
- 55.4 Once an *alternate coupe logging* operation is completed in any *coupes* in the *compartment*, no harvesting operations (other than *selective harvesting* carried out in accordance with condition 53 of this *approval*) must be carried out again in those *coupes* until the remaining *coupes* in the *compartment* have been *harvested* using *alternate coupe logging*.
- 55.5 **FCNSW** must wait at least five years between the completion of **alternate coupe logging** in one **harvesting operation** before it can commence **alternate coupe logging** in the remainder of the **compartment**.

### **Division 3 – Environmentally Significant Areas (ESAs)**

#### Outcome statement for Division 3 of Chapter 3 of this approval

Locally important environmental features including habitat, landscapes, ecological communities and threatened species habitat are identified and permanently protected to provide refuge, connectivity, and to support forest regeneration.

#### 56. Category 1 ESAs and category 2 ESAs

56.1 The areas set out in Table 1 are *ESAs*, being *category 1 ESAs* or *category 2 ESAs*, for the purposes of this *approval*.

#### Table 1: ESAs

(a)	Category 1 ESAs	(b)	Category 2 ESAs
i.	rainforest,	i.	<i>high conservation value old growth forest</i> ;
ii.	<i>riparian exclusion zones</i> on class 1 <i>classified drainage lines</i> and <i>riparian</i> <i>exclusion zones</i> on first <i>order drainage</i> <i>features</i> ;	ii.	rare forest;
iii.	riparian exclusion zones on unmapped drainage lines;	iii.	<i>riparian exclusion zones</i> other than those specified as <i>ESA 1</i> ;
iv.	<i>riparian exclusion zones</i> within the: <i>Class 1 aquatic habitat, Eden alternate</i> <i>coupe logging zone, Tumut Area,</i> and <i>intensive harvesting zone</i> ;	iv.	<i>ridge and headwater habitat</i> (40 metre and 80 metre corridors);
v.	<i>drainage lines</i> (width of the feature as measured from the <i>bankfull level</i> );	v.	rocky outcrop and cliff associated exclusion zones;
vi.	wetlands, major water storages and all associated exclusion zones;	vi.	carry-over exclusion zones;
vii.	<i>heath and scrub</i> and all associated <i>exclusion zones</i> ;	vii.	Spotted-tailed Quoll <i>exclusion zones</i> (established around Maternal Dens, Latrines and Permanent Dens);
viii.	rocky outcrop and cliff features;	viii.	Hastings River Mouse exclusion zones;
ix.	threatened frog – general features and all	ix.	Southern Brown Bandicoot exclusion

(a)	Category 1 ESAs	(b)	Category 2 ESAs
	associated exclusion zones;		zones (South Coast);
х.	<i>bird nest</i> and <i>roosts</i> and all associated <i>exclusion zones</i> ;	x.	Southern Brown Bandicoot <i>SMP</i> <i>exclusion zones</i> (Eden), Giant Burrowing Frog SMP <i>exclusion zones</i> (Eden) and Smoky Mouse SMP <i>exclusion zones</i> (Eden);
xi.	<i>bat roost tree</i> , <i>potential subterranean</i> <i>bat roost</i> , and <i>flying-fox camp</i> and all associated <i>exclusion zones</i> ;	xi.	any <b>exclusion zone</b> identified as a <b>category 2 ESA</b> in an approved <b>site-</b> <b>specific research condition</b> , <b>site-</b> <b>specific biodiversity condition</b> , <b>SMP</b> or <b>flora road management plan</b> ;
xii.	exclusion zones on subterranean sites associated with <i>records</i> of <i>roosting bats</i> ;	xii.	exclusion zones associated with a TEC;
xiii.	Assa darlingtoni (Southern meta- population) <b>exclusion zones</b> and <i>Philoria</i> <i>spp.</i> <b>exclusion zones</b> ;	xiii.	large forest owl <b>exclusion zones</b> ;
xiv.	<i>threatened ecological communities (TECs)</i> ;	xiv.	land mapped as <i>FMZ 2</i> and <i>FMZ 3A</i> ; that are not <i>category 1 ESAs</i> for the purposes of this <i>approval</i> ; and
xv.	exclusion zones, unless otherwise specified in this <i>approval</i> ;	XV.	land mapped as <i>inherent hazard level</i> 4.
xvi.	wildlife habitat clumps less than or equal to two hectares in area;	xvi.	<i>wildlife habitat clumps</i> greater than two hectares in area;
xvii.	tree retention clumps;		
xviii.	any exclusion zone identified as a category 1 ESA in an approved site- specific research condition, site- specific biodiversity condition, SMP (species management plan) or flora road management plan;		
xix.	temporary Koala exclusion zone(s) where condition 82.2 applies; and		
xx.	soak and seepages in operational areas where condition 76 applies.		

56.2 If a species or a habitat feature qualifies as both a category 1 ESA and category 2 ESA, the species or habitat feature is to be treated as a category 1 ESA.

#### 57. Wildlife habitat clumps in the local landscape area

- 57.1 At least five percent of the **base net area** of each **local landscape area** must be identified prior to the commencement of a **forestry operation** in each **local landscape area**, and permanently retained, as **wildlife habitat clumps** in accordance with **Protocol 22: Wildlife habitat and tree retention clumps**.
- 57.2 Each individual *wildlife habitat clump* must:
  - (a) be designed in accordance with **Protocol 22: Wildlife habitat and tree retention clumps**;

- (b) only include *ESAs* listed in condition 22.1(1) of **Protocol 22: Wildlife habitat and tree** retention clumps; and
- (c) be greater than one hectare in size, unless the *wildlife habitat clump* is:
  - i. a carry over exclusion zone;
  - ii. previously unmapped *rocky outcrops*, *cliffs*, *heath and scrub*, *wetlands* and their associated *exclusion zones*.
- 57.3 Where *carry-over exclusion zones* are more than 5% of the *base net area* of each *local landscape area*, then all *carry-over exclusion zones* must be retained.
- 57.4 Where a *subject species* or *habitat feature* is identified after the establishment of a *wildlife habitat clump* in the *local landscape area*, then:
  - (a) the *subject species* must be protected in accordance with the conditions of the *approval*, in addition to the *wildlife habitat clump*; or
  - (b) FCNSW can apply to the EPA to seek a revision to the wildlife habitat clump in the local landscape area in accordance with Protocol 22: Wildlife habitat and tree retention clumps.
- 58. High conservation value old growth forest, rainforest, large forest owl landscapes and ridge and headwater habitat on unassessed land
- 58.1 Prior to commencement of any *forestry operation* on *unassessed Crown-timber land* the following *protocols* must be applied and implemented:
  - (a) **Protocol 24: Identification of old growth on unassessed land**;
  - (b) Protocol 25: Identification of rainforest on unassessed land;
  - (c) **Protocol 26: Identification of large forest owl exclusion zones on unassessed land**; and
  - (d) Protocol 29: Ridge and headwater habitat.

#### 59. Ridge and headwater habitat

59.1 The location of *ridge and headwater habitat* must not be changed without the approval of the *EPA* in accordance with condition 29.3 of **Protocol 29: Ridge and headwater habitat**.

### **Division 4 – Pre-operational planning**

#### Outcome statement for Division 4 of Chapter 3 of this approval

Environment protections, hazards and mitigations are identified in pre-operational plans to ensure that appropriate site-specific management practices and protections are implemented during forestry operations.

#### 60. Pre-operational plans

- 60.1 **FCNSW** must prepare a separate **pre-operational plan** for each **forestry operation** in each **operational area** (as defined in the **operations register**), excluding **forest product** and timber operations conducted under section 45 of the **Forestry Act**.
- 60.2 A *forestry operation* must not commence in an *operational area* unless a *pre-operational plan* has been prepared for that *forestry operation* in that *operational area*.

- 60.3 Each *pre-operational plan* must include the following documents for each *forestry operation* in each *operational area*:
  - (a) an *operational plan* prepared in accordance with condition 4.2 of **Protocol 4: Pre-operational plans**;
  - (b) a *location map* prepared in accordance with condition 4.3 of **Protocol 4: Pre-operational** plans; and
  - (c) an *operational map* prepared in accordance with condition 4.4 of **Protocol 4: Pre**operational plans.
- 60.4 Each *pre-operational plan* must:
  - (a) adequately address the conditions of this *approval*;
  - (b) contain operational requirements in sufficient detail to enable the person proposing to undertake the *forestry operation* to comply with the conditions of this *approval*; and
  - (c) be approved and dated by an *FCNSW planning supervisor*.
- 60.5 Each *pre-operational plan* for a *forestry operation* must be made available to the public, *EPA* and *DPI*, at least two business days prior to the commencement of the *forestry operation*.
- 60.6 To vary any part of a *pre-operational plan FCNSW* must:
  - (a) prepare a document that:
    - i. details how the forestry operation varies from the approved plan; and
    - ii. sets out the reasons for the variation;
  - (b) amend the relevant documents under condition 60.3; and
  - (c) ensure that each document prepared under condition 60.6(a) or amended under condition 60.6(b) is approved and dated by a *FCNSW planning supervisor*.
- 60.7 Once approved in accordance with condition 60.6(c), the amended *pre-operational plan* is taken to be the approved *pre-operational plan* for the purpose of the *forestry operation* and must be implemented.
- 60.8 Amended *pre-operational plans* must be made available to the public, *EPA* and *DPI* within five business days of being approved under condition 60.6(c).

# CHAPTER 4 – OPERATIONAL PLANNING AND IMPLEMENTATION

#### 61. Protocols

61.1 The following *protocols* are referenced in Chapter 4:

Protocol
Protocol 5: Approvals for restricted activities
Protocol 10: Road design
Protocol 15: Inherent soil erosion and water pollution hazard assessment
Protocol 16: Riparian protection
Protocol 20: Pre-operational surveys
Protocol 21: Species management plan
Protocol 22: Wildlife habitat and tree retention clumps
Protocol 23: Tree retention
Protocol 27: Threatened ecological communities;
Protocol 28: Rocky outcrops and cliffs
Protocol 30: Subterranean bat roosts and flying-fox camps
Protocol 31: Species covered by the approval
Protocol 33: Work health and safety and accidentally felled trees

### **Division 1 – Planning assessments and surveys**

#### Outcome statement for Division 1 of Chapter 4 of the approval

Pre-operational surveys and assessments are undertaken to ensure that specified environmental features and risks are identified to ensure that mitigations and protections are established for an operational area.

#### 62. Road design and planning

- 62.1 **Protocol 10: Road design** must be applied and complied with in any location where there is *mass movement* hazard or the *ground slope* is greater than 30 degrees for the:
  - (a) construction of any new road; or
  - (b) *maintenance* or *upgrade* of any existing *road*.
- 62.2 Where an existing *road* is not planned to be used for the *forestry operation*, then:
  - (a) the *operational plan* and *operational map* must clearly indicate it is not to be used;
  - (b) if *FCNSW* becomes aware that the existing *road* is not *stable*, and is causing *water pollution*, then *FCNSW* must *stabilise* the existing *road*.

#### 63. Targeted flora and fauna surveys

- 63.1 A *forestry operation* must not be conducted in any part of an *operational area*, unless a *targeted flora and fauna survey* has been undertaken in that part of the *operational area* no greater than seven years prior to that *forestry operation* commencing in that area.
- 63.2 Each survey must:
  - (a) be carried out by a *suitably qualified person*;
  - (b) be carried out in, and within 100 metres of, the *base net area* of the *operational area*;
  - (c) search for each of the *species* set out in condition 20.3 and 20.4 of **Protocol 20: Pre-operational surveys**, unless otherwise specified in that condition; and
  - (d) be conducted and reported in accordance with condition 20.3, 20.4 and 20.5 of **Protocol 20: Pre-operational surveys**.
- 63.3 Any *subject species* detected in a *targeted flora and fauna survey* must be managed and protected in accordance with the applicable requirements of the *approval* and *protocols*.
- 63.4 **Targeted flora and fauna surveys** are not required to be undertaken in relation to a **species** referred to in conditions 73, 74, 75, 76 and 78 if **FCNSW's operational plan** states that **FCNSW** will apply the alternative to survey set out in conditions 73.2, 74.2, 75.2, 76.2, 76.3 or 78.1(c) of this **approval** for that particular **species**.
- 63.5 Any condition referred to in condition 63.4 must be complied with.

