

Integrated Forestry Operations Approval for Riverina Red Gum

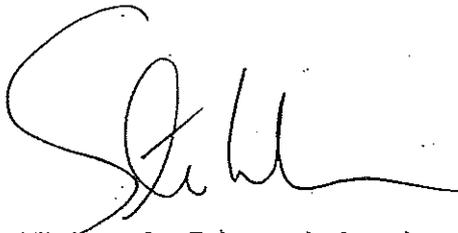
This approval is granted pursuant to Part 4 of the *Forestry and National Park Estate Act 1998* and section 15 of the *National Park Estate (Riverina Red Gum Reservations) Act 2010*.

We, the undersigned Ministers, approve of the carrying out of forestry operations by the Forestry Commission of New South Wales ('Forests NSW') or any other person, subject to the conditions of this approval, including the terms of the relevant licences set out in the approval.



Minister for Climate Change and the Environment

17/12/10
Dated:



Minister for Primary Industries

18/12/10
Dated:

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DICTIONARY

CHAPTER 1: GENERAL

PART 1.1 – SCOPE AND FRAMEWORK OF APPROVAL, INTERPRETATION, AND REVIEWS

Division 1 – General provisions relating to application and scope of approval

1. Interpretation – significant concepts

1. Terms used in this approval that are defined in the *Forestry and National Park Estate Act 1998* have the meanings set out in that Act if not otherwise defined in this approval.

2. In this approval:

ancillary road construction means ancillary road construction within the meaning of the *Forestry and National Park Estate Act 1998*, namely, the provision of roads and fire trails and the maintenance of existing railways, to enable or assist in forestry operations;

forest products operations means forest products operations within the meaning of the *Forestry and National Park Estate Act 1998*, namely, the harvesting of products of trees, shrubs and other vegetation (other than timber) that are of economic value;

forestry operations means forestry operations within the meaning of the *Forestry and National Park Estate Act 1998*, namely, logging operations, forest products operations, on-going forest management operations and ancillary road construction;

Forests NSW or FNSW means the Forestry Commission of New South Wales constituted by the *Forestry Act 1916*;

Note: The Forestry Commission may use the name “Forests NSW” under section 7 (4) of the *Forestry Act 1916*.

logging operations means logging operations within the meaning of the *Forestry and National Park Estate Act 1998*, namely, the cutting and removal of timber from land for the purpose of timber production;

Ministers means those Ministers who are authorised to amend this approval;

on-going forest management operations means on-going forest management operations within the meaning of the *Forestry and National Park Estate Act 1998*, namely, activities relating to the management of land for timber production such as managing and maintaining water infrastructure, weed, pest and disease control, bush fire hazard reduction, bee-keeping, grazing and other silvicultural practices; and

Riverina State forests means the land to which this approval applies as described in clause 4.

2. Notes and headings

Notes and headings in this approval are provided to assist understanding only and do not form part of this approval.

3. Duration of approval

This approval commences on 1 January 2011 and has effect up to and including 31 December 2030.

4. Description of the area of the State to which approval applies

1. This approval applies to Riverina State Forests as defined in section 14 of the National Park Estate (Riverina Red Gum Reservations) Act 2010, being State forests and other Crown-timber lands in the Riverina area as shown on the map at the end of section 3 of that Act. It applies to any land which becomes Crown-timber land during the term of this approval.
2. This approval does not apply to:
 - a) any part of the national park estate, being:
 - (i) land declared as a wilderness area under the *Wilderness Act 1987* or the *National Parks and Wildlife Act 1974*, or
 - (ii) land reserved or dedicated under the *National Parks and Wildlife Act 1974*, or
 - (iii) land dedicated or set apart as a flora reserve under the *Forestry Act 1916*, or
 - (iv) land dedicated or reserved for a similar public purpose under the *Crown Lands Act 1989*, or
 - b) any plantation within the meaning of the *Plantations and Reafforestation Act 1999*, or
 - c) any land that becomes:
 - (i) part of the national park estate (as described in paragraph (a)), or
 - (ii) a plantation within the meaning of the *Plantations and Reafforestation Act 1999*,during the term of this approval.

5. Description of forestry operations to which approval applies

1. This approval applies to river red gum forestry operations described in this clause in the Riverina State forests.

High quality large logging operations

2. This approval applies to river red gum logging operations in the Riverina State forests (including the western land leases) for the purpose of producing up to 90,253 m³ of high quality large logs (that is, 4,413 m³ x 20 + 1,993 m³ (being the unused portion of the 2010 allocation)) over the 20-year period commencing 1 January 2011.
3. This approval also applies to –
 - a) logging operations to produce low quality river red gum logs from the logging operations referred to (2); and
 - b) logging operations to produce up to 359,428 tonnes of river red gum residue and residue logs from the logging operations referred to in (2) , (that is, 17,533 tonnes x 20 + 8,768 tonnes (being the unused portion of the 2010 allocation)) over the 20 year period commencing 1 January 2011.

Early thinning operations (other than in the western lands leases)

4. This approval applies to a program of early thinning operations carried out in the Riverina State forests (but not in the western land leases) for the purpose of producing river red gum residue during a financial year specified in the Table below, up to the maximum amount specified opposite that year. Under the program, this river red gum residue is in addition to residue produced from high quality large logging operations of the kind referred to in subclause (3) (b).

Financial year	Maximum amount of residue that may be produced from early thinning operations during that financial year
2009-2010	30,000 tonnes#
2010-2011	30,000 tonnes#
2011-2012	25,000 tonnes
2012-2013	20,000 tonnes

This early thinning program commenced before this approval took effect and will continue under the approval. For the financial year 2010-2011, the maximum amount of residue that may be produced during the period is to include the residue produced from early thinning operations conducted under the program between 1 July 2010 and 31 December 2010, before this approval commenced.

Note: It is proposed that the approval will be amended by the Ministers following a review conducted in accordance with clause 27 to determine the volume of residue that may be produced from early thinning operations in the Riverina State forests (but not in the western land leases) after 30 June 2013.

Western land leases

5. In the western land leases, this approval also applies to river red gum logging operations (including early thinning operations) carried out during the period from 1 January 2011 to 31 December 2013 to produce residue and residue logs (including dry residue and dry residue logs), but no more than 54,000 tonnes in total (that is 18,000 tonnes x 3).

Note: It is proposed that the approval will be amended by the Ministers following a review conducted in accordance with clause 27 to determine the volume of residue and residue logs (including dry residue and dry residue logs) that may be produced from logging operations (including early thinning operations) in the western land leases after 31 December 2013.

Other forestry operations

6. This approval also applies to forest products operations, on-going forest management operations and ancillary road construction in the Riverina State forests.

Note: Forests NSW may need to undertake dredging or other water flow management activities. These activities may require consultation and a permit in accordance with the *Fisheries Management Act* (see Division 3 of Part 7 of the Act).

7. For the purpose of determining whether or not a particular operation is a forestry operation of a kind described in this clause, it does not matter that the operation has more than one purpose or satisfies more than one description. In particular, to the extent that timber is cut and removed in an operation for the purpose of timber production, then it is a logging operation for the purpose of producing the volume or other quantity of logs, residue or other timber product (or any combination of these) that Forests NSW predicts will be produced in the operation.

8. Despite any other provision of this clause, this approval applies only to forestry operations on Crown-timber lands that are not within State forest if they are carried out by, or on behalf of, Forests NSW or are authorised by Forests NSW under the *Forestry Act 1916*.
9. This approval does not apply to forestry operations on any land for the purpose of clearing natural forest:
 - a) to establish a timber plantation (within the meaning of the *Plantations and Reafforestation Act 1999*), or
 - b) for agricultural or non-forestry uses.

