

Site-specific operating conditions for South Brooman State Forest compartment 60A

I, Richard Bean, Chief Executive Officer of the Environment Protection Authority (**EPA**), for and on behalf of the EPA, grant the site-specific operating conditions set out below to Forestry Corporation of NSW pursuant to condition 23.4 of the Integrated Forestry Operations Approval for the Coastal Region (the **approval**).

Interpretation

1. The words used in this document have the same meaning as in the **approval**, except where contrary intention appears. All defined terms are printed in bold and italics.
2. In addition to the terms defined in the **approval**, the following definitions apply in this document:

Dead tree means a tree that has no epicormic and/or lignotuber growth (at the time of the **forestry operation**).

Erosion control measure means a control measure used to mitigate, reduce or prevent **erosion**.

Giant (dead) tree means:

- (a) in relation to Blackbutt or Alpine Ash trees, any **dead tree** of these species with a diameter at stump height over bark (DSHOB) of 160 centimetres or greater; and
- (b) in relation to all other tree species, a dead tree with a diameter at stump height over bark (DSHOB) of 140 centimetres or greater.

Partially burned area means the area covered by a spatial data set held by the **EPA** and provided to FCNSW that the **EPA** is satisfied adequately shows partially-burned areas at the **site**.

Unburned area means the area covered by a spatial data set held by the **EPA** and provided to FCNSW that the **EPA** is satisfied adequately shows unburned areas at the **site**.

Site means South Brooman State Forest **compartment** 60A.

Specific site(s) to which these **site-specific operating conditions** apply

3. These **site-specific operating conditions** apply to all **forestry operations** at the **site**.

Duration of these **site-specific operating conditions**

4. For the purposes of condition 23.4 of the **approval**, the **EPA** specifies that these **site-specific operating conditions** apply for 12 months from the date they are granted.
- 4A. Any condition of these **site-specific operating conditions** which by its nature should continue to apply beyond the expiry of these **site-specific operating conditions** continues to apply, including conditions 51 to 55 of these **site-specific operating conditions**.

Continuation of the **approval**

5. The conditions of the **approval** and the **protocols** continue to apply, except as otherwise provided by these **site-specific operating conditions**.

Inconsistency between instruments

6. In the event of inconsistency between these **site-specific operating conditions** and a condition of the **approval**, the **site-specific operating conditions** prevail to the extent of the inconsistency.

Schedule has effect

7. Any conditions in Schedule 1 of these **site-specific operating conditions** have effect.

Restrictions on harvesting method

8. Despite any condition to the contrary in the **approval**, including condition 13.1 of the **approval**, the following **forestry operations** must not be conducted at the site:
 - (a) **intensive harvesting**;
 - (b) **mixed intensity harvesting**;
 - (c) **alternate coupe logging**;
 - (d) **forest product operations** which involve removal of vegetation (other than trees or timber); and
 - (e) **burning operations**.

Adjustments to selective harvesting processes

9. Where **forestry operations** are conducted at the **site**:
 - (a) **harvesting operations** must only be conducted as **selective harvesting** in burned areas at the **site**;
 - (b) **dead standing trees** must be included in the calculation of the **basal area** under condition 7.3 of **Protocol 7: Harvesting limits**.

Retention of unburned areas and partially burned areas within clumps

10. Any **unburned area** or **partially burned area** of at least 0.05ha (or approximately 20 by 20 metres) is taken to be an **ESA** under the **approval**. Those **unburned areas** or **partially burned areas** over one hectare in size are taken to be a **Category 2 ESA**. Those **unburned areas** or **partially burned areas** between 0.05ha and one hectare in size are taken to be a **Category 1 ESA**. Despite anything to the contrary in the **approval**, these areas can be included as a **wildlife habitat clump** or **tree retention clump** if they otherwise meet the habitat standards listed in Protocol 22.