#### 64. Broad area habitat searches

- 64.1 Notwithstanding condition 64.4, a *forestry operation* must not be conducted in any part of an *operational area* unless a *broad area habitat search* has been undertaken in respect of that *forestry operation*:
  - (a) at least 100 metres in advance of the *forestry operation* occurring in that part of the *operational area*; and
  - (b) within a maximum of six months prior to the commencement of the *forestry operation* in that part of the *operational area*.
- 64.2 Each search must:
  - (a) be carried out by a *suitably qualified person*;
  - (b) be carried out in, and within 100 metres of, the *base net area* of the *operational area*;
  - (c) look for the *habitat features* and *species* listed in Table 2; and
  - (d) be conducted and reported in accordance with condition 20.2 and 20.5 of **Protocol 20: Pre-operational surveys**.
- 64.3 Any *habitat feature* or *species* listed in Table 2 that is identified during a *broad area habitat search*, must be protected in accordance with the requirements for that *habitat feature* or *species* in this *approval* and the *protocols*.

#### Table 2: Habitat features or species

Habitat features or species that must be searched for during broad area habitat searches				
Large forest owl diurnal roosts	Koalas			
Large forest owl nest trees	<b>Soaks and seepages</b> in Assa darlingtoni <b>modelled habitat</b> , Philoria species <b>modelled</b> <b>habitat</b> and where there is a <b>record</b> of Philoria species or Assa darlingtoni within two kilometres of that <b>operational area</b>			
Stick nest greater than 50 cm in diameter	Brush-tailed Phascogale den trees and logs			
Bat roost trees and potential subterranean bat roosts	Spotted-tailed Quoll dens (including maternal dens)			
Flying-fox camps	Spotted-tailed Quoll latrine sites			
Evidence of Glossy Black-Cockatoo activity (i.e. chewed cones)	Little Lorikeet nest trees			
Glider sap feed trees	Brown Treecreeper nest trees			
Glider (Petaurus sp.) den trees	Hooded Robin nests			
Unmapped <i>wetlands</i>	Black-chinned Honeyeater (eastern subspecies) nests			
Rocky outcrops and cliffs	Speckled Warbler nests			
Heath and scrub	Gang-gang Cockatoo nest trees			
Bare-nosed Wombat (Northern Population Management Area) burrows	Glossy Black-Cockatoo nest trees			
Flora species in Part 3 and Part 4 of the tables in condition 31.2(2) of <b>Protocol 31: Species</b> <b>covered by the approval</b> recorded within five kilometres of the <b>operational area</b> , where <b>potential habitat</b> occurs in the <b>operational</b> <b>area</b> .	Scarlet Robin nests			
Turquoise Parrot nest tree	Flame Robin nests			
Bush Stone-curlew nests	Varied Sittella nests			
Evidence of any other subject species	Albert's Lyrebird nests			
Emu nests in the Emu population in the NSW North Coast Bioregion and Port Stephens local government area	Regent Honeyeater nests			

#### 64.4 Condition 64.1 does not apply to:

- (a) a *road maintenance operation*; and
- (b) a *post-harvest burn* or *forest product operation* if:
  - i. the **post-harvest burn** or **forest product operation** is conducted in a part of an **operational area** in which a **broad area habitat search** was conducted for an associated **harvesting operation**, as set out in the **operational plan**; and
  - ii. the **broad area habitat search** conducted for the associated **harvesting operation** and the **post-harvest burn** or **forest product operation** are conducted in accordance with this **approval**.

#### 65. Incidental records of species and habitat features requiring protection

- 65.1 Where *FCNSW* identifies a *subject species* or *habitat feature* before or during the planning, surveying or carrying out of a *forestry operation*, *FCNSW* must:
  - (a) record the details or other evidence of the *subject species* or *habitat feature*; and
  - (b) apply the *conditions* of the *approval* for that *subject species* or *habitat feature*.

## **Division 2 – Habitat protection**

#### Outcome statement for Division 2 of Chapter 4 of the approval

Important environmental features including habitat, landscapes and communities are identified and permanently protected to support their persistence in the local landscape.

#### 66. Heath and scrub

- 66.1 An *exclusion zone* must be maintained around each area of *heath and scrub* that has an area of 0.2 hectares or greater, and the *exclusion zone* must be:
  - (a) at least 20 metres wide; and
  - (b) measured from the outer edge of the *heath and scrub*.

#### 67. Rocky outcrops and cliffs

- 67.1 An *exclusion zone* must be maintained around each *rocky outcrop* or each *cliff*, and the *exclusion zone* must be:
  - (a) at least 20 metres wide; and
  - (b) measured from the outer edge of the *rocky outcrop* or *cliff*, or as specified in Protocol 28: Rocky outcrops and cliffs.

#### 68. Threatened ecological communities

- 68.1 The location of all *TECs* must be identified in accordance with **Protocol 27: Threatened ecological communities**.
- 68.2 An *exclusion zone* with a minimum width as specified in condition 27.3 of **Protocol 27: Threatened** *ecological communities* must be retained around each *TEC* and the *exclusion zone* width must be measured from the outer edge of the *TEC*.
- 69. Coarse woody debris protection
- 69.1 *Coarse woody debris* that contains a hollow must not be removed from a *compartment*.
- 69.2 **Coarse woody debris** must not be removed from a **compartment**, including for use as firewood, if there is a **record** of any of the species listed in Table 3 in the **compartment**.

#### Table 3: Coarse woody debris species

Species where the collection of coarse woody debris is prohibited		
Bush Stone-curlew	Flame Robin	
Sand Goanna	Scarlet Robin	

Species where the collection of coarse woody debris is prohibited		
White-crowned Snake	Speckled Warbler	
Pale-headed Snake	Grey-crowned Babbler	
Rufous Bettong	Diamond Firetail	
Brush-tailed Phascogale	Hooded Robin	
Spotted-tailed Quoll	Brown Treecreeper	
White-lipped Snake	Eastern Pygmy-possum	
Varied Sittella		

## **Division 3 – Retained trees**

#### Outcome statement for Division 3 of Chapter 4 of the approval

Important feed and habitat trees are retained at levels that support their persistence in the landscape and to contribute to maintenance of biodiversity in local landscapes.

#### 70. Tree retention clumps

- 70.1 *Tree retention clumps* must be identified and permanently retained at least 100 metres in advance of a *forestry operation* in any part of an *operational area*, at the following rates:
  - (a) at least 5% of the **base net area** in each **compartment** in the **regrowth zone**; and
  - (b) at least 8% of the **base net area** in each **compartment** in the **non-regrowth zone**.
- 70.2 Each *tree retention clump* must be designed and implemented in accordance with **Protocol 22**: Wildlife habitat and tree retention clumps, and:
  - (a) must be between 0.1 and two hectares in size;
  - (b) must prioritise the retention of *hollow-bearing trees* and *potential future hollow-bearing trees*;
  - (c) may only include any area of *ESA* listed in condition 22.2(2) of **Protocol 22: Wildlife habitat** and tree retention clumps; and
  - (d) be in addition to the areas identified and protected as *wildlife habitat clumps*.
- 70.3 Where a *subject species* or *habitat* feature is identified after the establishment of *tree retention clumps* in the *compartment*, then:
  - (a) the subject species or habitat feature must be protected in accordance with the conditions of the approval, in addition to tree retention clumps; or
  - (b) FCNSW can apply to the EPA to seek a revision to the tree retention clumps in the compartment in accordance with Protocol 22: Wildlife habitat and tree retention clumps.

#### 71. Retained trees

- 71.1 *FCNSW* must select and protect *retained trees* in accordance with **Protocol 23: Tree retention**.
- 71.2 **FCNSW** must permanently retain the following tree(s):

- (a) all *giant trees*;
- (b) all Glossy Black-Cockatoo feed trees;
- (c) all glider sap feed trees;
- (d) all *dead standing trees*; and
- (e) the following numbers of *hollow-bearing trees*:
  - i. all *hollow-bearing trees* must be retained in the *net harvest area* in the *intensive harvesting zone*; or
  - ii. a minimum of five *hollow-bearing trees* must be retained in each hectare of *net harvest area* in accordance with Protocol 23: Tree retention in the *selective harvesting zone* and *Eden alternate coupe logging zone*; and
  - iii. where the density specified in condition 71.2(e)ii is not available in the selective harvesting zone or Eden alternate coupe logging zone, all hollow-bearing trees must be retained.

Note: For the purposes of determining the rate of tree retention in the **net harvest area** under condition 71.2, **Protocol 23: Tree retention** will be used.

- 71.3 If *FCNSW* identifies *Glossy Black-Cockatoo feed trees* and *glider sap feed trees* as *retained trees* in its *operational plan*, *FCNSW* must retain such trees but may cease to do so if a *broad habitat search* for a future *forestry operation* indicates clearly that those previously-identified trees have ceased to be *Glossy Black-Cockatoo feed trees* or *glider sap feed trees*.
- 71.4 A *retained tree* must not be felled unless it is in accordance with **Protocol 33: Work health and** safety and accidentally felled trees, and the tree is replaced with a *comparable tree* during active *harvesting* in the *patch* in which the tree was felled.

#### 72. Koala browse tree retention (North)

- 72.1 *FCNSW* must retain the following trees for the duration, and at the *completion* of, each *forestry operation* in accordance with **Protocol 23: Tree retention**:
  - (a) a minimum of 10 *Koala browse trees* in each hectare of *net harvest area* where *Koala browse prescription 1* applies;
  - (b) a minimum of five *Koala browse trees* in each hectare of *net harvest area* where *Koala browse prescription 2* applies; and
  - (c) all Koala browse trees in areas where the minimum coverage of Koala browse trees set out in conditions 72.1(a) and (b) does not exist in the *net harvest area* before the commencement of the *forestry operation*.

Note: For the purposes of determining the rate of tree retention in the **net harvest area** under condition 72.1(a) and 72.1(b), **Protocol 23: Tree retention** will be used.

## **Division 4 – Species-specific conditions for fauna**

#### Outcome statement for Division 4 of Chapter 4 of this approval

Site-specific measures are implemented for identified habitat of fauna species to mitigate impacts of forestry operations at the site to support their persistence in the landscape.

#### 73. Rufous Scrub-bird, Atrichornis rufescens

- 73.1 Where there is a *record* of Rufous Scrub-bird within an *operational area* or within 300 metres outside the boundary of an *operational area*, *FCNSW* must retain:
  - (a) an *exclusion zone* that encompasses all *Rufous Scrub-bird micro-habitat* within a 300metre radius of the *record*; and
  - (b) an additional *exclusion zone* that is 20 metres or greater in width must be maintained around the outer edge of the *exclusion zone* referred to in condition 73.1(a).
- 73.2 If *FCNSW* does not conduct a targeted survey for Rufous Scrub-bird in accordance with **Protocol** 20: Pre-operational surveys, *FCNSW* must:
  - (a) retain an *exclusion zone* that encompasses all *Rufous Scrub-bird micro-habitat* in the *operational area*; and
  - (b) an additional *exclusion zone* that is 20 metres or greater in width must be maintained around the outer edge of the *exclusion zone* referred to in condition 73.2(a).

