



## Site-specific operating conditions for Bago State Forest compartments 5A, 23A, 26A and 73A

I, Tracy Mackey, 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**) dated 16 November 2018.

### 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:

**Coarse woody fire debris** means dead timber (including a log or head of a tree) that has fallen on the forest floor due to fire and:

- (a) the smallest end of the dead timber has a minimum diameter of 10 centimetres or greater under bark; and
- (b) is greater than three metres long.

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

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

**Forest type 147** means the area covered by a **spatial dataset** held by the **EPA** and provided to **FCNSW** that the **EPA** is satisfied adequately shows forest type 147 (Alpine Ash) at the **site**, as amended from time to time.

**Forest type 148** means the area covered by a **spatial dataset** held by the **EPA** and provided to **FCNSW** that the **EPA** is satisfied adequately shows forest type 148 (Alpine Ash – Mountain/Manna Gum) at the **site**, as amended from time to time.

**Giant (dead) tree** means any **dead tree** of the species Alpine Ash (*Eucalyptus delegatensis*) with a **diameter at stump height over bark (DSHOB)** of 160 centimetres or greater.

**Live tree** means a tree of any species that has living foliage or epicormic growth or lignotuber growth (at the time of the **forestry operations**).

**Partially burned area** means the area covered by a **spatial dataset** held by the **EPA** and provided to **FCNSW** that the **EPA** is satisfied adequately shows partially-burned areas at the **site**, as amended from time to time.

**Previously harvested area** means the area covered by a **spatial dataset** held by the **EPA** and provided to **FCNSW** that the **EPA** is satisfied adequately shows areas where **harvesting operations** have been conducted at the **site** in the 12 months preceding the date of these **site-specific operating conditions**, as amended from time to time.

**Unburned area** means the area covered by a **spatial dataset** held by the **EPA** and provided to **FCNSW** that the **EPA** is satisfied adequately shows unburned areas at the **site**, as amended from time to time.

**Site** means Bago State Forest **compartments** 5A, 23A, 26A and 73A.

### 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. Subject to condition 5 of these *site-specific operating conditions*, for the purposes of condition 23.4 of the *approval*, the *EPA* specifies that these *site-specific operating conditions* apply until the earlier of:
  - (a) the date that the *site-specific operating conditions* are revoked in writing by the *EPA*; and
  - (b) the date that is 12 months from the date the *site-specific operating conditions* are granted.
5. 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 66 to 70 of these *site-specific operating conditions*.

#### Continuation of the *approval*

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

#### Inconsistency between instruments

7. 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.
8. In the event of inconsistency between these *site-specific operating conditions* and a *species management plan* approved by the *EPA* pursuant to the *approval*, the *site-specific operating conditions* prevail to the extent of the inconsistency.

#### Schedule has effect

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

#### Restrictions on areas at the *site* that must not be harvested

10. Despite any condition to the contrary in the *approval*, *harvesting operations* must not be conducted at the *site* except in areas that are *Forest type 147* or *Forest type 148*.
11. Areas at the *site* that are not *Forest type 147* or *Forest type 148* are taken to be a *Category 2 ESA*.
12. Despite any condition to the contrary in the *approval*, *harvesting operations* must not be conducted at the *site* in a *previously harvested area*.

[Note: These *site-specific operating conditions*, including conditions 43 and 44, and the *approval*, including condition 92, outline conditions in relation to the *construction*, use, *maintenance*, *upgrading* and/or re-opening of *roads*, *tracks*, *side-cut snig tracks*, *track crossings* and *log dumps* in *Category 2 ESAs*.]