Note: The above reflects section 24 (2) of the *Forestry and National Park Estate Act 1998*.

10. A reference in this clause to a forestry operation authorised by Forests NSW under the *Forestry Act 1916* (on Crown-timber lands that are not within a State forest) is a reference to a forestry operation carried out under the authority of or in accordance with any of the following:
 - a) a timber licence, products licence or clearing licence issued under Division 2 of Part 3 of the *Forestry Act 1916*,
 - b) an authorisation issued under section 30I of the *Forestry Act 1916* (except an authorisation issued under delegation from Forests NSW by a person who is not a member of staff of Forests NSW),
 - c) an agreement entered into with Forests NSW, or
 - d) a permit granted under Part 4 of the *Forestry Act 1916*.
11. A reference to a forestry operation authorised by Forests NSW does not include a reference to any thing done pursuant to a lease or licence issued by or with the approval of Forests NSW under the *Crown Lands Act 1989* or the *Western Lands Act 1901*.

6. Terms of licence under Threatened Species Conservation Act 1995

1. Forests NSW and any other person carrying out forestry operations covered by this approval are authorised to carry out any such operation that is likely to result in one or more of the following:
 - a) harm to any animal that is of, or is part of:
 - (i) a threatened species, or
 - (ii) an endangered population, or
 - (iii) an endangered ecological community,
 - b) harm to protected fauna,
 - c) the picking of any plant that is of, or is part of:
 - (i) a threatened species, or
 - (ii) an endangered population, or
 - (iii) an endangered ecological community,
 - d) the picking of any plant that is a protected native plant,
 - e) damage to habitat (other than critical habitat) of a threatened species, an endangered population or an endangered ecological community.

2. Forests NSW and any other person undertaking the construction or other provision of fire trails for emergency fire fighting purposes are authorised to undertake any such operation that is likely to result in:
 - a) harm to any animal that is part of, or the picking of any plant that is part of, an endangered ecological community, or
 - b) damage to habitat (other than critical habitat) of an endangered ecological community.
 3. The authority conferred by subclauses (1) and (2) is subject to the conditions and restrictions set out in:
 - a) Chapter 2 (Drainage protection areas and buffer strips) and
 - b) Chapter 3 (Protection of threatened species).
 4. Pursuant to section 34 of the *Forestry and National Park Estate Act 1998*, this clause, and the conditions and restrictions referred to in subclause (3), are the terms of a licence under the *Threatened Species Conservation Act 1995*. The provisions of this Part are also terms of that licence in so far as they relate to the application and interpretation of those terms.
 5. In this clause, **animal, critical habitat, endangered ecological community, endangered population, habitat, harm, picking, plant, protected fauna, protected native plant, Scientific Committee** and **threatened species** have the same meanings as in the *Threatened Species Conservation Act 1995*. Threatened species, population or ecological community has the same meaning as in Part 6 of the *Threatened Species Conservation Act 1995*.
- 7. Terms of licence under the Protection of the Environment Operations Act 1997**
1. Pursuant to section 34 of the *Forestry and National Park Estate Act 1998*, this approval contains the terms of a licence under the *Protection of the Environment Operations Act 1997* (the “environment protection licence”). Accordingly, Forests NSW and any other person carrying out forestry operations set out in subclause (2) are taken to hold a licence in those terms under the *Protection of the Environment Operations Act 1997*.
 2. The purpose of the environment protection licence is to control the carrying out of the following forestry operations covered by this approval in the Riverina State forests for the purpose of regulating water pollution resulting from any such operation, as referred to in section 122 of the *Protection of the Environment Operations Act 1997*:
 - a) logging operations (including any thinning operation involving the removal of timber cut in the operation for the purpose of its use in timber products),
 - b) ancillary road construction.

Note: Section 122 of the *Protection of the Environment Operations Act 1997* provides that it is a defence in proceedings against a person for an offence of polluting waters under that Act if the person establishes that the pollution was regulated by an environment protection licence held by the person or another person and the conditions to which that licence was subject relating to the pollution of waters were not contravened.

3. This clause, and the conditions set out in the following Chapters, are the terms of the environment protection licence, but only in their application to the operations described in subclause (2):

- a) Chapter 2 (Protection of drainage protection areas and buffer strips) (except as indicated in clause 101 (2) and (3)),
- b) Chapter 4 (Protection of water and the aquatic environment from pollution - planning and reporting on matters),
- c) Chapter 5 (Protection of water and the aquatic environment from pollution - operational matters).

The provisions of this Part are also terms of the environment protection licence in so far as they relate to the application and interpretation of that licence.

- 4. For the purposes of section 56 of the *Protection of the Environment Operations Act 1997*, the premises to which the environment protection licence set out in this approval applies are the Riverina State forests.

Note: The terms of the environment protection licence constitute Licence No. 13373 for the purposes of DECCW's administrative system.

8. Terms of licence under Part 7A of the Fisheries Management Act 1994

- 1. Forests NSW and any other person carrying out forestry operations covered by this approval are authorised to carry out any such operation 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,
 - c) damage to a habitat of a threatened species, population or ecological community.
- 2. The authority conferred by subclause (1) is subject to the conditions and restrictions set out in the following Chapters:
 - a) Chapter 2 (Protection of drainage features and wetlands), except as indicated in clause 104(3),
 - b) Chapter 4 (Protection of water and the aquatic environment from pollution - planning and reporting on matters), except Part 4.3,
 - c) Chapter 5 (Protection of water and the aquatic environment from pollution - operational matters).
- 3. Pursuant to section 34 of the *Forestry and National Park Estate Act 1998*, this clause, and the conditions and restrictions referred to in this clause, are the terms of a licence under Part 7A of the *Fisheries Management Act 1994*. The provisions of this Part are also terms of that licence in so far as they relate to the application and interpretation of those terms.
- 4. In this clause, "critical habitat", "habitat", "harm" and "threatened species, population or ecological community" have the same meanings as in Part 7A of the *Fisheries Management Act 1994*.

Division 2 – Interpretation

9. Dictionary for approval

Expressions used in this approval have the meanings set out in the Dictionary at the end of this approval.

10. References to areas in which operations prohibited or restricted

A reference in this approval to an **area of land in which the carrying out of an operation is prohibited or restricted** is a reference to an area (such as a drainage protection area or an environmentally significant area) in which the carrying out of the operation is prohibited or restricted by virtue of this approval or by virtue of the Forest Management Zoning System or the application of any other law.

11. Reference to miscellaneous forestry operation

A reference to a **miscellaneous forestry operation** in this approval is a reference to any of the following activities carried out by, or on behalf of, Forests NSW (but only to the extent to which the activity is a forestry operation to which this approval applies):

- a) the felling of trees for the purpose of providing Forests NSW with timber to maintain or construct infrastructure (such as stockyards, fences, causeways and bridges) located on land within the Riverina State forests,
- b) the felling of trees for the purpose of training (for example, in the proper and safe use of chainsaws or harvesting machinery),
- c) the clearing of vegetation (including trees) for the purpose of maintaining access to infrastructure or for a purpose related to the safe operation or maintenance of that infrastructure,
- d) road, fire trail or bush track maintenance,
- e) clearing of vegetation (including trees) to establish inventory plots or research plots (for the purposes of forest science) and the felling or other removal of trees in those plots, once established, in connection with the objectives of the research,
- f) the clearing of vegetation (including trees) for the purpose of conducting a cadastral survey.

12. References to a compartment or other tract of land

1. A reference to a **compartment or other tract of land in which a forestry operation is undertaken or proposed to be undertaken** (however expressed) is a reference to the area of land within which the forestry operation is or is to be carried out and, accordingly, may be a reference to a part of a compartment only or to more than one compartment.
2. If there is a site specific operational plan for a forestry operation, a reference to the compartment or other tract of land in which the operation is undertaken includes a reference to the area of land shown or identified on the operational map for the forestry operation as the area for which the operation has been planned.