#### 74. Albert's Lyrebird, Menura alberti

- 74.1 Where there is a *record* of Albert's Lyrebird within an *operational area* or within 300 metres outside the boundary of the *operational area FCNSW*, must retain:
  - (a) an *exclusion zone* of at least 20 metres in width on both sides of all class 1 *classified drainage lines* within 300 metres of the *record*; and
  - (b) an *exclusion zone* of at least 30 metres or greater in width on both sides of all class 2 *classified drainage lines* within 300 metres of the *record*.
- 74.2 If *FCNSW* does not conduct a targeted survey for Albert's Lyrebird, in accordance with **Protocol 20: Pre-operational surveys**, and there is Albert's Lyrebird *modelled habitat* or an existing *record* in an *operational area* or within 300 metres outside the boundary of the *operational area*, *FCNSW* must retain *exclusion zones* of:
  - (a) at least 20 metres in width on both sides of each class 1 *classified drainage line* within Albert's Lyrebird *modelled habitat* in the compartment; and
  - (b) at least 30 metres in width on both sides of each class 2 *classified drainage line* within Albert's Lyrebird *modelled habitat* in the *operational area*.
- 74.3 *FCNSW* must measure the *exclusion zones* required by conditions 74.1 and 74.2 from the *bankfull level* in accordance with Protocol 16: Riparian protection.

#### 75. Marbled Frogmouth, Podargus ocellatus

- 75.1 Where there is a *record* of Marbled Frogmouth within an *operational area* or within 300 metres outside the boundary of the *operational area*, *FCNSW* must retain:
  - (a) an *exclusion zone* of at least 20 metres in width on both sides of all class 1 *classified drainage lines* in the *operational area*;
  - (b) an *exclusion zone* of at least 30 metres in width on both sides of all class 2 *classified drainage lines* in the *operational area*.
- 75.2 If *FCNSW* does not conduct a targeted survey for Marbled Frogmouth in accordance with **Protocol** 20: Pre-operational surveys, and there is Marbled Frogmouth *modelled habitat* or an existing

*record* within an *operational area* or within 300 metres outside the boundary of the *operational area*, *FCNSW* must retain *exclusion zones* of:

- (a) at least 20 metres in width on both sides of each class 1 *classified drainage line* within Marbled Frogmouth *modelled habitat* in the *operational area*; and
- (b) at least 30 metres in width on both sides of each class 2 *classified drainage line* within Marbled Frogmouth *modelled habitat* in the *operational area*.
- 75.3 *FCNSW* must measure the *exclusion zones* required by condition 75.1 and 75.2 from the *bankfull level* in accordance with Protocol 16: Riparian protection.

#### 76. Philoria species and Pouched Frog, Assa darlingtoni (Southern meta-population)

- 76.1 An *exclusion zone* with a radius of 50 metres or greater must be retained around each *record* of any *Philoria* species or *Assa darlingtoni* within an *operational area* or within 50 metres outside the boundary of an *operational area*.
- 76.2 If *FCNSW* does not conduct a survey for *Assa darlingtoni* in accordance with **Protocol 20: Pre**operational surveys, all *Assa darlingtoni* modelled habitat in the operational area must be retained as an exclusion zone.
- 76.3 If *FCNSW* does not conduct a survey for *Philoria* species in accordance with **Protocol 20: Pre**operational surveys, all *Philoria* species *modelled habitat* in the *operational area* must be retained as an *exclusion zone*.
- 76.4 An *exclusion zone* that is 10 metres or greater must be retained around the full extent of each *soak or seepage* where:
  - no record of a Philoria species or Assa darlingtoni is associated with the soak or seepage; and
  - (b) Assa darlingtoni **modelled habitat** or Philoria species **modelled habitat** occurs in the **operational area**; or
  - (c) a *record* of a *Philoria* species or *Assa darlingtoni* occurs within two kilometres of the *operational area*.
- 76.5 For the purposes of applying an *exclusion zone* to a *soak or seepage*:
  - (a) the area of the soak or seepage, and the associated soak or seepage exclusion zone, must be measured from either the edge of the current saturated zone, or the outer edge of where the vegetation type indicates a wetter micro-environment than the surrounding country, whichever results in a larger area; and
  - (b) the width of the **soak or seepage exclusion zone** must be measured along the ground surface and must be determined in the field.
- 76.6 **Road maintenance** in, or within 10 metres of, a **soak or seepage** is only permitted if it is approved in accordance with **Protocol 5: Approvals for restricted activities**.

#### 77. Booroolong Frog, Litoria booroolongensis (South)

- 77.1 Within the **Booroolong Frog mapped layer** an **exclusion zone** of 10 metres or greater in width must be retained on both sides of each first **order drainage feature**, class 1 **classified drainage line** and **unmapped drainage line**.
- 77.2 The *exclusion zones* required by condition 77.1 must be measured and applied from the *bankfull level* in accordance with **Protocol 16: Riparian protection**.

#### 78. Northern Corroboree Frog, Pseudophyrne pengilleyi

#### 78.1 Within the *Northern Corroboree Frog mapped layer*.

- (a) an *exclusion zone* with a radius of 30 metres or greater must be retained around each Northern Corroboree Frog *record*; and
- (b) an exclusion zone of 30 metres or greater in width must be retained around the outer edge of every bog that has a Northern Corroboree Frog record; or
- (c) an exclusion zone of 30 metres or greater in width must be retained around the outer edge of every bog in the operational area, where FCNSW has not conducted surveys in accordance with Protocol 20: Pre-operational surveys.

#### 79. Hastings River Mouse, Pseudomys oralis

- 79.1 Where there is a *record* of a Hastings River Mouse in the *operational area*, or within 200 metres outside the boundary of the *operational area*:
  - (a) an *exclusion zone* that is 12 hectares or greater must be retained around each *record*, which must:
    - i. be dominated by Hastings River Mouse micro-habitat,
    - ii. have a low edge to area ratio; and
    - iii. link to other ESAs.

#### 80. Spotted-tailed Quoll, *Dasyurus maculatus*

- 80.1 An *exclusion zone* that is 12 hectares or greater must be retained around each *Spotted-tailed Quoll maternal den* site.
- 80.2 An *exclusion zone* that is 12 hectares or greater must be retained around each *Spotted-tailed Quoll latrine* site.
- 80.3 An *exclusion zone* that is 3.5 hectares or greater must be retained around each *Spotted-tailed Quoll permanent den* site.

#### 81. Bare-nosed Wombat, Vombatus ursinus

81.1 In a *compartment* within the *Bare-nosed Wombat (Northern Population Management Area)* map, an *exclusion zone* with a radius of 20 metres or greater must be applied around each entrance to a wombat burrow that is greater than one metre in length.

Note: Wombat burrows outside of the Bare-nosed Wombat (Northern Population Management Area) map are managed through the application of a guideline.

#### 82. Koala

- 82.1 A *suitably qualified person* must visually assess each tree for Koalas immediately prior to it being felled, where:
  - (a) Koala browse prescription 1 or Koala browse prescription 2 applies; or
  - (b) there is a *contemporary Koala record* in any *operational areas* in the *Southern Subregion* or *Eden Subregion*.

- 82.2 If a Koala is located in a tree, an *exclusion zone* with a radius of 25 metres or greater must be retained around the tree. The *exclusion zone* may be removed once the Koala moves from that tree.
- 82.3 **Koala browse prescription 2** must be applied to the remainder of an **operational area** where **evidence of Koala** is detected during a **harvesting operation** in an area which is not identified in condition 82.1 of this **approval**.
- 82.4 *FCNSW* must maintain records, updated each week, to demonstrate condition 82 of this *approval* has been applied.

#### 83. Bird nests and roosts

83.1 An *exclusion zone* must be retained around each *bird nest and roost* as specified in **Table 4**.

Table 4:	<b>Bird nest</b>	or roost	protection
----------	------------------	----------	------------

(a) 25 metre radius exclusion zone	(b) 50 metre radius exclusion zone	(c) 100 metre radius exclusion zone
Regent Honeyeater nest	Powerful Owl nest	Bush Stone-curlew nest
Varied Sittella nest	Masked Owl nest	Albert's Lyrebird nest
Gang-gang Cockatoo nest	Barking Owl nest	Emu nest of the Emu population in the NSW North Coast Bioregion and Port Stephens local government area
Brown Treecreeper nest	Sooty Owl nest	
Black-chinned Honeyeater (eastern sub-species) nest	Flame Robin nest	
Speckled Warbler nest	Scarlet Robin nest	
Diamond Firetail nest	Hooded Robin nest	
Grey-crowned Babbler nest	Glossy-black Cockatoo nest	
Powerful Owl roost	All stick nests (50 cm or greater in diameter)	
Masked Owl roost	Emu nest other than of the Emu population in the NSW North Coast Bioregion and Port Stephens local government area	
Barking Owl roost	Dusky Woodswallow nest	
Sooty Owl roost		
Turquoise Parrot nest		
Little Lorikeet nest		

- 83.2 Where there is a *record* of a *bird nest or roost*, and the nest or roost cannot be located, the *exclusion zone* must be centred on the location of the existing *record*.
- 83.3 An *exclusion zone* required for a Powerful Owl, Masked Owl, Barking Owl and Sooty Owl nest or roost must be applied for the duration of this *approval*.
- 83.4 An *exclusion zone* required for all other nests or roosts, must be applied unless:

- (a) otherwise approved by the **EPA**; and
- (b) surveys conducted in the two consecutive breeding seasons immediately preceding the *forestry operation* establishes that the nest or roost is no longer being used.

#### 84. Threatened frog – general

- 84.1 An *exclusion zone* 10 metres wide or greater must be applied around the outer edge of all *dams*.
- 84.2 Any new *drainage feature crossing* that is located within 200 metres upstream or downstream of a *stream breeding threatened frog record* must not alter natural stream flow.

#### 85. Bat tree roost protection

85.1 An *exclusion zone* with a radius of 30 metres or greater must be applied around each *bat roost tree*.

#### 86. Flying-fox camps

- 86.1 An *exclusion zone* 50 metres wide or greater must be applied to the full extent of each occupied and non-occupied *flying-fox camp*.
- 86.2 Between the first day of October and concluding on the last day of February, a temporary **exclusion zone** that is 200 metres wide or greater must be applied around the full extent of each occupied **flying-fox camp**.
- 86.3 The full extent of a *flying-fox camp* must be determined in accordance with **Protocol 30: Subterranean bat roosts and flying-fox camps**.

#### 87. Subterranean bat roosts

87.1 An *exclusion zone* with a minimum radius as specified in columns (a), (b) or (c) of **Table 5** must be applied to each *subterranean site* feature listed in **Table 5**.

#### Table 5: Subterranean site feature exclusion zones

Subterranean site feature	(a) Potential subterranean bat roost	(b) Confirmed presence of bats	<i>(c) Confirmed absence of bats</i>
Cave, mine or tunnel	100 metres	100 metres	50 metres
Disused mine shaft	40 metres	40 metres	0 metres
Rock overhang	100 metres	100 metres	0 metres

- 87.2 Column (c) in **Table 5** in condition 87.1, relating to *confirmed absence of bats*, must only be applied if:
  - (a) no *records* of a *roosting bat* are within 100 metres of the *potential subterranean bat roost*; and
  - (b) a potential subterranean bat roost has been subject to a bat inspection survey in accordance with Protocol 30: Subterranean bat roosts and flying-fox camps and no evidence of bats was identified following:
    - i. a single *bat inspection survey* if the entire *potential subterranean bat roost* could be physically inspected; or

- ii. at least two *bat inspection surveys* using ultrasonic bat detectors if the entire *potential subterranean bat roost* could not be physically inspected.
- 87.3 Notwithstanding condition 87.2(b), an *exclusion zone* with a radius of 100 metres or greater, must be applied around any *potential subterranean bat roost* that has a *record* of a *roosting bat*, unless the *potential subterranean bat roost* is a disused mine shaft in which case an *exclusion zone* with a radius of 40 metres or greater must be applied.
- 87.4 A minimum of a 100 metre radius *exclusion zone* must be applied around any *subterranean site* that is not a *potential subterranean bat roost* if it is associated with a *record* of a *roosting bat*, unless the *subterranean site* has characteristics inconsistent with a *potential subterranean bat roost*, in which case an *exclusion zone* with a radius of 40 metres or greater must be applied around the *subterranean site*.