Prioritising wildlife habitat clumps and tree retention clumps

11. When applying Protocol 22, FCNSW must prioritise the establishment of **tree retention clumps** and **wildlife habitat clumps** in **unburned areas** or **partially burned areas** or in areas with **unburned groundcover**, over other areas.

Adjustments to flora and fauna surveys

12. **FCNSW** is not required to comply with condition 57.1 (c) of the **approval**.
13. Despite any condition to the contrary in the **approval**, a **forestry operation** must not be conducted in any part of an **operational area** unless and until a **broad area habitat search** has been completed since the last date on which any part of the **operational area** was burned in 2019-20.
- 13A. Despite any condition to the contrary in the **approval**, that part of the **broad area habitat search** that involves looking for, identifying and recording any of the trees referred to in conditions 17, 19, 21 or 23 of these **site-specific operating conditions**, or looking for, identifying and recording Glossy Black-Cockatoo feed trees or Glider sap feed trees, may be carried out by a **suitably qualified person** 50 metres in advance of the **harvesting operation**.
14. **FCNSW** can undertake the **broad area habitat search** described in **Protocol 20: Pre-operational surveys** in a **patch** via any means that is capable of identifying the **habitat features** or **species** in Table 2 of condition 57 of the **approval**, which may include by foot, vehicle or unmanned aerial vehicle or a combination of these methods. A **broad-area habitat search** must be undertaken on foot wherever it is deemed by **FCNSW** to be safe to do so. **FCNSW** must record the method(s) used and date of the **broad-area habitat search** for each **patch**.
15. Where a **patch** subject to a **broad area habitat search** cannot be surveyed to meet conditions 13, 13A and 14 of these **site-specific operating conditions**:

- (a) *FCNSW* must consult with the *EPA* to identify alternative approaches before *forestry operations* can occur in that *patch*; and
 - (b) the *EPA* may approve an alternative approach to conditions 13, 13A and 14 of these *site-specific operating conditions*.
16. Where the *EPA* has approved an alternative approach pursuant to condition 15(b) of these *site-specific operating conditions*, *FCNSW* must comply with that alternative approach but need not comply with conditions 13, 13A and 14 of these *site-specific operating conditions* in respect of the *patch* for which the *EPA* has approved an alternative approach.

Adjustments to retained trees requirements

Adjustments to the retention requirements for hollow-bearing trees

17. Despite any condition to the contrary in the *approval*:
- (a) All *hollow-bearing trees* (living or dead) must be permanently retained.
 - (b) *Hollow-bearing trees* must be prioritised for inclusion in a *tree retention clump* or *wildlife habitat clump*, provided that the other requirements in the *approval* relevant to *tree retention clump* or *wildlife habitat clump* are met, including the requirements in Protocol 22.

Adjustments to retention requirements for dead standing trees

- 18. *FCNSW* is not required to comply with condition 64.2(b) of the *approval*.
- 19. *FCNSW* must permanently retain at least 10 *dead standing trees* per hectare of *net harvest area*, where they occur.
- 20. Trees selected for the purpose of condition 19 of these *site-specific operating conditions* must be identified, recorded and protected in accordance with **Protocol 23: Tree retention as retained trees**.

Prioritisation of retention requirements for giant (dead) trees

- 21. Despite any condition to the contrary in the approval, *giant (dead) trees* must be prioritised for inclusion in a *tree retention clump* or *wildlife habitat clump*, provided that the other requirements in the *approval* relevant to *tree retention clump* or *wildlife habitat clump* are met, including the requirements in Protocol 22.
- 22. Trees selected for the purpose of condition 21 of these *site-specific operating conditions* must be identified, recorded and protected in accordance with **Protocol 23: Tree retention as retained trees**.

[Note: condition 64.2(a) of the *approval* requires that all live *giant trees* be permanently retained].