Note: The compartment or other tract of land in the case of road construction may be no more than the footprint of the proposed road.

13. References to certain areas within a compartment or other tract of land

1. In this approval, a reference to the **net mapped operation area** of a compartment or other tract of land, in connection with a forestry operation, is a reference to those parts of the compartment or other tract identified in the site specific operational plan (including the operational map) for the forestry operation, at the time of its preparation, as areas in which the operation may be carried out.
Accordingly, the **net mapped operation area** does not include any area (such

as an environmentally significant area as described in Chapter 3) in which the operation is prohibited or restricted and that is shown on the operational map.

2. In this approval, a reference to *the net operational area* of a compartment or other tract of land is a reference to those parts of the compartment or tract in which the operation may be carried out.
Accordingly, the *net operational area* does not include any area that, either at the time of preparation of the site specific operational plan for the operation or at any subsequent time (such as following a survey under Division 2 of Part 3.3 or when the operation is taking place), is identified as an area in which the operation is prohibited or restricted, such as a species protection zone under Chapter 3.
3. If more than one kind of forestry operation to which this approval applies is (or is proposed to be) carried out in a compartment or other tract of land at the same time, a reference to the net mapped operation area or the net operational area must be read as a reference to the net mapped operation area or net operational area (as the case may be) for each kind of operation occurring in the compartment or other tract of land.

14. Determination as to whether tree accidentally felled into an area

1. For the purposes of this approval, a tree is accidentally felled into an area if it is apparent that:
 - a) techniques of directional felling were used in an attempt to fell the tree away from the area, or
 - b) an attempt was made using some other method (such as use of a mechanical harvester) to fell the tree away from the area.
2. However, a tree is not accidentally felled into an area if the person responsible for the felling of the tree knew, or could reasonably have been expected to know, that the tree would fall into the area.
3. In this clause, *directional felling* means the felling of a tree at a particular angle so that it falls in a pre-determined direction.

15. Most restrictive requirement to be complied with

1. If, in a particular set of circumstances:
 - a) more than one requirement applies to the carrying out of forestry operations, and
 - b) by complying with the most restrictive of those requirements, all of the requirements will be satisfied, then the most restrictive of the requirements must be complied with.
2. In particular, where an area of land to which this approval applies can be characterised or identified for the purposes of this approval in more than one way (such as being both an area of heath and a species protection zone) and:
 - a) a term of this approval allows the doing of a thing in the area characterised or identified in one way, but
 - b) another term of this approval prohibits the doing of that thing in the area characterised or identified in another way, then the doing of that thing is prohibited in the area.
3. For the purposes of this clause, a reference to a term of this approval includes a reference to a term of a licence set out in this approval, and a requirement is

a requirement imposed by a term of this approval or a document with which this approval requires compliance.

16. Conflict between documents

1. If there is an inconsistency between any term of this approval and any other document with which this approval requires compliance, the terms of this approval prevail to the extent of the inconsistency.
2. If Forests NSW is aware of the inconsistency, Forests NSW is to advise DECCW accordingly.
3. For the purposes of this clause, there is an inconsistency between a term of this approval and any other document if it is not possible to comply with both the term and the other document.

17. Requirements of approval subject to occupational health and safety laws

The requirements of this approval are subject to duties imposed by or under the *Occupational Health and Safety Act 2000* or similar laws (including Forests NSW Safety Standards). Accordingly, this approval is not breached merely because of any thing done (or not done) in complying with any such duty.

18. References to agencies

1. A requirement of this approval to forward or give a document or other thing to DII (Fisheries) may be satisfied by forwarding or giving the document or other thing to a senior officer of DII (Fisheries), such as the Director, Fisheries Conservation and Aquaculture Branch, Department of Industry and Investment.
2. A requirement of this approval to forward or give a document or other thing to DECCW may be satisfied by forwarding or giving the document or other thing to a senior officer of DECCW or an authorised officer of the EPA (within the meaning of the *Protection of the Environment Operations Act 1997*) (as the case may require).
3. If a provision of this approval (including the terms of a licence set out in this approval) prohibits or restricts the doing of any thing without the approval or authorisation of DECCW (however expressed), DECCW is taken to have given such an approval or authorisation if the Director-General of the Department of Environment, Climate Change and Water, or a member of staff nominated by the Director-General for the purpose, has given the approval or authorisation.
4. A reference in this clause to a senior officer of DII (Fisheries) or DECCW includes a reference to any member of staff nominated by the Director-General of the Department of Industry and Investment or the Director-General of the Department of Environment, Climate Change and Water (as the case may be) for the purposes of this clause.

19. Requirements to provide information or create and keep records etc.

1. A requirement of this approval to provide information (including in writing), to give or forward a document (such as a plan) or to create or keep a record or register (however described) may be satisfied by providing the information, forwarding the document or creating or keeping the record or register in electronic form.
2. If a document is required to be signed by a member of staff of Forests NSW (such as an authorisation for the purposes of an operation in an

environmentally significant area), then another method is to be used to indicate the member of staff's endorsement of the contents of the document when forwarding it in electronic form.

3. Forests NSW may rely on an approval of DECCW given to it in electronic form for the purposes of any provision that prohibits the doing of any thing without DECCW's written approval (however expressed).

20. Obligations imposed on Forests NSW by approval

A requirement imposed on Forests NSW by this approval (including the terms of each licence set out in this approval) to do or not to do anything or ensure that something is or is not done (or ensure that a certain state of affairs exists or does not exist), in relation to a forestry operation, only applies to the extent that the forestry operation is carried out by or on behalf of Forests NSW or is authorised by Forests NSW.

21. Requirement to specify grid co-ordinates of location

A requirement of this approval to specify the grid co-ordinates of the location of any feature or other thing includes a requirement to specify the co-ordinates system used (such as Australian Map Grid 1966 or 1984 ("AMG 66" and "AMG 84") and Map Grid of Australia 1994 ("MGA 94")).

Division 3 – Savings and transitional provisions

22. Interpretation of Division

For the purposes of this Division, a reference to the *continued licences* is a reference to those licences granted to Forests NSW (Forestry Commission) under Part 6 of the *Threatened Species Conservation Act 1995* in relation to the Riverina State forests (as they were last varied by the Director-General of the Department of Environment, Climate Change and Water), being licences referred to in clause 3 of Schedule 7 to the *Threatened Species Conservation Act 1995*.

23. Forestry operations already physically commenced not affected by approval

1. The conditions of this approval (other than this Part) do not apply to, or in relation to, the carrying out of any forestry operation that has already physically commenced in a compartment or other tract of land on the commencement of this approval.
2. However, any such operation, if continued, must be carried out in accordance with the continued licences. Forests NSW must also ensure that their guidelines entitled "Soil conservation measures for Logging in River Red Gum Forests of the Depositional Floodplain of the Murray-Darling Catchment", as current at the time of commencement of this approval, are given effect to in carrying out the operation.

24. Forestry operation not commenced may proceed under continued licences for a limited time

1. A forestry operation that has not commenced on the commencement of this approval may be carried out in accordance with a continued licence, rather than this approval.
2. Forests NSW must ensure that their guidelines entitled "Soil conservation measures for Logging in River Red Gum Forests of the Depositional Floodplain of the Murray-Darling Catchment", as current at the time of

commencement of this approval, are also given effect to in carrying out the operation.