#### Restrictions on harvesting method

13. 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

14. 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 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

15. Any **unburned area** or **partially burned area** of at least 0.02ha 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 0.02ha 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

16. 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

17. Despite any condition to the contrary in the **approval**, including condition 56 of the **approval**, a **targeted flora survey** is not required to be conducted in Bago State Forest **compartments** 23A and 26A for the **species thelymitra atronitida** and **pterostylis foliata**.
18. **FCNSW** is not required to comply with condition 57.1 (c) of the **approval**.
19. 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.
20. 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 28, 31 and 33 of these **site-specific operating conditions**, or looking for, identifying and recording **Glossy Black-Cockatoo feed trees** or **Glider sap feed trees**, must be carried out by a **suitably qualified person** at least 50 metres in advance of the **harvesting operation**.
21. **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 in the reasonable opinion of **FCNSW** it is safe to do so. **FCNSW** must record the method(s) used and date of the **broad-area habitat search** for each **patch**.
22. Where a **patch** subject to a **broad area habitat search** cannot be surveyed to meet conditions 19, 20 and 21 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 19, 20 and 21 of these **site-specific operating conditions**.
23. Where the **EPA** has approved an alternative approach pursuant to condition 22(b) of these **site-specific operating conditions**, **FCNSW** must comply with that alternative approach but need not comply with conditions 19, 20 and 21 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 live trees**

24. Despite any condition to the contrary in the **approval**, **live trees** must not be harvested.
25. Despite any condition to the contrary in the **approval**, damage to **live trees** greater than or equal to 30 centimetres in **diameter at breast height (DBH)** must be minimised to the greatest extent practicable.
26. Despite any condition to the contrary in the **approval**, **FCNSW** must retain and protect all unburnt and mature banksia spp., acacia spp. and xanthorrhoea spp.

**Adjustments to retention requirements for dead trees that are not Alpine Ash (*Eucalyptus delegatensis*)**

27. Despite any condition to the contrary in the **approval**, damage to **dead trees** greater than or equal to 30 centimetres in **diameter at breast height (DBH)** must be minimised to the greatest extent practicable, except for **dead trees** of the species Alpine Ash (*Eucalyptus delegatensis*).
28. **FCNSW** must permanently retain at least 10 **dead trees** with a **diameter at stump height over bark** of 40cm centimetres or greater per hectare of **net harvest area**, whether Alpine Ash (*Eucalyptus delegatensis*) or another species, where they occur.
29. Trees retained for the purpose of condition 28 of these **site-specific operating conditions** must be those that, in the opinion of **FCNSW**, provide the greatest potential habitat value, as determined by reference to capacity to develop hollows, provision of foraging and perching for fauna and likely longevity at the **site**.
30. Trees selected for the purpose of condition 28 of these **site-specific operating conditions** must be identified, recorded and protected in accordance with **Protocol 23: Tree retention** as **retained trees**.

**Adjustments to retention requirements for hollow-bearing trees**

31. Despite any condition to the contrary in the **approval**:
  - (a) All **hollow-bearing trees**, and any trees that would fit the definition of **hollow-bearing trees** if they were alive, must be permanently retained.
  - (b) The trees referred to in condition 31(a) of these **site-specific operating conditions** above 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.
32. Trees selected for the purpose of condition 31 of these **site-specific operating conditions** must be identified, recorded and protected in accordance with **Protocol 23: Tree retention** as **retained trees**.

[Note: Condition 24 of these **site-specific operating conditions** requires that **live trees** (including all **hollow-bearing trees**) must not be harvested].

**Adjustments to retention requirements for giant (dead) trees**

33. Despite any condition to the contrary in the **approval**:
  - (a) All **giant (dead) trees** must be permanently retained.
  - (b) **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.
34. Trees selected for the purpose of condition 33 of these **site-specific operating conditions** must be identified, recorded and protected in accordance with **Protocol 23: Tree retention** as **retained trees**.

[Note: Condition 24 of these **site-specific operating conditions** requires that **live trees** must not be harvested (and condition 64.2(a) of the **approval** requires that all live **giant trees** be permanently retained)].

Adjustments to fauna and/or flora protections

**Application of site-specific biodiversity conditions**

35. 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**.

**Flora**

36. **Forestry operations** must not be conducted in an area unless and until:

- (a) **FCNSW** has updated all pre-existing **species management plans** for flora species and **flora road management plans** relevant to that area to take into account fire impacts from the 2019-20 bushfires; and
- (b) The **EPA** has approved each relevant plan referred to in condition 36(a) above.