Adjustments to retention requirements for feed trees

- 23. Despite any condition to the contrary in the *approval*, *FCNSW* must:

 - (a) permanently retain all live Red Gum (*E. Tereticornis*, *glaucina*, *seeana* and hybrids) and Swamp Mahogany *E. robusta* trees,
 - (b) retain at least 10 live *Allocasuarina* spp. trees over 10cm DBH per hectare of *net harvest area*, where they occur. The trees must be selected from the largest trees of this species present, and the ones most capable of producing cones, and
 - (c) retain at least 10 live *nectar trees* per hectare of *net harvest area*, where they occur. The trees must be selected first from trees with unburned canopies where they occur.

24. Trees selected for the purpose of condition 23 of these ***site-specific operating conditions*** must be identified, recorded and protected in accordance with **Protocol 23: Tree retention as retained trees.**

[Note: For the purpose of condition 23(c) of these ***site-specific operating conditions, nectar trees*** retained must be those that in the opinion of a **suitably qualified person**, are the **nectar trees** most capable of generating fruit and flowers in the next flowering season. Some **nectar trees** may be difficult to identify if their bark has been severely burned. Where this occurs, **FCNSW** must make best endeavours to identify and protect the correct **nectar tree** species in such instances].

Adjustments to fauna and/or flora protections

Application of site-specific biodiversity conditions, including koala protections

25. For the avoidance of doubt, **FCNSW** must comply with all requirements of condition 21 of the **approval** and condition 31.3 of **Protocol 31: Matters covered by the approval**, including but not limited to site-specific biodiversity conditions for koalas.

Flora

26. **Forestry operations** must not be conducted in an area unless and until:
- FCNSW** has updated all **species management plans** and **flora road management plans** relevant to that area to take into account fire impacts; and
 - The **EPA** has approved each relevant plan referred to in condition 26(a) above.

Adjusted Environmentally Significant Areas for specified features

27. Despite any condition to the contrary in the **approval**, an **exclusion zone** of at least 35 metres must be retained around all **heath and scrub, rocky outcrops and cliffs, rainforest** and **TECs**.
28. Areas retained for the purpose of condition 27 of these ***site-specific operating conditions*** can be included in a **wildlife habitat clump**, provided that:
- areas of unburned habitat are prioritised first, and
 - the requirements in the **approval** relevant to a **wildlife habitat clump** are met, including the requirements in Protocol 22.

Adjusted riparian protection

29. Despite any condition to the contrary in the **approval**, and to replace the **riparian exclusion zones** in Tables 6a and 6b of the **approval** to the extent of any inconsistency, a **riparian exclusion zone** with a minimum width as specified in **Table 1** below must be retained on each side, and for the entire length of, each of the drainage categories listed in column one of the table.

Table 1

Drainage Category	Riparian Exclusion Zone	ESA Category
	Minimum width of riparian exclusion zone (metres)	
Drainage depression (mapped or unmapped)	10m, unless otherwise approved by the EPA	Category 2 ESA
Unmapped drainage lines	20m	Category 2 ESA
Class 1 classified drainage line	20m	Category 2 ESA

Class 1 classified drainage line within class 1 aquatic habitat	20m	Category 2 ESA
Class 2 classified drainage line	30m	Category 2 ESA
Class 3 classified drainage line	40m	Category 2 ESA
Class 4 classified drainage line	60m	Category 2 ESA

Additional conditions to prevent or minimise erosion and water pollution

30. **Harvesting operations** must:

- (a) only use **walkover techniques** where it is possible to do so;
- (b) minimise skewing; and
- (c) limit further ground disturbance to the greatest extent possible.

31. Unless otherwise approved in writing by the **EPA**:

- (a) new **roads** or **side-cut snig tracks** must not be constructed; and
- (b) new or existing **track crossings** must not be constructed or used, in any area to which these **site-specific operating conditions** apply.

All other **tracks** may only be constructed with the approval of a **suitably qualified person**.