## **Division 5 – Species-specific conditions for flora**

#### Outcome statement for Division 5 of Chapter 4 of this approval

Site-specific measures are implemented for identified habitat of flora species to mitigate impacts of forestry operations at the site to support their persistence in the landscape.

#### 88. Flora requiring the protection of all individuals

- 88.1 An *exclusion zone* with a radius of 20 metres or greater must be retained around:
  - (a) each individual plant of a species listed in Part 3, Table 1 of condition 31.2 of **Protocol 31: Species covered by the approval**; and
  - (b) each individual plant of a species listed in Part 3, Table 3 of condition 31.2 of Protocol 31: Species covered by the approval that does not have an *EPA* approved *species management plan* or *flora road management plan* in place prior to the commencement of a *forestry operation*, as required by conditions 90 and 91 of this *approval*.

#### 89. Flora requiring the protection of mature individuals

- 89.1 Each individual plant must be retained and protected from *forestry operations* if:
  - (a) it is a species listed in Part 3, Table 2 of condition 31.2 of **Protocol 31: Species covered by the approval**; and
  - (b) its diameter is equal to, or is greater than, the minimum diameter specified in Part 3, Table 2 of condition 31.2 of **Protocol 31: Species covered by the approval**.
- 89.2 Each individual plant required to be retained under condition 89.1 must be protected from *forestry operations* in accordance with the requirements for *retained trees* in **Protocol 23: Tree retention**.

#### 90. Flora road management plan

- 90.1 A *flora road management plan* must be prepared for all plant species listed in Part 3, Table 4 of condition 31.2 of **Protocol 31: Species covered by the approval** and approved by the *EPA* prior to the commencement of a *forestry operation* in an *operational area* with *known habitat*.
- 90.2 Each *flora road management plan* must be prepared in accordance with the requirements set out in Part 3, Table 4 of condition 31.2 of **Protocol 31: Species covered by the approval**.
- 90.3 *FCNSW* must implement the requirements of each *EPA* approved *flora road management plan* during all *forestry operations* in the *operational area*.

- 90.4 Notwithstanding condition 90.1, condition 88.1 of this *approval* must be applied if:
  - (a) no flora road management plan has been prepared by FCNSW or approved by the EPA for a flora species listed in Part 3, Table 4 of condition 31.2 of Protocol 31: Species covered by the approval; or
  - (b) the **EPA** approved **flora road management plan** for the flora species is more than five years old.

### **Division 6 – Species management plans**

#### Outcome statement for Division 6 of Chapter 4 of this approval

Best management practices are planned and implemented to maintain or increase the species population within the plan areas.

#### 91. Species management plans

- 91.1 *FCNSW* must prepare a *species management plan* in accordance with **Protocol 21: Species** management plan for each:
  - (a) species listed in Part 2, Table 3 of **Protocol 31: Species covered by the approval**;
  - (b) species listed in Part 3, Table 3 of Protocol 31: Species covered by the approval; or
  - (c) species where required, or approved, in writing by the **EPA**.
- 91.2 A *species management plan* must be approved by the *EPA* before the commencement of any *forestry operation* in an *operational area* to which the *species management plan* applies.
- 91.3 *FCNSW* must implement and comply with each *species management plan*.

## **Division 7 – Burning**

#### Outcome statement for Division 7 of Chapter 4 of this approval

Pre-and post-harvest burns are planned, timed and implemented to minimise impacts to identified environmental and habitat values and to provide refuge habitat in the immediate period around harvesting operations.

#### 92. General obligations on burn planning

- 92.1 FCNSW must not conduct a pre-harvest burn or post-harvest burn in an operational area unless:
  - (a) it has prepared a *burn plan* in accordance with **Protocol 4: Pre-operational plans** and the limitations in conditions 93 and 94;
  - (b) the burn plan clearly states that FCNSW elected to apply the terms of the approval instead of the requirements of the Rural Fires Act 1997 (NSW);
  - (c) the *burn plan* clearly states whether the proposed *burning operation* is a *pre-harvest burn* or *post-harvest burn*; and
  - (d) the *burn plan* is recorded in the Bushfire Risk Information Management System (BRIMS) NSW Rural Fire Service 'State-wide fire recording system'.

- 92.2 **FCNSW** must ensure that **pre-harvest burn** or **post-harvest burn** planning and implementation is carried out by a **suitably qualified person**.
- 92.3 Each *pre-harvest burn* or *post-harvest burn* must be carried out in accordance with:
  - (a) the *burn plan* prepared for each *operational area*; and
  - (b) all conditions specified in this *approval* that relate to a *pre-harvest burn* or *post-harvest burn*.

#### 93. Limits on the timing of burns

- 93.1 A *pre-harvest burn* may only be conducted within one year before the commencement of a *harvesting operation* or within such other period as approved under condition 5.2 of **Protocol 5:** Approvals for restricted activities.
- 93.2 A *post-harvest burn* may only be conducted within two years after the *completion* of a *harvesting operation*.
- 93.3 A *pre-harvest burn* must not be conducted in any part of the *net harvest area* that has been subject to a *burn event* within the preceding five years.
- 93.4 A *post-harvest burn* must not be conducted in any part of the *net harvest area* in which a *pre-harvest burn* was conducted.
- 93.5 A *pre-harvest burn* or a *post-harvest burn* must not be ignited where immediately prior to the planned start time for the burn:
  - (a) the recorded McArthur Forest Fire Danger Index within the burn area is greater than 12; or
  - (b) the McArthur Forest Fire Danger Index is predicted to be greater than 15 at any time during the intended duration of the burn; or
  - (c) the McArthur Forest Fire Danger Index is predicted to be greater than 15 at any time in a 24hour period following the planned completion of the burn.
- 93.6 For land classified as *inherent hazard level* 2 or 3 in accordance with **Protocol 15: Inherent soil** erosion and water pollution hazard assessment:
  - (a) a *pre-harvest burn* or *post-harvest burn* must not be carried out during, or within the month prior to, a month with an average monthly *rainfall erosivity* of greater than 1100; and
  - (b) a *pre-harvest burn* or *post-harvest burn* carried out during a month with an average monthly *rainfall erosivity* of 900 to 1100 may only be conducted using a ground burning (top disposal) method.

#### 94. Limits on the application of fire during pre-harvest burns and post-harvest burns

**Consultation note**: Post consultation a specified list of fire tolerant ESAs will be developed. Changes may include removing the need for FCNSW to seek EPA approval, and installing a protocol that sets out criteria that must be met before deliberate burning is permitted, and mitigation measures to minimise environmental impacts.

- 94.1 Except in accordance with the *EPA's* approval under condition 94.5, *FCNSW* must not carry out a *pre-harvest burn* or a *post-harvest burn* in an *ESA* or *ground protection zone*.
- 94.2 *FCNSW* must *stabilise* and *rehabilitate* any area in an *ESA* or *ground protection zone disturbed* by a *pre-harvest burn* or a *post-harvest burn*.

- 94.3 Where *FCNSW* considers deliberate ignition or deliberate intrusion of a *pre-harvest burn* or a *post-harvest burn* is required within an *ESA* or *ground protection zone*, *FCNSW* must apply to the *EPA* to carry out such *burning operations*.
- 94.4 An application under condition 94.3 must:
  - (a) provide information which demonstrates to the *EPA* that no safe or practical alternatives exist;
  - (b) include a *burn plan* prepared in consultation with the *EPA* that:
    - i. demonstrates that the proposed *pre-harvest burn* or a *post-harvest burn* will be carried in such a way that:
      - a. mitigates impacts on each ESA or ground protection zone;
      - b. limits *pre-harvest burn* or a *post-harvest burn* to the minimum extent necessary; and
    - ii. specifies actions to be implemented to *stabilise* and *rehabilitate* each *ESA* or *ground protection zone disturbed*, or likely to be *disturbed*, by the *pre-harvest burn* or a *post-harvest burn*;
    - iii. includes all relevant information and otherwise complies with **Protocol 5: Approval for** restricted activities.
- 94.5 The *EPA* may only approve an application under condition 94.3 if it considers that:
  - (a) there is no safe and practical alternative, or the only safe and practical alternative would result in more environmental harm than deliberate ignition within a *category 1 ESA*, *category 2 ESA* or *ground protection zone*;
  - (b) appropriate measures will be implemented to ensure that the burning within the *category 1 ESA*, *category 2 ESA* or *ground protection zone* is minimised and any damage from that burning is minimised; and
  - (c) the relevant *category 1 ESA*, *category 2 ESA* or *ground protection zone* is fire tolerant.
- 94.6 If the *EPA* grants approval to an application under condition 94.3, *FCNSW* must comply with the approval (including any conditions of approval) if it carries out the approved *pre-harvest burn* or a *post-harvest burn*.

## **CHAPTER 5 – OPERATING CONDITIONS**

#### 95. Protocols

95.1 The following *protocols* are referenced in Chapter 5:

Protocol
Protocol 5: Approvals for restricted activities
Protocol 12: Seasonality restrictions
Protocol 14: Design methods for crossings and drainage structures
Protocol 15: Inherent soil erosion and water pollution hazard assessment
Protocol 16: Riparian protection
Protocol 17: Fish passage
Protocol 18: Aquatic habitat assessment
Protocol 19: Determination of drainage class and stream order
Protocol 32: Temporary log crossings
Protocol 33: Work health and safety and accidentally felled trees

## **Division 1 – Overarching compliance obligations**

#### 96. Operational compliance

- 96.1 *FCNSW* may only carry out a *forestry operation* if there is an approved and current *pre-operational plan* for the *forestry operation*.
- 96.2 An approved *pre-operational plan* must be:
  - (a) named, signed and dated by all persons involved in carrying out the *forestry operation*;
  - (b) kept at the site of the *forestry operation* at all times; and
  - (c) provided to an *authorised officer* of the *EPA* or *DPI* upon request.

#### 97. Plant and equipment

- 97.1 All plant and equipment used or installed in connection with any *forestry operation* must, until the *completion* of that *forestry operation*, be:
  - (a) maintained in a proper and efficient condition; and
  - (b) operated in a proper and efficient manner.
- 97.2 Servicing and repair of equipment must not cause or contribute to *water pollution*.

## **Division 2 – Management of ESAs**

#### Outcome statement for Division 2 of Chapter 5 of this approval

ESAs are protected during forestry operations to maintain their intended, specific environmental values.

#### 98. Category 1 ESAs

- 98.1 The following conditions apply to a *category 1 ESA*:
  - (a) forestry operations are prohibited unless otherwise specified in this approval;
  - (b) machinery entry into the **ESA** is prohibited;
  - (c) a tree (or any part of a tree) must not be felled into the **ESA**;
  - (d) **FCNSW** may *maintain* and use existing *roads*, existing *tracks* and existing *drainage feature crossings* in the *ESA*;
  - (e) **FCNSW** must not **construct** or **upgrade roads**, **tracks** or **drainage feature crossings** unless approved in accordance with **Protocol 5: Approvals for restricted activities**;
  - (f) forest products or coarse woody debris must not be removed from the ESA;
  - (g) **FCNSW** must not **construct** or re-open a **log dump** within an **ESA** unless approved in accordance with **Protocol 5: Approvals for restricted activities**; and
  - (h) **FCNSW** must **stabilise** and **rehabilitate** any area within the **ESA** that is **disturbed** by **forestry operations**.