3. If the forestry operation is not completed within 3 months of the agreed date on which the flood waters recede sufficiently for forestry operations to recommence, it may be continued only in accordance with the conditions of this approval (other than any requirements of this approval that must be met before the commencement of an operation in a compartment or other tract of land).
4. A reference in this clause to the “**agreed date**” is a reference the date on which Forests NSW, DECCW and DII (Fisheries) agree that the flood waters present at the commencement of this approval have receded sufficiently for roads in the Riverina State forests to become accessible.

25. Existing permit holders not affected

The conditions of this approval (other than this Part) do not apply to, or in relation to, the carrying out of any forestry operation in accordance with an authorisation under section 30I, or a permit or forest lease issued under Part 4, of the *Forestry Act 1916* that is in force on the commencement of this approval.

Division 4 – Reviews and future projects

26. Review of approval

1. A review of this approval will be undertaken by the Ministers every five years from its commencement to determine if it effectively promotes ecologically sustainable forest management and a sustainable timber supply.
2. Each review will include consideration of the following matters, but is not limited to them:
 - a) the minimum basal area retention rules contained in clause 43 informed by the research carried out under clause 28(2) and (3); and
 - b) any new listings under the *Threatened Species Conservation Act*; and
 - c) any new record of a threatened species or a species listed in clause 140 (a), (b) or (c) in the area to which this approval applies;
 - d) in the case of the second review, a review of the Riverina Forests Drainage Protection Map, to determine whether any drainage protection areas should be added to the map.

27. Setting future volume limits on certain logging operations

Early thinning operations (other than in the western lands leases)

1. A review of the early thinning program referred to in clause 5 will be conducted in the period 1 July 2012 to 31 December 2012 to determine a sustainable annual maximum amount of river red gum residue that may be produced from early thinning operations, taking into account the silvicultural and environmental impacts and benefits of the program, and the extent of the resource.
2. The terms of reference for the review will be set jointly by DECCW and Forests NSW.
3. The review will be carried out on a scientific basis by an independent panel, comprised of members mutually agreed to by the Directors General of

DECCW and Industry and Investment NSW and jointly funded by Forests NSW and DECCW.

4. The independent panel will make recommendations to the Ministers. The Ministers will consider the joint recommendations before deciding whether to amend the licence to continue early thinning operations in some form.

Residue operations in the western land leases

5. Forests NSW will conduct a series of reviews for the purpose of recommending the maximum volume of residue and residue logs (including dry residue and dry residue logs) that may be produced from logging operations (including early thinning operations) in the western land leases for each of the following periods –
 - a) 1 January 2014 to 31 December 2019;
 - b) 1 January 2020 to 31 December 2025;
 - c) 1 January 2026 to 31 December 2031.
6. The terms of reference for the review will be set jointly by Forests NSW and DECCW no less than 12 months before the commencement of the next review period (for example, the terms of reference for the review described in subclause (5)(b) must be settled by 31 December 2012).
7. The review will include:
 - a) an assessment of the resource; and
 - b) the silvicultural implications of continuing, and of discontinuing, the logging operation under review; and
 - c) an environmental assessment of the impact of continuing, and of discontinuing, the operations.
8. Forests NSW will send a copy of each review and its recommendations to DECCW for its assessment, no less than 6 months before the commencement of the next review period.
9. Following DECCW's assessment of Forests NSW's review and recommendations, Forests NSW will develop, in consultation with DECCW, joint recommendations for the amendment of this approval in relation to relevant volume limits by the Ministers who are parties to this approval.
10. The joint recommendations for amendment of this approval will be provided to the Ministers no less than 3 months before the commencement of the next review period.

Note: It is proposed that the Ministers will consider the joint recommendations before amending the licence to set relevant volume limits under clause 5 for the next period.

28. Research

1. Any research, undertaken by or on behalf of Forests NSW, for the purposes of a review of this approval or any other matter relating to its terms, is to be guided by the following principles and objectives:
 - a) the aims of, or questions posed by, the research are clearly defined,
 - b) the method adopted for the research is appropriate in light of the aims of, and questions to be addressed by, the research,
 - c) the procedures adopted to carry out the research minimise potential for individual bias to affect the results of the research,

- d) the data collected in the research is reliable.
- 2. Forests NSW may carry out a trial in accordance with this clause to determine the optimal rate of basal area retention for the purposes of clause 43, in a range between 6 and 12 square metres per hectare, having regard to the need for both ecologically sustainable forest management and a sustainable timber supply.
- 3. Forests NSW must consult with DECCW as to the area selected for the trial and the parameters of the trial.

Note: This research will inform the 5 year review referred to in clause 26.

29. Auditing methodology for tree retention requirements in this approval

- 1. Forests NSW is to develop, within 12 months of the commencement of this approval and in consultation with DECCW, a methodology for:
 - a) auditing compliance with the requirements for the retention of trees for the purposes of this approval (clauses 42 to 45 and clause 179); and
 - b) calculating dbhob using stump dimensions (clause 191).
- 2. The methodology for auditing compliance with the requirements for the retention of trees for the purposes of this Part is to specify the following:
 - a) how many sample areas need to be selected,
 - b) the size of each sample area, including whether or not the sample area must be the whole hectare or whether it may comprise a smaller plot or plots of land within that hectare,
 - c) how each sample area is to be selected,
 - d) the method of measuring basal area for the purposes of clauses 42-45, and calculating the total basal area of trees in a sample area, including the extent to which estimates may be used,
 - e) the method of calculating number of trees retained for the purposes of clause 179 (habitat and recruitment trees) in a sample area,
 - f) the acceptable level of error in the results obtained by applying the methods referred to in paragraphs (d) and (e) to a sample area.
- 3. The methodology may deal with other matters.
- 4. The methodology does not have effect unless and until DECCW has approved it in writing. It may be amended from time to time with the written approval of DECCW.

30. Methodology for targeted survey for regent parrot

- 1. Forests NSW is to develop, in consultation with DECCW, a methodology for the targeted survey for the regent parrot required under clause 160, by 29 July 2011.
- 2. The methodology is to specify the following:
 - a) The number and size of search sites;
 - b) The spacing and location of search sites;
 - c) The timing of the survey;
 - d) The time spent on each search;
 - e) The total number of days to be spent on each survey; and

- f) Reporting of the results of each survey.
- 3. The methodology may deal with other matters.
- 4. The methodology does not have effect unless and until DECCW has approved it in writing. It may be amended from time to time with the written approval of DECCW.

31. Field protocol for measuring distances

From 1 January 2012, the distances referred to in Chapter 2 (for example, clauses 104 (drainage feature protection zones), 105 (linkage protection zones), and 106 (buffer strips)) are to be measured in accordance with a field protocol developed jointly between Forests NSW, Fisheries and DECCW.

PART 1.2 – GENERAL TERMS APPLYING TO FORESTRY OPERATIONS

Division 1 – Terms applying generally to all forestry operations

32. Best Practice

- 1. In carrying out, or authorising the carrying out of, forestry operations, Forests NSW must give effect to the principles of best practice that apply to the operations concerned.
- 2. In this clause, “best practice” means the management of a forestry operation to achieve the ongoing minimisation of any adverse impacts of the forestry operation on the environment.

33. Cumulative impacts of past logging operations

- 1. This clause applies to a logging operation that is proposed on a tract of land-
 - a) that has been the subject of a logging operation before 1 January 2011; or
 - b) that adjoins a tract that has been the subject of a logging operation before 1 January 2011.
- 2. Before making a decision to carry out the proposed logging operation, Forests NSW must consider the cumulative impacts that may arise if the proposed operation were to proceed.
- 3. In particular, Forests NSW must, as far as is practicable, plan AGS, STS release and STS regeneration operations in accordance with clauses 41 to 43 as if a reference in those clauses to the interval required between logging operations of the same or a different kind included a reference to the interval between logging operations carried out before and after 1 January 2011 (and not just intervals between operations carried out after that date).