32. Subject to condition 33 of these **site-specific operating conditions**, water flow must not occur on **roads** or in **table drains** for distances exceeding the maximum distance specified for the grade of **road** or **table drain** in Table 2 below.

33. If:

- (a) the only practicable way to ensure that water flow does not occur on **roads** or in **table drains** for distances exceeding the maximum distance specified for the grade of **road** or **table drain** in Table 2 below is to install new **relief pipes**; or
- (b) in the opinion of a **suitably qualified person**, the **road** and **table drains** are **stable**; then
- (c) **FCNSW** is not required to comply with condition 32 of these **site-specific operating conditions**; and
- (d) **FCNSW** must instead use best practice measures to minimise the flow of water on **roads** and **table drains**, minimise **erosion** and ensure sediment laden water is not discharging directly into **drainage features**.

Table 2. Maximum distance of water flow along road surfaces and table drains

Road or table drain Grade (degrees)	Maximum distance (metres)
1	125
2	100
3	75
4	65
5	50
6	45
7	40
8 - 9	35
10 - 11	30

Road or table drain Grade (degrees)	Maximum distance (metres)
12 - 13	25
14 – 15 +	20

34. Water flow must not occur on **tracks** for distances exceeding the maximum distance specified for the grade of **track** in Table 3 below.

Table 3. Maximum distance of water flow along track surfaces

Track grade (degrees)	Maximum distance (metres)
up to 5	50
6-10	30
11-15	20
16-20	15

35. Despite condition 104.1 of the **approval**, **tracks** must be drained to divert water flow from the **track surface** on completion of use of the **track** for the **forestry operation** as follows:

- (a) where soil on the **track** is not **saturated soil** – the **track** must be drained within two days; or
- (b) where soil on the **track** is **saturated soil**:
 - i. temporary **stabilisation** and **sediment control measures** must be implemented within two days; and
 - ii. the **track** must be drained as soon as the soil is not **saturated soil**.

36. Where water flows or has the potential to flow from a **track** to a **log dump**, a **track drainage structure** must be put in place within 5 metres of the outer edge of a **log dump** to prevent water flow from the **track** to the log dump.

Monitoring and maintenance of drainage structures

- 37. **FCNSW** is not required to comply with condition 101.1(b)(i) and (ii) and 104.3(a) of the **approval**.
- 38. **Drainage structures** and **drainage structure outlets** must be properly installed, constructed and maintained in a manner so that they are in a proper and efficient condition and minimise **erosion**.
- 39. Where a **drainage structure outlet** is causing erosion or discharging sediment or water flow directly into a drainage feature, **sediment control measures** and **erosion control measures** must be installed to ensure the **outlets** are **stable**.
- 40. Any **drainage structures** that are not in a proper or efficient condition must be repaired within 2 days, unless otherwise approved by the **EPA**.

Log dumps

- 41. Despite condition 107.2 of the **approval**, each **borrow pit**, **gravel pit** and **log dump** must be located at least 20 metres from the outer edge of any **riparian exclusion zone** or **ground protection zone** on a class 1 **classified drainage line** or class 2 **classified drainage line**.
- 42. Each **log dump** must be **stabilised** on completion of its use by applying one of the following methods:
 - (a) spreading bark evenly across the **log dump** surface to achieve at least 70% **groundcover**;
 - (b) ripping across the **log dump** surface to reduce **runoff** volume from the **log dump**; or
 - (c) construct berms across the **log dump** to reduce **runoff** volume from the **log dump**.

43. Within 5 days of any ripping or construction of berms in accordance with condition 42 of these **site-specific operating conditions**, seeds of **groundcover** species must be spread if the **log dumps** have less than 70% **groundcover**, for the purpose of achieving more than 70% **groundcover**.

Directional felling to reduce runoff and erosion

44. Trees should be felled across the fall of the slope to establish **groundcover** and assist in reducing **runoff** and/or **erosion**.