#### 99. Category 2 ESAs

- 99.1 The following conditions apply to a *category 2 ESA*:
  - (a) *forestry operations* are prohibited unless otherwise specified in this *approval*;
  - (b) a tree (or any part of a tree) must not be felled into the **ESA** unless:
    - i. there is no practical alternative of felling the tree into the net harvest area; and
    - ii. the maximum number of trees felled into the **ESA** is no more than six in any 200-metre length of the **ESA**;
  - (c) machinery is only permitted into the **ESA** for the purpose of felling a tree located within the **harvest area** if:
    - i. the ESA is not land mapped as inherent hazard level 4;
    - ii. the machinery is within the outer five metres of the **ESA**, and the tree:
      - a. cannot safely be felled from within the net harvest area; and
      - b. is felled away from the ESA;
  - (d) **FCNSW** may **maintain** and use existing **roads**, existing **tracks** and existing **drainage feature crossings** in the **ESA**;

- (e) **FCNSW** must not **construct** or **upgrade roads**, **tracks** or **drainage feature crossings** unless approved in accordance with **Protocol 5: Approvals for restricted activities**;
- (f) forest products or coarse woody debris must not be removed from the ESA;
- (g) *FCNSW* must not *construct* or re-open a *log dump* within an *ESA* unless approved in accordance with **Protocol 5: Approvals for restricted activities**; and
- (h) **FCNSW** must **stabilise** and **rehabilitate** any area within the **ESA** that is **disturbed** by **forestry operations**.

#### 100. Accidentally felled trees

- 100.1 A tree, or part of a tree, can be identified as being accidentally felled into an **ESA**, and is not considered a breach of conditions 98.1(c) or 99.1(b) of the **approval**, if **FCNSW** can demonstrate that:
  - (a) a reasonable attempt was made to fell the tree away from the **ESA**;
  - (b) the person carrying out the *forestry operation* did not know, and could not reasonably have been expected to know, that the tree would fall into the *ESA*; and
  - (c) the accidentally felled tree was recorded in accordance with **Protocol 33: Work health and** safety and accidently felled trees at the time the tree, or part of the tree, entered the *ESA*.
- 100.2 A tree, or part of a tree, that has been accidentally felled into an **ESA** may only be removed if:
  - (a) its removal will cause no further damage to the vegetation within the **ESA**;
  - (b) machinery does not enter the **ESA** to retrieve the tree or part of the tree; and
  - (c) immediately following removal, any soil, *groundcover* or vegetation within the *ESA* that is *disturbed* by the removal is *stabilised* and *rehabilitated*.

#### 101. ESAs associated with drainage features

101.1 Any *ESA* that is required to be applied to both sides of, or from the edge of, a *drainage feature* must be measured and applied from the *bankfull level* in accordance with **Protocol 16: Riparian protection**.

### **Division 3 – Riparian protection**

#### Outcome statement for Division 3 of Chapter 5 of this approval

Riparian vegetation along each side of a drainage feature is protected to maintain water quality, stream stability, riparian habitat and contribute to habitat connectivity.

#### 102. Riparian exclusion zones

- 102.1 A *riparian exclusion zone* with a minimum width as specified in **Table 6a** or **Table 6b** (depending on the applicable subregion and zone) must be retained on each side, and for the entire length of, each of the drainage categories listed in column one of those tables.
- 102.2 For the purpose of applying **Table 6a** and **Table 6b**, each:
  - (a) *drainage class* must be classified in accordance with **Protocol 19: Determination of** drainage class and stream order; and

(b) *riparian exclusion zone* must be measured and applied in accordance with **Protocol 16**: Riparian protection.

Table 6a: ESA categories and minimum riparian exclusion zone and ground protection zone widths for
the Eden Subregion, Tumut Area and regrowth zone (intensive)

Drainage category	Minimum width of <i>riparian exclusion zone</i> (metres)	ESA category	Minimum width of ground protection zone (metres)
<b>Drainage depression</b> (mapped or <b>unmapped</b> )	n/a	n/a	5
Unmapped drainage line	5	category 1 ESA	10
Class 1 classified drainage line	5	category 1 ESA	10
Class 1 classified drainage line within the class 1 aquatic habitat map or Eden Subregion	10	category 1 ESA	10
Class 2 classified drainage line	20	category 1 ESA	0
Class 3 classified drainage line	30	category 1 ESA	0
Class 4 (and above) classified drainage line	50	category 1 ESA	0

Table 6b: *ESA* categories and minimum *riparian exclusion zone* and *ground protection zone* widths for all other subregions and zones not prescribed by Table 6a

Drainage category	Minimum width of <i>riparian exclusion zone</i> (metres)	ESA category	Minimum width of ground protection zone (metres)
<b>Drainage depression</b> (mapped or <b>unmapped</b> )	n/a	n/a	5
Unmapped drainage line	5	category 1 ESA	10
Class 1 classified drainage line	5	category 1 ESA	10
Class 1 classified drainage line within the class 1 aquatic habitat map	10	category 1 ESA	10
Class 2 classified drainage line	20	category 2 ESA	0
Class 3 classified drainage line	30	category 2 ESA	0
Class 4 (and above) classified drainage line	50	category 2 ESA	0

102.3 For the purpose of applying Table 6a and Table 6b, *FCNSW* must:

- (a) identify *drainage class* in accordance with **Protocol 19: Determination of drainage class** and stream order; and
- (b) measure and apply each *riparian exclusion zone* in accordance with **Protocol 16: Riparian protection**.

#### 103. Riparian exclusion zones for ordered drainage features

- 103.1 For *forestry operations* where *LiDAR* mapping is unavailable, *FCNSW* must:
  - (a) identify *drainage order* for each *drainage feature* in accordance with **Protocol 19: Determination of drainage class and stream order**;
  - (b) determine the minimum *riparian exclusion zone* width and *ESA* category for each *drainage feature* in accordance with Table 1 of **Protocol 16: Riparian protection**; and
  - (c) retain the *riparian exclusion zone* required by condition 102 on each side, and for the entire length of, each *drainage feature.*

#### 104. Ground protection zones

- 104.1 A *ground protection zone* must be applied, for the minimum width specified, for each of the drainage categories required by:
  - (a) Table 6a or Table 6b of condition 102 of this approval; or
  - (b) Table 1 of **Protocol 16: Riparian protection**.
- 104.2 For the purpose of condition 104.1, the width of each *ground protection zone* is to be measured along the ground surface from:
  - (a) the outer edge of each *riparian exclusion zone*;
  - (b) each side of the centreline of an *unmapped drainage depression* or *mapped drainage depression*; or
  - (c) the entire length of each side of a *mapped drainage depression* located above the *channel head*.
- 104.3 Machinery must not operate in a *ground protection zone* when the *soil* is *saturated*.
- 104.4 *Earthworks* must not be undertaken in a *ground protection zone* except for the *construction* or *upgrading* of a *drainage feature crossing*, its approaches or as required to undertake *stabilisation* work of *disturbed* areas.
- 104.5 Machinery operating within a *ground protection zone* must:
  - (a) operate with blade up at all times except when conducting *earthworks* to *construct* or *upgrade* a *drainage feature crossing*, its approaches or as required to undertake *stabilisation* work of any *disturbed* areas; and
  - (b) not *snig* along *unmapped drainage depressions* or *mapped drainage depressions* located above the *channel head*.
- 104.6 Areas within the *ground protection zone* that are *disturbed* by *forestry operations* must be *stabilised* and *rehabilitated*.

#### 105. Saturated soils

- 105.1 If a *drainage feature*, *riparian exclusion zone* or *ground protection zone* is *disturbed* and *saturated soils* prevent permanent *stabilisation* measures being implemented then:
  - (a) temporary **soil stabilisation** and **sediment control measures** must be implemented within five days after the **disturbance**; and
  - (b) permanent *stabilisation* measures must be implemented as soon as the soil is not saturated.
- 105.2 **FCNSW** must document each instance where **saturated soils** prevent permanent **stabilisation** measures from being implemented for areas that are **disturbed** in a **drainage feature**, **riparian exclusion zone** or **ground protection zone**.

#### 106. Wetlands

- 106.1 For a *wetland* or *major water storage*:
  - (a) **FCNSW** must retain an **exclusion zone** around any **wetlands** or **major water storages** with a minimum width as specified in Table 7 of this condition;
  - (b) for the purposes of applying Table 7 to *wetlands*:
    - i. the presence of the *wetland* must be verified and its location determined in the field;
    - ii. the surface area of the *wetland*, and the associated *wetland exclusion zone*, must be measured from either the edge of the current saturated zone, or the outer edge of where the vegetation type indicates a wetter micro-environment than the surrounding country, whichever results in a larger surface area;
  - (c) the width of the *wetland exclusion zone* must be measured along the ground surface and must be determined in the field; and
  - (d) if an exclusion zone for a wetland or major water storage extends beyond the catchment of the wetland or major water storage it is protecting, the exclusion zone may be terminated at the catchment boundary.

Feature type	Size of the surface area	Exclusion zone (metres)
Wetland	Less than 0.5 hectares	10
Wetland	Between 0.5 and 2.0 hectares	20
Wetland	Greater than 2.0 hectares	40
Coastal Management SEPP	All	40
Major water storage	All	100

#### Table 7: Minimum exclusion zone widths for wetlands and major water storages

## **Division 4 – Roads**

#### Outcome statement for Division 4 of Chapter 5 of this approval

Best management practices for roads and road crossings are implemented to minimise soil erosion and water pollution to maintain water quality, aquatic habitat and native fish movement.

#### 107. Roads

- 107.1 All road batters, table drains and road surfaces must be stable.
- 107.2 Where clearing for *road construction* or *road maintenance* extends three metres or more beyond the *inflexion point* of the *road prism*, the area that is *disturbed* must be *stabilised*.

#### 108. Drainage of roads

- 108.1 *Roads* must be drained to divert water flow or potential water flow from *road surfaces* and each *table drain* and:
  - (a) road drainage structures must have the capacity to wholly convey a peak flow from a 1:5-year storm event, as determined in accordance with Protocol 14: Design methods for crossings and drainage structures;
  - (b) road drainage structures must divert water onto a stable surface that:
    - i. is capable of handling *concentrated water flow*;
    - ii. provides for sediment trapping and energy dissipation; and
  - (c) **road drainage structures** and **sediment control measures** must be designed, installed and operated so that water flow does not discharge, or have the potential to discharge, directly into **drainage features**.

#### 109. Wet weather restrictions

- 109.1 A *haulage operation* must immediately cease when *runoff* from a *road* causes or contributes to, or is likely to cause or contribute to *water pollution*.
- 109.2 If *runoff* from a *road* causes or contributes to, or is likely to cause or contribute to *water pollution*, a *road* must not be used for a *haulage operation*, other than for the purposes of allowing a truck that is already loaded or partially loaded with *timber products* to leave the *compartment* and/or *coupe*.

#### 110. Road crossings

- 110.1 A *road crossing* must be:
  - (a) **stable** and capable of withstanding **haulage operations**;
  - (b) located, designed, *constructed*, *upgraded*, used and *maintained* for *fish passage* in accordance with:
    - i. Protocol 17: Fish passage; and
    - ii. Protocol 18: Aquatic habitat assessment.
- 110.2 A *drainage feature crossing* must only be a *bridge*, a *culvert*, a *causeway*, an existing *stable gully stuffe*r, or an existing *side-cut causeway*.
- 110.3 A new gully stuffer or new side-cut causeway must not be constructed.
- 110.4 An existing *gully stuffer* must not be upgraded. Where an existing *gully stuffer* becomes unstable or not capable of withstanding *haulage operations*, it must be replaced with a *bridge*, a *culvert* or a *causeway*.