Note: Clauses 41 to 43 require between 10 and 30 years between some operations.

34. Forest Management Zoning System

- 1. In carrying out, or authorising the carrying out of, forestry operations in State forests, Forests NSW must give effect to the document entitled, “Forest Management Zoning in State Forests” (State Forests of New South Wales, December 1999).
- 2. To the extent of any inconsistency between this approval and the document referred to in subclause (1), this approval prevails.

3. Part 3.7 applies to any area of land classified as Forest Management Zone 2 as if such an area were an environmentally significant area.
4. However, the provisions of Part 3.7 as applied to any area of land classified as Forest Management Zone 2 by this clause are not terms of the licence under the *Threatened Species Conservation Act 1995* included in this approval.
5. To avoid doubt, if a dam or tank, or its surrounding protection zone (as described in clause 225) also lies (wholly or partially) within an area of land classified as Forest Management Zone 2, then harvesting machinery (and any other machinery) may enter and be used within the area for the purpose of carrying out maintenance work on the dam or tank in accordance with clause 225.

35. Threatened Species Conservation Act 1995 – proposed new listings

1. Forests NSW must, as far as is practicable, minimise or mitigate any adverse effect of forestry operations on animals or plants of a proposed threatened species, population or ecological community.
2. In deciding how to minimise or mitigate any adverse effect of operations on the animals or plants of the species, population or ecological community concerned, Forests NSW is to be guided by any written advice provided to it by DECCW.
3. The requirements of this clause continue to apply until one of the following occurs:
 - a) this approval is amended to make specific provision in relation to the species, population or ecological community concerned or one or both of the Ministers make a decision not to amend this approval for that purpose (being a decision of which there is a written record),
 - b) the Scientific Committee makes a final determination not to insert the species, population or ecological community in Schedule 1, 1A or 2 to the *Threatened Species Conservation Act 1995*
4. For the purposes of this clause, a species, population or ecological community is a proposed threatened species, population or ecological community only if the species, population or ecological community is not already listed in a schedule to the *Threatened Species Conservation Act 1995* and:
 - a) the Minister administering the *Threatened Species Conservation Act 1995* or the Natural Resources Commission has requested the Scientific Committee to consider a proposal to insert the species, population or ecological community in Schedule 1, 1A or 2 to the *Threatened Species Conservation Act 1995*, or
 - b) the Director-General of the Department of Environment, Climate Change and Water has nominated the species, population or ecological community for insertion in Schedule 1, 1A or 2 to the *Threatened Species Conservation Act 1995*, or
 - c) the Scientific Committee has initiated for consideration a proposal to insert the species, population or ecological community in Schedule 1, 1A or 2 to the *Threatened Species Conservation Act 1995*, or
 - d) the Scientific Committee has made a preliminary determination that a proposal to insert the species, population or ecological community in Schedule 1, 1A or 2 to the *Threatened Species Conservation Act 1995* should be supported.

5. Despite subclause (4), this clause does not apply to an ecological community in respect of which a proposal or nomination is made for its insertion in Schedule 2 to the *Threatened Species Conservation Act 1995* as a vulnerable ecological community.
 6. In this clause:
adverse impact, in relation to animals or plants of a species, includes harm to animals of the species, or the picking of plants of the species, and damage to any habitat of animals or plants of the species; and
animal, ecological community, habitat, harm, Natural Resources Commission, picking, plant, population, Scientific Committee and **species** have the same meanings as in the *Threatened Species Conservation Act 1995*.
- 36. Threatened Species Conservation Act 1995 – proposed listing of critical habitat**
1. Forests NSW must, as far as is practicable, minimise or mitigate any adverse effect of forestry operations on proposed critical habitat in the Riverina State forests.
 2. Subclause (1) ceases to apply when the Minister refuses or approves the recommendation of the Director-General of DECCW for identification of the area as critical habitat under Division 1 of Part 3 of the *Threatened Species Conservation Act 1995*.
 3. For the purposes of this clause, an area of land is proposed critical habitat if a notice of a recommendation by the Director-General of DECCW for identification of the area as critical habitat has been published in accordance with the *Threatened Species Act 1995*.
- 37. Threatened Species Conservation Act 1995 – listing as critically endangered**
1. If an endangered or vulnerable species, or endangered ecological community, that is present in the Riverina State forests becomes critically endangered, Forests NSW is, at the request of DECCW, to participate in a review of this approval as it applies to, or provides measures for the protection of, the species or ecological community concerned.
 2. In this clause:
 - a) the **review** referred to is a review that has regard to the Scientific Committee’s opinion that the species or community is facing an extremely high risk of extinction in New South Wales in the immediate future, and
 - b) the terms, **critically endangered, endangered ecological community** and **endangered or vulnerable species**, have the same meanings as in the *Threatened Species Conservation Act 1995*.
- 38. Forests NSW to notify DECCW of its discovery of new evidence of plant and animal species**
1. Forests NSW must notify DECCW of any new evidence that it finds, during the term of this approval, concerning the presence of a species of plant or animal in the Riverina State forests, being evidence that:
 - a) a species of plant or animal not previously known to be present in the Riverina State forests is present in those forests, or

- b) the range of a species of plant or animal in the Riverina State forests has significantly expanded in those forests, or
 - c) a species of plant or animal that has not been recorded in the Riverina State forests within the previous 10 years is present in those forests.
2. In this clause, **animal**, **plant** and **species** have the same meanings as in the *Threatened Species Conservation Act 1995*.

Division 2 – General restrictions on logging operations

39. Logging operations in areas projected to be wetter

- 1. This clause applies to logging operations in the projected wetter areas shown as areas projected to be flooded on the map titled “Koondrook-Perricoota Flood Enhancement Works” in Schedule 2 to this approval and those areas assessed as Site Quality 1 and 2 in Campbell’s Island State forest, as shown on the map titled “Campbells Island - Site Quality Map” in Schedule 2 to this approval.
- 2. Trees must be selected for harvesting in the projected wetter areas using one or more of the following silvicultural practices:
 - a) AGS as provided in clause 41,
 - b) STS release as provided in clause 42,
 - c) early thinning as provided in clause 44,
 - d) thinning as provided in clause 45.

40. Logging operations in areas projected to be drier

- 1. This clause applies to logging operations in areas of the Riverina State forests other than the areas to which clause 33 applies.
- 2. Trees must be selected for harvesting in the areas to which this clause applies using one or more of the following silvicultural practices:
 - a) STS regeneration as provided in clause 43,
 - b) STS release as provided in clause 42,
 - c) early thinning as provided in clause 44,
 - d) thinning as provided in clause 45.

41. Australian Group Selection (AGS)

- 1. AGS may only be used to select trees for logging in a tract of land if:
 - a) STS release has not been used on that tract since 1 January 2011;
 - b) the area of each group of trees selected for logging, as measured from the outermost crown edges of the outermost trees standing on the outer boundary of the group prior to logging, is no more than 0.5 hectares and 80 metres in diameter;
 - c) the distance between each group of trees selected for logging is 40 metres or more;
 - d) the total area selected for logging, being the sum of the areas referred to in paragraph (b), is no more than 22.5% of the **net operational area of the tract**.

2. If AGS has been used to carry out a harvesting operation on a tract of land after 1 January 2011:
 - a) AGS must not be used again in the same tract for 10 years (that is, there must be 10 years between operations); and
 - b) AGS must not be used again in the gaps created by the first operation (that is, the areas where trees were logged) until 3 further harvesting operations have been carried on elsewhere on the tract.