[Note: condition 81.1(b) of the **approval** continues to apply]

**Adjusted Environmentally Significant Areas for specified features**

- 37. Despite any condition to the contrary in the **approval**, an **exclusion zone** of at least 30 metres must be retained around all **heath and scrub** and **rocky outcrops and cliffs**.
- 38. An additional **exclusion zone** of at least 10 metres must be retained around all **rainforest** and this area is taken to be a **category 1 ESA**.
- 39. Areas retained for the purpose of conditions 37 or 38 of these **site-specific operating conditions** can be included in a **wildlife habitat clump**, provided that:
  - (a) areas of unburned habitat are prioritised first, and
  - (b) the requirements in the **approval** relevant to a **wildlife habitat clump** are met, including the requirements in Protocol 22.
- 40. In addition to the requirements of the **approval** in relation to **coarse woody debris** (including conditions 62 and 91), damage or disturbance to **coarse woody debris** or **coarse woody fire debris** must be minimised to the greatest extent practicable.

Adjusted riparian protection

41. 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	
	Minimum width of <b>riparian exclusion zone</b> (metres)	ESA Category
<b>Drainage depression (mapped or unmapped)</b>	10m, unless otherwise approved by the <b>EPA</b>	<b>Category 2 ESA</b>
<b>Unmapped drainage lines</b>	20m	<b>Category 2 ESA</b>
Class 1 <b>classified drainage line</b>	20m	<b>Category 2 ESA</b>
Class 1 <b>classified drainage line</b> within <b>class 1 aquatic habitat</b>	20m	<b>Category 2 ESA</b>
Class 2 <b>classified drainage line</b>	30m	<b>Category 2 ESA</b>

Class 3 <i>classified drainage line</i>	40m	<b>Category 2 ESA</b>
Class 4 <i>classified drainage line</i>	60m	<b>Category 2 ESA</b>

Additional conditions to prevent or minimise erosion and water pollution

42. **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.

43. Unless otherwise approved in writing by the **EPA**, new **roads** must not be constructed at the **site**.

44. **Tracks, side-cut snig tracks** and **track crossings** may only be constructed at the **site** where a **suitably qualified person** confirms in writing that the relevant **tracks, side-cut snig tracks** or **track crossings** will be **stable**, and not cause **erosion** or **water pollution**. For the avoidance of doubt, this condition does not apply to **roads**.

45. Subject to condition 46 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.

46. 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 45 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**

<b>Road or table drain grade (degrees)</b>	<b>Maximum distance (metres)</b>
1	125
2	100
3	75
4	65
5	50
6	45
7	40
8 - 9	35
10 - 11	30
12 - 13	25
14 – 15 +	20



47. 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**

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

48. 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**.
49. 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

50. **FCNSW** is not required to comply with condition 101.1(b)(i) and (ii) and 104.3(a) of the **approval**.
51. **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**.
52. 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**.
53. 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

54. For the avoidance of doubt, **log dumps** must not be constructed in **Category 1 ESAs** or **Category 2 ESAs**.
55. 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**.
56. 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**.
57. Within 5 days of any ripping or construction of berms in accordance with condition 56 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

58. Trees should be felled across the fall of the slope so that the remaining **harvesting debris** assists with the establishment of **groundcover** and assists in reducing **runoff** and/or **erosion**.

#### Harvesting debris

59. 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

60. **Harvesting operations** must not be carried out in areas at the **site** with **ground slopes** greater than 20°.

61. Areas at the **site** with **ground slopes** greater than 20° are taken to be a **Category 2 ESA**.

#### Additional soil conservation measures

62. **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

63. **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

64. **FCNSW** is not required to comply with Condition 108.2 of the **approval**.

65. **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

66. 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**.

67. 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**.

68. **FCNSW** must comply with any request from the **EPA** in writing under condition 67 of these **site-specific operating conditions** within 1 month of the request being made.

#### Monitoring of effectiveness of site-specific measures

69. **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 in the reasonable opinion of **FCNSW**:

- (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 datasets** 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**.
70. **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**.

**TRACY MACKEY**  
**Chief Executive Officer**  
**Environment Protection Authority**

**Schedule 1**

71. 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
Pterostylis foliata	Slender Greenhood
Pterostylis alpina	
Pterostylis oreophila	Blue-tongued Greenhood

[Note: Except as otherwise provided by these **site-specific operating conditions**, the requirements of the **approval** for species listed in this condition 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**].