- 110.5 Each *road crossing* must be capable of withstanding the *peak flow* from a 1:10-year storm event, as determined in accordance with **Protocol 14: Design methods for crossings and drainage** structures.
- 110.6 If a *road crossing* other than a *causeway* is *constructed* or *upgraded*, that *road crossing* must have the capacity to wholly convey a *peak flow* from a 1:5-year storm event, as determined in accordance with Protocol 14: Design methods for crossings and drainage structures.
- 110.7 Each *road crossing outlet* must discharge onto a *stable* surface capable of handling *concentrated water flow*.
- 110.8 A *road* must be drained between five metres and 30 metres on each side of a *drainage line crossing*, measured from the *bankfull level*.
- 110.9 If a *road* cannot be drained between five metres and 30 metres either side of a *drainage line crossing*, the *road* approaches to the *crossing* must be *armoured*.
- 110.10 The *construction*, *upgrade* or *maintenance* of a *road crossing* must restrict the *disturbance* of vegetation and *groundcover* in the *ESA* to the area that is three metres upstream and downstream of the *road crossing* unless otherwise approved in accordance with **Protocol 5: Approvals for restricted activities**.
- 110.11 Where a *road* is *constructed* or *upgraded* in *dispersible soils*, each part of the *road prism* within 20 metres of each side of a *road crossing* must be *stabilised*.
- 110.12 Spoil derived from road crossing construction, upgrading, maintenance, removal or use:
  - (a) must be removed from all *drainage features*; and
  - (b) must not be placed in any **ESA** or **ground protection zone**.
- 110.13 If the removal of *spoil* from a *drainage feature disturbs* an area, that area must be re-shaped and *stabilised*.
- 110.14 If any works are carried out to *construct*, *upgrade*, *maintain* or remove all, or part of, a *road crossing*, then:
  - (a) any *disturbed* area caused by such works must be re-shaped and *stabilised*, and
  - (b) any *disturbed* area within the *road prism*, 20 metres each side of the *road crossing* of a *drainage line*, must be *stabilised*.
- 110.15 Any in-stream works in *class 1 aquatic habitat*, including the *construction* or *upgrading* of *road crossings* must comply with Protocol 17: Fish passage, unless otherwise approved in accordance with Protocol 5: Approvals for restricted activities.

### **Division 5 – Tracks**

#### Outcome statement for Division 5 of Chapter 5 of this approval

Best management practices for tracks and track crossings are implemented to minimise soil erosion and water pollution to maintain water quality, aquatic habitat and native fish movement.

#### 111. Drainage of tracks

111.1 **Tracks** must be drained to divert water flow or potential water flow from the **track surface** on completion of use of the **track** for the **forestry operation**, or if the **track** is not, or will not be, used for five consecutive days or longer.

- 111.2 Each *track drainage structure* must have the capacity to wholly convey a *peak flow* from a 1:2year storm event as determined in accordance with **Protocol 14: Design methods for crossings** and drainage structures.
- 111.3 Each *track drainage structure* must be located, designed, installed and maintained in such a way that:
  - (a) water is diverted onto a *stable surface* capable of handling *concentrated water flow* and provides for *sediment trapping* and *energy dissipation*; and
  - (b) water flow does not discharge directly to *drainage features*.
- 111.4 **Blading off** is prohibited on tracks.
- 111.5 Where outfall or walkover techniques are used crossbanks are not required.
- 111.6 *Crossbanks* must be *constructed* of soil only.

#### 112. Wet weather restrictions

112.1 A *track* must not be used where the use of that *track* causes or contributes to, or is likely to cause or contribute to, *runoff* that causes *water pollution*.

#### 113. Track crossings

- 113.1 A *track* must not cross a *wetland*.
- 113.2 A *track crossing* must not be used when:
  - (a) water is flowing from the *drainage feature* across the pavement or running surface of the *crossing*; or
  - (b) the *track crossing* is saturated.
- 113.3 A *track crossing* must be *stable* and capable of withstanding *snigging*.
- 113.4 A *track crossing* must only be a *bridge*, a *culvert*, a *causeway*, a *temporary log crossing*, or an existing *stable gully stuffer*.
- 113.5 A new *gully stuffer* must not be *constructed*.
- 113.6 An existing *gully stuffer* must not be upgraded. Where an existing *gully stuffer* becomes unstable or not capable of withstanding *snigging*, it must be removed and replaced with a *bridge*, a *culvert*, a *causeway* or a *temporary log crossing*.
- 113.7 The *construction*, use and removal of each *temporary log crossing* must be carried out in accordance with **Protocol 32: Temporary log crossings.**
- 113.8 Each *track crossing* must be capable of withstanding the *peak flow* from a 1:10-year storm event, as determined in accordance with **Protocol 14: Design methods for crossings and drainage** structures.
- 113.9 Each *permanent track crossing,* other than a *causeway,* must have the capacity to wholly convey a *peak flow* from a 1:5-year storm event, as determined in accordance with **Protocol 14: Design methods for crossings and drainage structures**.
- 113.10 Each *permanent track crossing* must be located, designed, *constructed*, *upgraded*, used and *maintained* for *fish passage* in accordance with:

- (a) **Protocol 17: Fish passage**; and
- (b) **Protocol 18: Aquatic habitat assessment**.
- 113.11 A *track* must be drained between five and 20 metres on each side of a *drainage line crossing*, measured from the *bankfull level*.
- 113.12 Each *track crossing outlet* must discharge onto a *stable* surface capable of handling *concentrated water flow*.
- 113.13 Where a *track* is in *dispersible soils*, the *track* surface must be *stabilised* for a length of 20 metres each side of a *track crossing*, measured from the *bankfull level*.
- 113.14 Each *temporary track crossing* must be removed at the completion of its use.
- 113.15 Spoil derived from track crossing construction, upgrading, maintenance, removal or use must:
  - (a) be removed from *drainage features*, and
  - (b) not be placed in any **ESA** or **ground protection zone**.
- 113.16 If the removal of *spoil* from a *drainage feature disturbs* an area, that area must be re-shaped and *stabilised*.
- 113.17 Any area of land 20 metres either side of a *track crossing* of a *drainage line* that is *disturbed* by *construction*, *upgrading*, *maintenance* or removal of a *track crossing* must be re-shaped and *stabilised*.

Note: This does not include the **track** surface or **track drainage structures** within 20 metres either side of the **drainage line**.

- 113.18 The *construction*, *upgrade* or *maintenance* of a *track crossing* must restrict the *disturbance* of vegetation and *groundcover* in the *riparian exclusion zone* to the area that is three metres upstream and downstream of the *track crossing* unless otherwise approved in accordance with **Protocol 5: Approvals for restricted activities.**
- 113.19 Any in-stream works in *class 1 aquatic habitat*, including the *construction* or *upgrading* of *track crossings* must comply with **Protocol 17: Fish passage**, unless otherwise approved in accordance with **Protocol 5: Approvals for restricted activities**.

## Division 6 – General soil and water operating requirements

#### Outcome statements for Division 6 of Chapter 5 of this approval

Best management practices are implemented to minimise soil erosion and water pollution to maintain water quality and aquatic habitat.

Dust and waste are managed to minimise pollution around operational areas.

#### 114. Log dumps, borrow pits and gravel pits

- 114.1 *Runoff* from a *borrow pit*, *gravel pit* or *log dump* must not discharge directly into a *drainage feature*.
- 114.2 Each *borrow pit*, *gravel pit* and *log dump* must be located at least 10 metres from the outer edge of any *riparian exclusion zone* or *ground protection zone* on a *class 1 classified drainage line*, *class 2 classified drainage line*, *first order drainage feature* or second *order drainage feature*.

114.3 Operations on *log dumps* must immediately cease where *runoff* causes or contributes to, or is likely to cause or contribute to *water pollution*.

#### **115. Seasonality restrictions**

- 115.1 For the periods specified in **Protocol 12: Seasonality restrictions**, in a *compartment* that has an average annual *rainfall erosivity* between 4000 and 6000:
  - (a) no forestry operations are permitted on land classified as inherent hazard level 3; and
  - (b) no *road construction* is permitted on *ground slopes* greater than 30 degrees.
- 115.2 For a *compartment* that has an average annual *rainfall erosivity* greater than 6000, *forestry operations* are not permitted on the *ground slopes* and during the periods as specified in Protocol 12: Seasonality restrictions.

#### 116. Debris and spoil management

- 116.1 *Harvesting debris* or *spoil* must not be deposited in any *ESA*.
- 116.2 **Spoil** must not be deposited in any ground protection zone.

#### 117. Inherent hazard level 4

- 117.1 *Harvesting* is prohibited on any land that is *inherent hazard level* 4 as determined and mapped in accordance with Protocol 15: Inherent soil erosion and water pollution hazard assessment.
- 117.2 Where there is land within the *net harvest area* that is *unmapped inherent hazard level* 4 as determined in accordance with **Protocol 15: Inherent soil erosion and water pollution hazard assessment**:
  - (a) *harvesting* is permitted provided the *unmapped inherent hazard level* 4 is:
    - i. no larger than 50 metres by 50 metres in extent; or
    - ii. no larger than 2500 square metres; and
    - iii. the land is not contiguous with any other mapped *inherent hazard level* 4 or *unmapped inherent hazard level* 4 within the *compartment* or any adjoining land;
  - (b) machinery must not enter the *unmapped inherent hazard level* 4 area;
  - (c) *harvesting* must only be conducted in months where the monthly *rainfall erosivity* is less than 300;
  - (d) there must be no water flow, or potential water flow, along the *log furrow* surface for a distance exceeding 10 metres;
  - (e) within five business days of the *completion* of *harvesting* in the *unmapped inherent hazard level* 4 area, 70% *groundcover* must be achieved by:
    - i. the respreading or retaining of *harvesting debris*; or
    - ii. the spreading of topsoil and seed; and
  - (f) the *unmapped inherent hazard level* 4 area must be clearly identified on the *operational map* and recorded in the *operational plan* prior to the commencement of *harvesting*.

Note: These requirements are in addition to the requirements in Division 3 of Chapter 3 - ESAs

#### 118. Waste

- 118.1 *Waste*, including but not limited to tyres, drums, wire, rope, sump oil and litter generated in the course of or from any *forestry operations*, must be removed from the *operational area* and disposed of in a lawful manner at an appropriate facility.
- 118.2 Condition 118.1 excludes *harvesting debris*.

#### 119. Dust

- 119.1 A *forestry operation* must be carried out in a proper and efficient manner to prevent the emission of dust from the *operational area*, where it could impact on property or public health.
- 119.2 If it is not reasonably practicable to prevent the emission of dust from the **operational area**, **FCNSW** must minimise the emission of dust from the **operational area**.

### **Division 7 – Burning operations**

#### Outcome statement for Division 7 of Chapter 5 of this approval

Pre- and post-harvest burns are planned and implemented to minimise impacts to identified environmental and habitat values and to provide refuge habitat in the immediate period around harvesting operations.

#### 120. Burning

- 120.1 A *pre-harvest burn* or *post-harvest burn* must be carried out in accordance with the *burn plan* prepared for the *forestry operation* in accordance with conditions 92, 93 and 94 of this *approval*.
- 120.2 In an area where there has been a *pre-harvest burn*, a *forestry operation* must not commence in any *operational area* until the soil is *stable*.
- 120.3 A *pre-harvest burn* or *post-harvest burn* must be undertaken in a manner that:
  - (a) does not impact on fallen logs that are greater than 40 centimetres in diameter and greater than five metres in length; and
  - (b) does not impact on the integrity or longevity of *hollow-bearing trees* which are required to be retained under condition 71.

Note: Impact as described by condition 120.3(a) is where the ecological features and functions are substantially destroyed or removed. FCNSW must consider associated guidelines to support the implementation of this condition.

## **CHAPTER 6 – MAPPING**

#### 121. Protocols

121.1 The following *protocols* are referenced in Chapter 6:

Protocol
Protocol 34: Spatial datasets
Protocol 35: Data and information management
Protocol 36: Field mapping

#### Outcome statement for Chapter 6 of this approval

Accurate data layers are created, maintained and used during forestry operations and are accessible to agencies and the public.