42. STS release

1. STS release may only be used to select trees for logging in a tract of land if:
 - a) AGS has not been used in that tract since 1 January 2011; and
 - b) the tract is 175 hectares or less; and
 - c) the tract adjoins at least one tract with a minimum area of 30 ha on which STS release has not been carried out for at least 10 years prior to the operation; and
 - d) there are at least 2 age classes or cohorts of trees and the dominant and co-dominant trees in the youngest class or cohort of trees have a dbh of 10 cm or more; and
 - e) the sum of the basal area of all dominant and co-dominant trees remaining on the tract after the harvesting operation has been carried out will be at least 12 square metres per hectare, when calculated in accordance with clause 46.
2. If STS release has been used to carry out a harvesting operation on a tract of land after 1 January 2011, STS release must not be used again in the same tract for 10 years.

43. STS regeneration

1. STS regeneration may only be used to select trees for logging in a tract of land if the sum of the basal area of all trees remaining on the tract after the harvesting operation has been carried out will be at least 12 square metres per hectare, when calculated in accordance with clause 46.
2. If STS regeneration has been used to carry out a harvesting operation in a tract of land after 1 January 2011, STS regeneration must not be used again in the same tract for 30 years.

44. Early thinning

The early thinning method may only be used to select trees for logging in a tract of land if:

- a) the diameter of dominant and co-dominant trees in each cohort of trees proposed to be logged is less than 50 cm: and
- b) for each cohort of trees being logged, the sum of the basal area of the remaining dominant and co-dominant trees in that cohort in that tract (that is, after the logging operation has been carried out) will be at least 12 square metres per hectare, when calculated in accordance with clause 46.

45. Thinning

Thinning of a cohort of trees may only be carried out in a tract if the sum of the basal area of the remaining dominant and co-dominant trees in that cohort in that tract (that is, after the thinning operation has been carried out) will be at least 12 square metres per hectare, when calculated in accordance with clause 46.

46. Calculation of average basal area of trees in a hectare

1. For the purposes of clauses 42 to 45, the sum of the basal area of the relevant remaining trees will be taken to be at least 12 square metres per hectare if it averages this rate when calculated across the net harvest area.
2. Compliance with this requirement will be audited in accordance with the auditing methodology approved under clause 29.

47. Travelling stock reserves

1. When deciding whether to carry out, or authorise the carrying out of, a logging operation in which timber on a travelling stock reserve (within the meaning of the *Rural Lands Protection Act 1998*) that is Crown-timber land is to be cut and removed, Forests NSW must assess or determine the following matters:
 - a) the significance of the travelling stock reserve in providing habitat connectivity or a habitat corridor for individuals of a threatened species, population or ecological community (or protected fauna) and whether the proposed logging on the stock reserve will have any adverse impact on the reserve's role in providing habitat connectivity or as a habitat corridor,
 - b) whether there are any records of a threatened species or endangered population in the area within the travelling stock reserve affected by the proposed logging operation,
 - c) whether the surrounding land provides (and foreseeably will continue to provide) similar habitat for plants and animals (within the meaning of the *Threatened Species Conservation Act 1995*) as the area within the travelling stock reserve affected by the proposed logging operation,
 - d) having regard to its assessment of the matters referred to in paragraphs (a), (b) and (c), the conservation value of the area within the travelling stock reserve that is proposed to be logged,
 - e) the area of the travelling stock reserve in which it is proposed to log compared with the length of its outer boundary.
2. Forests NSW must take into account the matters it has assessed under subclause (1) when determining whether to carry out or authorise the carrying out of the proposed logging operation concerned in the area within the travelling stock reserve. Factors against an operation proceeding include that the area has a high conservation value and that the area is an isolated patch of forest habitat of its type, with a low boundary to area ratio.
3. Forests NSW must not carry out, or authorise the carrying out of, a logging operation in any forested area within the travelling stock reserve that it identifies as having a high conservation value (under subclause (1) or otherwise) unless the logging operation will maintain or improve the environmental attributes that contribute to the high conservation value of the area.
4. Forests NSW is to prepare a plan for managing logging operations on travelling stock reserves in the Riverina State forests within 12 months of the commencement of this approval. The plan is to include measures, in relation

to each forested area within a travelling stock reserve that Forests NSW identifies as having high conservation value (under subclause (1) or otherwise), for ensuring that the environmental attributes that contribute to the high conservation value of the area are maintained or improved.

5. In preparing the plan for managing logging operations on travelling stock reserves, Forests NSW is to consult and take into account the written comments of any livestock health and pest authority constituted by the *Rural Lands Protection Act 1998* and having the care, control and management of a travelling stock reserve (or part of such a reserve) within the Riverina State forests.
6. Forests NSW may not carry out, or authorise the carrying out of, any logging operations on land within a travelling stock reserve until it has forwarded its draft plan for managing those operations to DECCW and considered any written comments DECCW may provide regarding the contents of the plan within two months of receiving it.
7. Forests NSW may review and amend its plan for managing logging operations on travelling stock reserves at any time. However, it is to consult and take into account any written comments of affected livestock health and pest authorities and DECCW (if provided to it within a reasonable time) before giving effect to an amendment.
8. Forests NSW is to give effect to its plan for managing logging operations on travelling stock reserves, as current from time to time.
9. Nothing in this clause affects the rights or obligations of a livestock health and pest authority constituted by the *Rural Lands Protection Act 1998* with respect to a travelling stock reserve or the operation of section 89 of that Act.

Division 3 – General requirements relating to forest products operations

48. Ecological viability of species from which forest products taken

Forests NSW must ensure that the scale and intensity of forest products operations that it carries out or authorises in any part of the Riverina State forests does not harm the sustained ecological viability of the relevant species of tree, shrub or other vegetation within the part.

Division 4 – General requirements relating to on-going forest management operations

49. Replanting trees

If Forests NSW plants any trees for the purpose of regenerating the overstorey following the carrying out of logging operations, the seeds or seedlings chosen are to be of the same provenance as the trees removed in the logging operations, in so far as it is practicable to do so.

50. Assessment of regeneration in silvicultural management

1. Forests NSW must assess the extent and nature of regeneration in areas of land within the Riverina State forests that are logged during the term of this approval.
2. Assessments must be carried out on a regular and periodic basis.
3. The first such assessment is to be completed by the end of 2013.

4. Before carrying out the first assessment, Forests NSW must consult DECCW regarding the nature, collection (including timing) and analysis of data on which assessments of regeneration under this clause are to be based.

51. Pest animal management – plan for Riverina State forests

1. Forests NSW must ensure that it has, at all times while this approval is in force, a plan or plans for the control of pest animals within State forests in the Riverina State Forests that comply with the requirements of this clause (“pest animal management plan”).
2. A pest animal management plan must specify the following:
 - a) the objectives sought to be achieved in relation to the control of pest animals, during or by the end of the term of the plan, and the strategies to be adopted to achieve those objectives,
 - b) the species of pest animal that are to be targeted for control, their known or likely locations within State forests in the Riverina State forests, and the control methods that may be used for each species,
 - c) the environmental impacts of each species of pest animal targeted for control and of the control methods, and how it is proposed to limit any adverse environmental impacts (of both the pest animals and control methods),
 - d) procedures for setting priorities for control activities under the plan.
3. A requirement to specify a matter in subclause (2) (b) or (c) may be met by applying or adopting provisions of another document (such as Forests NSW’s Chemicals Manual), including by way of reference.
4. A pest animal management plan must provide for the following:
 - a) monitoring the distribution of pest animals within State forests in the Riverina State forests,
 - b) assessing the extent to which the objectives of the plan are achieved and the effectiveness of the strategies implemented under the plan to achieve them,
 - c) monitoring the implementation and effectiveness of methods, measures and procedures referred to in subclause (2) (b), (c) and (d),
 - d) reporting on the results of monitoring and assessment undertaken in accordance with the plan.
5. A pest animal management plan may include matters in addition to those referred to in subclauses (2) and (4). A plan may apply to State forests within a region or part of the State that includes, but is not limited to, the Riverina State forests.
6. In this clause:
animal means any animal of an invertebrate or vertebrate species, whether native or introduced, and
pest animals means pest animals that have an adverse environmental or economic impact in the Riverina State forests or surrounding agricultural land.