Harvesting debris

45. To reduce runoff, **harvesting debris** (including non-merchantable logs) must be spread on the ground surface so that to the fullest extent practicable it is in contact with the ground surface.

Slope restrictions to prevent or minimise erosion and water pollution

46. **Harvesting operations** must not be carried out on **ground slopes** greater than 20°.

Additional soil conservation measures

47. **Forestry operations** must not be carried out in:
 - (a) areas of **dispersible soils**;
 - (b) areas identified as **soil regolith** class 2 or **soil regolith** class 4 under **Protocol 15: Inherent soil erosion and water pollution hazard assessment**; or
 - (c) areas identified as **inherent hazard level (IHL) IHL3** or **IHL4** under **Protocol 15: Inherent soil erosion and water pollution hazard assessment**.

Measures to avoid the mass movement of soil

48. **Forestry operations** must not be carried out in areas where **mass movement** hazard is identified under **Protocol 13: Mass movement assessment** unless otherwise approved by the **EPA**.

Adjustment of seasonality restrictions

49. **FCNSW** is not required to comply with Condition 108.2 of the **approval**.
50. **Forestry operations** must not be carried out from 1 December to 30 April in any year in **compartments** where **rainfall erosivity** levels are greater than 6000 under **Protocol 12: Seasonality restrictions**.

Regeneration

51. For the avoidance of doubt, condition 4.2(3)(x) and 4.2(7)(a) of **Protocol 4: Operational plans** apply to the **site**, and **operational plans** must include management actions to mitigate the impact or further spread of **Bell Miner associated dieback**, **biosecurity matter** or other **regeneration** risks as a consequence of fire impacts and subsequent **forestry operations**.
52. Despite any condition to the contrary in the **approval**, the **EPA** may request in writing that **FCNSW** prepare a **regeneration remedial action** and site-specific **regeneration rehabilitation plan** to be approved by the **EPA** in writing for the **site**.
53. **FCNSW** must comply with any request from the **EPA** in writing under condition 52 of these **site-specific operating conditions** within 1 month of the request being made.



Monitoring of effectiveness of site-specific measures

54. **FCNSW** must monitor the effectiveness of the **site-specific operating conditions** that apply to the **site**, and submit a further report to the **EPA** in relation to the **site** under condition 23.4 of the **approval** if:

- (a) these **site-specific operating conditions**:
 - i. result in poor environmental outcomes;
 - ii. do not effectively mitigate **erosion** and **water pollution** risks;
 - iii. are not delivering the **objectives** and **outcomes** of the **approval**; or
 - iv. are unable to be complied with, or
- (b) **FCNSW** identify that the spatial data sets held by the **EPA** showing **partially burned areas** and **unburned areas** are inconsistent with those areas that appear to have been partially burned or unburned at the **site**.

55. **FCNSW** must work with the Natural Resources Commission, or other agency agreed by the **EPA**, to monitor the long-term impacts and recovery of the **site** as part of the **monitoring program**.

RICHARD BEAN
Chief Executive Officer
Environment Protection Authority
7 February 2020

Schedule 1

56. Despite any condition to the contrary in the *approval*, including condition 81.1 of the *approval*, an *exclusion zone* with a radius of 50 metres or greater must be retained around each individual *record* of a *plant* of a species listed in **Table 4** below.

Table 4

Species name	Common name
Cryptostylis hunteriana	Leafless Tongue Orchid
Genoplesium vernale	East Lynne Midge Orchid

[Note: Except as otherwise provided by these *site-specific operating conditions*, the requirements of the *approval* for species listed in condition 56 continue to apply including the requirements of Chapter 4 of the *approval* and *Protocol 31: Matters covered by the approval* in relation to *species-specific conditions*].

57. For the avoidance of doubt, the *site-specific biodiversity condition* issued for *Rhodamnia rubescens* on 4 September 2019 remains in force for this *site*.