#### 122. Identifying operational boundaries

- 122.1 Prior to the commencement of a *forestry operation* in an *operational area*, the following must be identified on the *operational map*:
  - (a) the location and mapped extent of all known *ESAs* and their associated *exclusion zones*; and
  - (b) any other area or *habitat feature* required to be protected under this *approval*.
- 122.2 Prior to the commencement of a *forestry operation* in an *operational area*, the location and mapped extent of the boundary of all *ESAs* and their associated *exclusion zones*, or any other area required to be protected under this *approval*, must be *field identified*.
- 122.3 For all **ESAs**, and their associated **exclusion zones**, identified during the carrying out of a **forestry operation** in an **operational area** the location and mapped extent of the boundary must be **field identified** in advance of the **forestry operation**.
- 122.4 The location of the *field identified* boundary of any *ESA* contained in an *IFOA spatial dataset*, *FCNSW spatial dataset* and *FCNSW field mapped dataset* must match the location and extent of the boundary as it is mapped on that dataset, unless otherwise specified by this *approval*.
- 122.5 The extent of an **ESA** boundary contained in an **IFOA spatial dataset**, **FCNSW spatial dataset** and **FCNSW field mapped dataset** is the outer edge of the boundary line drawn on a hardcopy or electronic map.
- 122.6 The location of the *field identified* boundary of any *ESA* contained in an *indicative IFOA spatial dataset* or any *unmapped ESA*, must match the physical boundary of the *ESA* as it occurs in the field.

#### 123. Spatial datasets

- 123.1 Each *spatial dataset* and archived *spatial dataset* must be:
  - (a) stored in an ESRI feature class format;
  - (b) be in the Lambert Projection for NSW based on the GDA94 datum;
  - (c) free of gaps and overlaps in its topology; and

- (d) have *metadata*.
- 123.2 A *spatial dataset* may only be replaced or updated in accordance with **Protocol 34: Spatial datasets.**
- 123.3 **Spatial datasets** and archived **spatial datasets** and associated **metadata** must be made publicly available in accordance with condition 48 and **Protocol 35: Data and information management**, unless otherwise stated in this **approval**.

#### 124. Field mapping

- 124.1 The location and boundary of any of the following must be mapped, or re-mapped, in accordance with **Protocol 36: Field mapping** prior to the commencement of any *forestry operation* within each *operational area*:
  - (a) all unmapped ESA(s);
  - (b) full extent of all *flying-fox camps*;
  - (c) all *unmapped rainforest* incidentally identified by *FCNSW*;
  - (d) all *indicatively mapped ESA(s)* that can be demonstrated by *FCNSW* to be incorrectly mapped; or
  - (e) any other plant, animal or feature required to be mapped or re-mapped in the field as specified by this *approval*.
- 124.2 Prior to the commencement of a *forestry operation* in an *operational area*, any mapping or remapping that occurs under condition 124.1 must be temporarily stored in a *FCNSW field mapped dataset* and be:
  - (a) made available to officers of FCNSW, EPA and DPI; and
  - (b) in accordance with **Protocol 35: Data and information management**.
- 124.3 Any *ESA* or other feature mapped or re-mapped under condition 124.1 must be quality assured and incorporated into a *spatial dataset* in accordance with **Protocol 34: Spatial datasets**.

#### 125. Species data transfer to NSW BioNet

125.1 All *records* of *plants and animals* that are required to be identified or protected by the *approval* must be provided by *FCNSW* to *NSW BioNet* in accordance with **Protocol 35: Data and information management** as soon as practicable, but no more than three months after the detection of each *record*.

## **CHAPTER 7 – REGENERATION**

#### 126. Protocols

126.1 The following *protocols* are referenced in Chapter 7:

#### Protocol

Protocol 37: Regeneration and stocking

#### Outcome statement for Chapter 7 of this approval

Forests are adequately stocked to maintain ecological function and sustainable timber supplies.

#### 127. Regeneration

- 127.1 *FCNSW* must *regenerate* the *harvested area* to the *regeneration* and stocking standards and timeframes contained in condition 37.2 in **Protocol 37: Regeneration and stocking**.
- 127.2 *FCNSW* must otherwise comply with the requirements in **Protocol 37: Regeneration and stocking** relating to *regeneration*, including required actions and monitoring when *FCNSW* does not meet *regeneration* and stocking standards.
- 127.3 **Replanting** or **seeding** must only use over storey species that were part of the pre-harvest **natural** *floristic composition* of the **harvested area** as determined by **Protocol 37: Regeneration and stocking.**

## **CHAPTER 8 – MONITORING CONDITIONS**

#### 128. Protocols

128.1 The following *protocols* are referenced in Chapter 8:

#### Protocol

Protocol 38: Monitoring program

#### Outcome statement for Chapter 8 of this approval

Forest monitoring and adaptive management are applied at multiple landscape scales to ensure the ongoing effectiveness of this approval in delivering stated outcomes.

#### 129. Monitoring program

- 129.1 *FCNSW* must establish a monitoring steering committee to oversee the design and implementation of a *monitoring program* in accordance with **Protocol 38: Monitoring program**.
- 129.2 *Forestry operations* must not commence under this *approval* until the *EPA* and *DPI* have approved the composition of the monitoring steering committee as set out in **Protocol 38:** Monitoring program.
- 129.3 **FCNSW** must provide a **monitoring program** endorsed by the monitoring steering committee to the Chief Environment Regulator of the **EPA** and the Deputy Director General (Strategy and Policy) of **DPI** for their approval within 12 months following the commencement of this **approval**.
- 129.4 Once the *monitoring program* has been approved by the *EPA* and *DPI*:
  - (a) the *EPA* will incorporate the approved *monitoring program* into **Protocol 38: Monitoring program**; and
  - (b) **FCNSW** must implement and comply with the **monitoring program** in accordance with this **approval** and **Protocol 38: Monitoring program**.

## **SCHEDULE 1**

#### Part 1: General interpretation rules

#### 130. Words and headings

- 130.1 In this *approval* and in each *protocol*, unless expressed to the contrary:
  - (a) words denoting the singular include the plural and vice versa;
  - (b) the word 'includes' in any form is not a word of limitation;
  - (c) where a word or phrase is defined, another part of speech or grammatical form of that word or phrase has a corresponding meaning; and
  - (d) headings, sub-headings, notes and outcome statements in the *approval* and the *protocols* are for ease of reference and to assist interpretation and are not enforceable on their own.

#### 131. Specific references

- 131.1 In this *approval* and in each *protocol*, unless expressed to the contrary, a reference to:
  - (a) a gender includes all other genders;
  - (b) any legislation (including subordinate legislation) is to that legislation as amended, re-enacted or replaced and includes any subordinate legislation issued under it;
  - (c) any document (such as a deed, agreement, plan or other document) is to that document (or, if required by the context, to a part of it) as amended, novated, substituted or supplemented at any time;
  - (d) writing includes writing in digital form;
  - (e) the *approval* or the *protocols* is to those documents as amended from time to time;
  - (f) any *protocol* is to the *protocol* as amended from time to time;
  - (g) any property or assets of a person includes the legal and beneficial interest of that person of those assets or property, whether as owner, lessee or lessor, licensee or licensor, trustee or beneficiary or otherwise;
  - (h) a person includes a firm, partnership, joint venture, association, corporation or other body corporate;
  - (i) a person includes the legal personal representatives, successors and permitted assigns of that person, and in the case of a trustee, includes any substituted or additional trustee; and
  - (j) any body (Original Body) which no longer exists or has been reconstituted, renamed, replaced or whose powers or functions have been removed or transferred to another body or agency, is a reference to the body which most closely serves the purposes or objects of the Original Body.
- 131.2 In this *approval*, unless expressed to the contrary, a reference to a Chapter, Part, condition or Schedule is a reference to a Chapter, Part, condition or Schedule in or to this *approval*.
- 131.3 In a *protocol*, unless expressed to the contrary, a reference to a condition is a reference to a condition in or to that *protocol*.

### Part 2: Register of protocols

#### 132. Register of protocols

Protocol	Chapter and Division referenced
Protocol 1: Registers	Chapter 1, Division 1
Protocol 2: Annual plan of forestry operations	Chapter 2, Division 2
Protocol 3: Operational tracking	Chapter 2, Division 4
Protocol 4: Pre-operational plans	Chapter 1, Division 2 Chapter 3, Division 4 Chapter 4, Division 7
Protocol 5: Approvals for restricted activities	Chapter 1, Division 2, Division 5 Chapter 3, Division 1 Chapter 4, Division 4, Division 7 Chapter 5, Division 2, Division 4, Division 5
Protocol 6: Suitably qualified persons – training and experience	Chapter 1 – Division 5
Protocol 7: Harvesting limits	Chapter 3, Division 2
Protocol 8: Local landscape areas	Chapter 3, Division 1
Protocol 9: Pre-operational road and crossing assessments	Referenced in Protocol 4: Pre-operational plans
Protocol 10: Road design	Chapter 4, Division 1
Protocol 11: Soil dispersibility assessment	Referenced in Protocol 4: Pre-operational plans
Protocol 12: Seasonality restrictions	Chapter 5, Division 6
Protocol 13: Mass movement assessment	Referenced in Protocol 4: Pre-operational plans
Protocol 14: Design methods for crossings and drainage structures	Chapter 5, Division 4, Division 5
Protocol 15: Inherent soil erosion and water pollution hazard assessment	Chapter 4, Division 7 Chapter 5, Division 6
Protocol 16: Riparian protection	Chapter 4, Division 4 Chapter 5, Division 2, Division 3
Protocol 17: Fish passage	Chapter 5, Division 4, Division 5
Protocol 18: Aquatic habitat assessment	Chapter 5, Division 4, Division 5
Protocol 19: Determination of drainage class and stream order	Chapter 5, Division 3
Protocol 20: Pre-operational surveys	Chapter 4, Division 1, Division 4
Protocol 21: Species management plan	Chapter 4, Division 6

Protocol	Chapter and Division referenced
Protocol 22: Wildlife habitat and tree retention clumps	Chapter 3, Division 3 Chapter 4, Division 3
Protocol 23: Tree retention	Chapter 4, Division 3, Division 5
Protocol 24: Identification of old growth on unassessed land	Chapter 3, Division 3
Protocol 25: Identification of rainforest on unassessed land	Chapter 3, Division 3
Protocol 26: Identification of large forest owl exclusion zones on unassessed land	Chapter 3, Division 3
Protocol 27: Threatened ecological communities	Chapter 1, Division 3 Chapter 4, Division 2
Protocol 28: Rocky outcrops and cliffs	Chapter 4, Division 2
Protocol 29: Ridge and headwater habitat	Chapter 3, Division 3
Protocol 30: Subterranean bat roosts and flying-fox camps	Chapter 4, Division 4
Protocol 31: Species covered by the approval	Chapter 1, Division 3, Division 5 Chapter 4, Division 1, Division 5, Division 6
Protocol 32: Temporary log crossings	Chapter 5, Division 5
Protocol 33: Work health and safety and accidentally felled trees	Chapter 1, Division 5 Chapter 4, Division 3 Chapter 5, Division 2
Protocol 34: Spatial datasets	Chapter 1, Division 5 Chapter 6
Protocol 35: Data and information management	Chapter 2, Division 4 Chapter 6
Protocol 36: Field mapping	Chapter 6
Protocol 37: Regeneration and stocking	Chapter 7
Protocol 38: Monitoring program	Chapter 8
Protocol 39: Definitions	Chapter 1, Division 1, Division 3
Protocol 40: Transitional arrangements	Chapter 3, Division 2

### Part 3: Land to which this approval does not apply – maps

#### **Upper North East Subregion**

- 'Map 1 Land to which the Integrated Forestry Operations Approval for the Upper North East Subregion does not apply'
- 'Map 2 Land to which the Integrated Forestry Operations Approval for the Upper North East Subregion does not apply'

- 'Map 3 Land to which the Integrated Forestry Operations Approval for the Upper North East Subregion does not apply'
- 'Map 4 Land to which the Integrated Forestry Operations Approval for the Upper North East Subregion does not apply'
- 'Map 5 Land to which the Integrated Forestry Operations Approval for the Upper North East Subregion does not apply'