52. Pest animal management plan – review and amendment

1. Forests NSW must review the pest animal management plan applying to State forests within the Riverina State forests, regularly and periodically (and at least every 5 years from the date of its approval for implementation).

2. The review is to be conducted in light of the results of monitoring and assessment carried out under the plan (as referred to in clause 51 (4)) and, to the extent that they are available to Forests NSW, the following:
 - a) any new information concerning the presence or distribution of pest animals within State forests in the Riverina State forests and their environmental or economic impacts,
 - b) any developments in methods for controlling pest animals and any new information concerning existing methods adopted under the plan,
 - c) any new information relating to measures to limit the adverse environmental impacts of pest animals and of the methods for controlling pest animals,
 - d) any relevant plan or strategy published by the Commonwealth or NSW Government for the control of pest animals (such as a threat abatement plan), if the plan or strategy is current at the time of the review.
3. Forests NSW may amend its pest animal management plan, or prepare a new pest animal management plan, following a review or at any time.

53. Pest animal management plan – Forests NSW to give effect to plan

Forests NSW is to give effect to its pest animal management plan, as current from time to time. However, to the extent of any inconsistency between this approval and a plan, this approval prevails.

54. Weed management – plan for the Riverina State forests

1. Forests NSW must ensure that it has, at all times while this approval is in force, a plan or plans for the control of weeds within State forests in the Riverina State forests that comply with the requirements of this clause (“weed management plan”).
2. A weed management plan must specify the following:
 - a) the objectives sought to be achieved in relation to the control of weeds, during or by the end of the term of the plan, and the strategies to be adopted to achieve those objectives,
 - b) the species of weed that are to be targeted for control, their known or likely locations within State forests in the Riverina State forests, and the control methods that may be used for each species,
 - c) the environmental impacts of each species of weed targeted for control and of the control methods, and how it is proposed to limit any adverse environmental impacts (of both the weeds and the control methods),
 - d) procedures for setting priorities for control activities under the plan.
3. A requirement to specify a matter in subclause (2) (b) or (c) may be met by applying or adopting provisions of another document (such as Forests NSW’s Chemical Manual), including by way of reference.
4. A weed management plan must provide for the following:
 - a) monitoring the distribution of weed species within State forests in the Riverina State forests,
 - b) assessing the extent to which the objectives of the plan are achieved and the effectiveness of the strategies implemented under the plan to achieve them,

- c) monitoring the implementation and effectiveness of methods, measures and procedures referred to in subclause (2) (b), (c) and (d),
 - d) reporting on the results of monitoring and assessment undertaken in accordance with the plan.
5. A weed management plan may include matters in addition to those referred to in subclauses (2) and (4). A plan may apply to State forests within a region or part of the State that includes, but is not limited to, the Riverina State forests.
 6. A reference in this clause to **weeds** is a reference to noxious weeds (within the meaning of the *Noxious Weeds Act 1993*) and to any other weed that has an adverse impact on the environment within the Riverina State forests.

55. Weed management plan – review and amendment

1. Forests NSW must review the weed management plan applying to State forests within the Riverina State forests, regularly and periodically (and at least every 5 years from its approval for implementation).
2. The review is to be conducted in light of the results of monitoring and assessment carried out under the plan (as referred to in clause 54) and, to the extent that they are available to Forests NSW, the following:
 - a) any new information concerning the presence or distribution of weeds within State forests in the Riverina State forests and their environmental or economic impacts,
 - b) any developments in methods for controlling weeds and any new information concerning existing methods adopted under the plan,
 - c) any new information relating to measures to limit the adverse environmental impacts of weeds and of the methods of controlling weeds,
 - d) any relevant plan or strategy published by the Commonwealth or NSW Government for the control of weeds (such as a threat abatement plan), if the plan or strategy is current at the time of the review.
3. Forests NSW may amend its weed management plan or prepare a new weed management plan, following a review or at any time.

56. Weed management plan – Forests NSW to give effect to plan

Forests NSW is to give effect to its weed management plan, as current from time to time. However, to the extent of any inconsistency between this approval and a weed management plan, this approval prevails.

57. Grazing management – plan for Riverina State forests

1. Forests NSW must ensure that it has, at all times while this approval is in force, a plan or plans that comply with the requirements of this clause for the regulation of grazing by domestic stock within State forests in the Riverina State forests (“grazing management plan”). An aim of the plan must be to regulate grazing so as to limit its adverse environmental impacts while ensuring its use for bush fire hazard reduction is not compromised.
2. A grazing management plan must specify the following:
 - a) the objectives sought to be achieved in relation to the regulation of grazing, during or by the end of the term of the plan, and the strategies to be adopted to achieve those objectives,

- b) the methods that may be used to manage grazing pressure on herbaceous vegetation while reducing bush fire hazard,
 - c) the environmental impacts of grazing (particularly on ecosystems sensitive to grazing) and how it is proposed to limit any adverse impacts,
 - d) procedures for selecting areas for the application and removal of grazing, respectively.
3. A requirement to specify a matter in subclause (2) (b), (c) and (d) may be met by applying or adopting provisions of another document, including by way of reference.
 4. A grazing management plan must provide for the following:
 - a) monitoring the impact of grazing within State forests in the Riverina State Forests
 - b) assessing the extent to which the objectives set out in the plan are achieved and the effectiveness of strategies implemented under the plan to achieve them,
 - c) monitoring the implementation and effectiveness of methods, measures and procedures referred to in subclause (2) (b), (c) and (d),
 - d) reporting on the results of monitoring and assessment undertaken in accordance with the plan.
 5. A grazing management plan may include matters in addition to those referred to in subclauses (2) and (4). A plan may apply to State forests within a region or part of the State that includes, but is not limited to, the Riverina State forests.

58. Grazing management plan – review and amendment

1. Forests NSW must review its grazing management plan applying to State forests within the Riverina State forests, regularly and periodically (and at least every 5 years from the date of its approval for implementation).
2. The review is to be conducted in light of the results of monitoring and assessment carried out under the plan (as referred to in clause 57(4)) and, to the extent that they are available to Forests NSW, the following:
 - a) any new information concerning the environmental impacts of grazing, including the use of grazing to encourage the growth of native species of grass,
 - b) any developments in methods or measures to limit the adverse environmental impacts of grazing,
 - c) any new information relevant to the management of grazing pressure on herbaceous vegetation.
3. Forests NSW may amend its grazing management plan, or prepare a new grazing management plan, following a review or at any time.

59. Grazing management plan – Forests NSW to give effect to plan

Forests NSW is to give effect to its grazing management plan, as current from time to time. However, to the extent of any inconsistency between this approval and the plan, this approval prevails.