#### Lower North East Subregion

- 'Map 1 Land to which the Integrated Forestry Operations Approval for the Lower North East Subregion does not apply'
- 'Map 2 Land to which the Integrated Forestry Operations Approval for the Lower North East Subregion does not apply'
- 'Map 3 Land to which the Integrated Forestry Operations Approval for the Lower North East Subregion does not apply'
- 'Map 4 Land to which the Integrated Forestry Operations Approval for the Lower North East Subregion does not apply'
- 'Map 5 Land to which the Integrated Forestry Operations Approval for the Lower North East Subregion does not apply'
- 'Map 6 Land to which the Integrated Forestry Operations Approval for the Lower North East Subregion does not apply'

#### **Southern Subregion**

- 'Map 1 Land to which the Integrated Forestry Operations Approval for the Southern Subregion does not apply'
- 'Map 2 Land to which the Integrated Forestry Operations Approval for the Southern Subregion does not apply'
- 'Map 3 Land to which the Integrated Forestry Operations Approval for the Southern Subregion does not apply'
- 'Map 4 Land to which the Integrated Forestry Operations Approval for the Southern Subregion does not apply'

#### **Eden Subregion**

 'Map 1 – Land to which the Integrated Forestry Operations Approval for the Eden Subregion does not apply'

## SCHEDULE 2: REQUIREMENTS FOR FORESTRY OPERATIONS – HARVESTING OPERATIONS

#### 133. Timber product requirements

- 133.1 *Harvesting operations* must only be conducted with the purpose of producing *high quality large sawlogs, high quality small sawlogs, veneer logs* or *piles, poles* or *girder logs*.
- 133.2 *Harvesting operations* must not be conducted for the primary purpose of producing *low quality timber* (including salvage and firewood), *pulpwood logs* and *heads and offcuts*.
- 133.3 Each log that is cut and removed in a *harvesting operation* must be categorised into one of the following categories:
  - (a) *high quality large sawlog*, or if the timber cannot be categorised as a *high quality large sawlog*, as any:
    - i. high quality small sawlog;
    - ii. veneer log; or
    - iii. as a *pile*, *pole* or *girder log*; or
  - (b) if the *timber product* cannot be categorised as a *high quality large sawlog*, *high quality small sawlog*, *veneer log*, *pile*, *pole* or *girder log*, as a *pulpwood log*, *low quality log* or *heads and offcuts*.
- 133.4 A log must be sold into the highest category possible under Schedule 2, condition 132.3.
- 133.5 Timber volume limits contained in Table 8 will be maintained to align with the NSW Regional Forest Agreements (as current from time to time).

#### Table 8: Criteria for each area

Harvesting operations are forestry operations if the harvesting operations produce the following timber products.

IFOA subregion	Upper North East Subregion	Lower North East Eden Subregion Southern Subre Subregion		Southern Subregion	on	
IFOA area (where applicable)	N/A	N/A	N/A	South Coast Area Tumut Area		
High quality large sawlogs and large veneer logs	<ul> <li>High quality large sawlogs and large veneer logs, produced in the following quantities:</li> <li>(i) no more than 136,250 m<sup>3</sup> (that is, 109,000 m<sup>3</sup> + 25% of 109,000 m<sup>3</sup>) per financial year; and</li> <li>(ii) no more than 572,250 m<sup>3</sup> (that is, 109,000 m<sup>3</sup> x 5 + 5% of that total) in each 5-year period commencing 1 July 2018; and</li> <li>(iii) no more than 2,180,000 m<sup>3</sup> x 20) over the duration of this approval.</li> </ul>	<ul> <li>High quality large sawlogs and large veneer logs, produced in the following quantities:</li> <li>(i) no more than 200,000 m<sup>3</sup> (that is, 160,000 m<sup>3</sup> + 25% of 160,000 m<sup>3</sup> + 25% of 160,000 m<sup>3</sup>) per financial year; and</li> <li>(ii) no more than 840,000 m<sup>3</sup> (that is, 160,000 m<sup>3</sup> x 5 + 5% of that total) in each 5-year period commencing 1 July 2018; and</li> <li>(iii) no more than 3,200,000 m<sup>3</sup> (that is, 160,000 m<sup>3</sup> x 20) over the duration of this approval.</li> </ul>	<ul> <li>High quality large sawlogs produced in the following quantities:</li> <li>(i) no more than 28,750 m<sup>3</sup> (that is, 23,000 m<sup>3</sup> + 25% of 23,000 m<sup>3</sup>) per financial year; and</li> <li>(ii) no more than 120,750 m<sup>3</sup> (that is, 23,000 m<sup>3</sup> x 5 + 5% of that total) in each 5-year period commencing 1 July 2018; and</li> <li>(iii) no more than 460,000 m<sup>3</sup> (that is, 23,000 m<sup>3</sup> x 20) over the duration of this approval.</li> </ul>	<ul> <li>High quality large sawlogs produced in the following quantities:</li> <li>(i) no more than 60,625 m<sup>3</sup> (that is, 48,500 m<sup>3</sup>+ 25% of 48,500 per financial year); and</li> <li>(ii) no more than 254,625 m<sup>3</sup> (that is, 48,500 m<sup>3</sup> x 5 + 5% of that total) in each 5-year period commencing 1 July 2018; and</li> <li>(iii) no more than 970,000 m<sup>3</sup> (that is, 48,500 m<sup>3</sup> x 20) over the duration of this approval.</li> </ul>	<ul> <li><i>High quality large</i> <i>sawlogs</i> produced in the following quantities in</li> <li>a) the <i>Tumut Area</i> (other than Ingebirah State Forest):</li> <li>(i) no more than 60,000 m<sup>3</sup> (that is, 48,000 m<sup>3</sup> + 25% of 48,000 m<sup>3</sup> per financial year); and</li> <li>(ii) no more than 252,000 m<sup>3</sup> (that is, 48,000 m<sup>3</sup> x 5 + 5% of that total) in each 5-year period commencing 1 July 2018; and</li> <li>(iii) no more than 960,000 m<sup>3</sup> (that is, 48,000 m<sup>3</sup> x 20) over the duration of this <i>approval</i>.</li> <li>b) the Ingebirah State Forest and Crown- timber lands within the <i>Tumut Area</i> east of Kosciuszko National Park):</li> </ul>	

IFOA subregion	Upper North East Subregion	Lower North East Subregion	Eden Subregion	Southern Subregion	
IFOA area (where applicable)	N/A	N/A	N/A	South Coast Area	Tumut Area
					<ul> <li>(i) no more than</li> <li>20,000 m<sup>3</sup> over the</li> <li>duration of this</li> <li>approval.</li> </ul>
Pulpwood logs	Any <i>pulpwood logs</i> arising from harvesting operations producing the volumes of <i>high</i> <i>quality large timber</i> <i>logs</i> above.	Any <i>pulpwood logs</i> arising from harvesting operations producing the volumes of <i>high</i> <i>quality large timber</i> <i>logs</i> above.	Pulpwood logs produced in the following quantities: (i) no more than 345,000 tonnes per year.	Any <i>pulpwood logs</i> arising from harvesting operations producing the volumes of <i>high</i> <i>quality large timber</i> <i>logs</i> above.	Any <i>pulpwood logs</i> arising from harvesting operations producing the volumes of <i>high</i> <i>quality large timber</i> <i>logs</i> above.
Other timber products	Any high quality small sawlogs, small veneer logs, piles, poles, girder logs, and low quality timber arising from harvesting operations producing the volumes of high quality large timber logs above.	Any high quality small sawlogs, small veneer logs, piles, poles, girder logs, and low quality timber arising from harvesting operations producing the volumes of high quality large timber logs above.	Any high quality small sawlogs, veneer logs, piles, poles, girder logs, and low quality timber arising from harvesting operations producing the volumes of high quality large timber logs above.	Any high quality small sawlogs, veneer logs, piles, poles, girder logs, and low quality timber arising from harvesting operations producing the volumes of high quality large timber logs above.	Any high quality small sawlogs, veneer logs, piles, poles, girder logs, and low quality timber arising from harvesting operations producing the volumes of high quality large timber logs above.
Heads and offcuts (as defined under the Protection of the Environment Operations (General) Regulation 2009)	Any <i>heads and</i> offcuts arising from harvesting operations producing the volumes of <i>high quality large</i> <i>timber logs</i> above.	Any <i>heads and</i> <i>offcuts</i> arising from harvesting operations producing the volumes of <i>high quality large</i> <i>timber logs</i> above.	Any <i>heads and</i> offcuts arising from harvesting operations producing the volumes of <i>high quality large</i> <i>timber logs</i> above.	Any <i>heads and</i> <i>offcuts</i> arising from harvesting operations producing the volumes of <i>high quality large</i> <i>timber logs</i> above.	Any <i>heads and</i> <i>offcuts</i> arising from harvesting operations producing the volumes of <i>high quality large</i> <i>timber logs</i> above.

## SCHEDULE 3: SPECIFIED CONDITIONS APPLYING TO RELEVANT LICENCES

The part of this *approval* specified in column 1 of Table 9 is a part of the relevant licence for which the letter 'Y' is indicated in columns 2, 3, 4 and 5 of Table 9:

#### Table 9

Column 1	Column 2	Column 3	Column 4	Column 5
Part	Forestry approval (Forestry Act)	Environment protection licence (POEO Act)	Fisheries licence (Fisheries Act)	Biodiversity conservation licence (BC Act)
Chapter 1 – Scope and interpretation				
Division 1 – Interpretation of the approval	Y	Y	Y	Y
Division 2 – Terms of the approval	Y	Y	Y	Y
Division 3 – Conditions of the approval	Y	Y	Y	Y
Division 4 – Objectives of the approval	Y	Y	Y	Y
Division 5 – General conditions of the	Y	Y	Y	Y
approval				
Chapter 2 – Administrative conditions				
Division 1 – Registers	Y	Y	Y	Y
Division 2 – Annual plans and reports	Υ	Y	Y	Y
Division 3 – Notification of harm		Y	Y	Y
Division 4 – Records	Y	Y	Y	Y
Division 5 – Notices	Υ	Υ	Y	Υ
Chapter 3 – Planning conditions	1		1	
Division 1 – Landscape level protections				Y
Division 2 – Distribution of harvesting	Y			Y
across the landscape				
Division 3 – Environmentally Significant	Y	Y	Y	Y
Areas (ESAs) Division 4 – Pre-operational planning	Y	Y	Y	Y
Chapter 4 – Operational planning and im		1	1	I
Division 1 – Planning assessments and		Y		Y
surveys		1		1
Division 2 – Habitat protection				Y
Division 3 – Retained trees				Y
Division 4 – Species-specific conditions for				Y
fauna				
Division 5 – Species-specific conditions for				Y
flora				
Division 6 – Species management plans				Y
Division 7 – Burning		Y	Y	Y
Chapter 5 – Operating conditions				
Division 1 – Overarching compliance		Y	Y	Y
obligations				
Division 2 – Management of ESAs		Y	Y	Y
Division 3 – Riparian protection		Y	Y	Y
Division 4 – Roads		Y	Y	
Division 5 – Tracks		Y	Y	
Division 6 – General soil and water		Y		
operating requirements				
Division 7 – Burning operations		Υ		Υ

Column 1	Column 2	Column 3	Column 4	Column 5
Part	Forestry approval (Forestry Act)	Environment protection licence (POEO Act)	Fisheries licence (Fisheries Act)	Biodiversity conservation licence (BC Act)
Chapter 6 – Mapping		Υ	Y	Y
Chapter 7 – Regeneration	Y			
Chapter 8 – Monitoring conditions	Υ	Y	Y	Y

# Coastal Integrated Forestry Operations Approval – Conditions

### Consultation draft May 2018

**Disclaimer:** The Coastal IFOA will include revisions from this draft version when it is granted by the Ministers, reflecting consideration of the outcomes of public consultation, and legislative changes being undertaken in line with the NSW Government Forest Industry Roadmap.