60. Burning operations management - plan for the Riverina State forests

1. If Forests NSW decides to carry out burning operations within the Riverina State forests it must first prepare a plan or plans for the regulation of burning operations in accordance with this clause (“burning operations management plan”). An aim of the management plan must be to regulate the carrying out of burning operations so as to limit any adverse environmental impacts of burning while ensuring that its use for bush fire hazard reduction and other silvicultural purposes (including ecological purposes) is not compromised.
2. A burning operations management plan must specify the following:
 - a) the objectives sought to be achieved in relation to the regulation of burning operations, during or by the end of the term of the plan, and the strategies to be adopted to achieve those objectives,
 - b) how burning operations are to be conducted and measures that may be used to limit the risk of wildfire resulting from the operations or generally to contain the extent of burning,
 - c) the environmental impacts of the fire regimes proposed to be applied to State forests in the Riverina State forests (particularly impacts on ecosystems that are either sensitive to fire or require fire for their maintenance), and how it is proposed to limit any adverse impacts,
 - d) the measures to be used to ensure that a burning operation for the purpose of bush fire hazard reduction will result in a mosaic of burnt and unburnt patches,
 - e) procedures for setting priorities in selecting areas for burning operations.
3. A requirement to specify a matter referred to in subclause (2) (b), (c), (d) or (e) may be met by applying or adopting provisions of another document (such as the *Bush Fire Environmental Assessment Code for New South Wales* in force under Division 8 of Part 4 of the *Rural Fires Act 1997*), including by way of reference.
4. A burning operations management plan must provide for the following:
 - a) monitoring the environmental impact of the fire regimes applied to State forests within the Riverina State forests,
 - b) assessing the extent to which the objectives of the plan are achieved and the effectiveness of the strategies implemented under the plan to achieve those objectives,
 - c) monitoring the implementation and effectiveness of measures and procedures referred to in subclause (2) (b), (c), (d) and (e),
 - d) reporting on the results of monitoring and assessment undertaken in accordance with the plan.
5. The burning operations management plan must also describe the main aspects of the regulatory and policy framework in which bush fire hazard reduction work and other burning operations are carried out, including any internal procedures or policies of Forests NSW (as set out in its guidelines or corporate plans) and identifying any obligations imposed on Forests NSW under the *Rural Fires Act 1997* in relation to bush fire prevention. The plan is to specify the matters that must be considered in the context of that regulatory and policy framework in deciding whether a burning operation should or is required to be conducted.

6. A burning operations management plan may include matters in addition to those referred to in subclauses (2), (4) and (5). A plan may apply to State forests within a region or part of the State that includes, but is not limited to, the Riverina State forests.

61. Burning operations management plan – preparation of first plan

Forests NSW must prepare (and approve for implementation) a burning operations management plan that complies with clause 60 within 12 months of the commencement of this approval. Forests NSW is to invite DECCW and DII (Fisheries) to provide comments on a draft of the plan, and is to take into account any comments made by those agencies (within a reasonable time) in finalising the plan.

62. Burning operations management plan – required for remainder of term of approval

Forests NSW must ensure that it has a burning operations management plan that complies with the requirements of clause 60 at all times following the approval of the first burning operations management plan for implementation.

63. Burning operations management plan – review and amendment

1. Forests NSW must review the burning operations management plan applying to State forests within the Riverina State forests, regularly and periodically (and at least every 5 years from the date of its approval for implementation).
2. The review is to be conducted in light of the results of monitoring and assessment undertaken under the plan (as referred to in clause 60), and, to the extent that they are available to Forests NSW, the following:
 - a) any new measures that can be taken to limit the risk of wildfire occurring as a result of burning operations or generally to contain the extent of burning,
 - b) any new information concerning the environmental impacts of the fire regimes that have been applied to State forests in the Riverina State forests or relevant to limiting the adverse environmental impacts of burning operations,
 - c) any other new information that may be relevant to the matters referred to in clause 60(2)(d) or (e).
3. Forests NSW may amend its burning operations management plan, or prepare a new burning operations management plan, following a review or at any time.

64. Burning operations management plan – Forests NSW to give effect to plan

Forests NSW is to give effect to its burning operations management plan, as current from time to time. However, to the extent of any inconsistency between this approval and the plan, this approval prevails. To avoid doubt, nothing in this approval or a burning operations management plan affects the obligations of Forests NSW under the *Rural Fires Act 1997*.

Division 5 – General requirements relating to ancillary road construction

65. Road and fire trail management – plan for Riverina State forests

1. Forests NSW must ensure that it has, at all times while this approval is in force, a plan or plans for the provision of a road and fire trail network within

State forests in the Riverina State forests that comply with the requirements of this clause (“road and fire trail management plan”). An aim of the plan must be to provide for a road and fire trail network that enables or assists forestry operations to be carried out efficiently while limiting adverse environmental impacts of works relating to roads and fire trails and their use.

2. A road and fire trail management plan must specify the following:
 - a) the objectives sought to be achieved in relation the provision of a road and fire trail network, during or by the end of the term of the plan, and the strategies to be adopted to achieve those objectives,
 - b) standards to be applied in carrying out works relating to roads and fire trails (such as their construction, up-grading, re-opening, maintenance and closure (including rehabilitation of the land)),
 - c) the environmental impacts of using roads and fire trails and works relating to them (such as construction and rehabilitation of land), and how it is proposed to limit any adverse impacts,
 - d) procedures for setting priorities for carrying out works relating to roads and fire trails.
3. A requirement to specify a matter in subclause (2) (b), (c) or (d) may be met by applying or adopting provisions of another document (such as Forests NSW’s Road Work Systems Manual or Policy and Guidelines for Fish Friendly Waterway Crossings (NSW Fisheries, 2003)), including by way of reference.
4. A road and fire trail management plan must identify existing roads and fire trails within State forests in the Riverina State forests and any roads and fire trails proposed to be constructed during the term of the plan. It may identify such roads and fire trails by reference to the Forests NSW corporate geodatabase.
5. A road and fire trail management plan must provide for the following:
 - a) monitoring the environmental impact of works relating to roads and fire trails and their use,
 - b) assessing the extent to which the objectives of the plan are achieved, and the effectiveness of strategies implemented under the plan to achieve them,
 - c) monitoring the implementation and effectiveness of measures and procedures referred to in subclause (2) (c) and (d),
 - d) reporting on the results of monitoring and assessment undertaken in accordance with the plan.
6. A road and fire trail management plan may include matters in addition to those referred to in subclauses (2), (4) and (5). A plan may apply to State forests within a region or part of the State that includes, but is not limited to, the Riverina State forests.

66. Road and fire trail management plan – review and amendment

1. Forests NSW must review the road and fire trail management plan applying to the Riverina State forests, regularly and periodically (and at least every 5 years from its approval for implementation).
2. The review is to be conducted in light of the results of monitoring and assessment carried out under the plan (as referred to in clause 65(5)) and any

new information or measures (if available to Forests NSW) relevant to limiting the adverse environmental impact of road works and the use of roads.

3. Forests NSW may amend or prepare a new road and fire trail management plan, following a review or at any time.

67. Road and fire trail management plan – Forests NSW to give effect to plan

Forests NSW is to give effect to its road and fire trail management plan, as current from time to time. However, to the extent of any inconsistency between this approval and a road and fire trail management plan, this approval prevails.

68. Road closure

1. A road or fire trail must be closed, and the relevant land rehabilitated, as soon as practicable after it is no longer required for the carrying out of forestry operations.
2. Subclause (1) does not apply where the road or fire trail concerned:
 - a) is being used, or is proposed to be used, for activities other than forestry operations, or
 - b) is intended to be used for future forestry operations (but only if that intention is identified in any relevant road and fire trail management plan).
3. In this clause, **forestry operations** has the same meaning as in the *Forestry and National Park Estate Act 1998*.

PART 1.3 – PLANNING FORESTRY OPERATIONS

Division 1 – Application of Part

69. Application of Part

1. This Part applies only to forestry operations of the following kinds:
 - a) a logging operation
 - b) a forest products operation,
 - c) weed control,
 - d) pest animal control,
 - e) authorised water management activities,
 - f) a burning operation,
 - g) ancillary road construction.
2. Despite subclause (1), this Part does not apply to a forestry operation if it comprises any of the following:
 - a) the taking of timber or products in accordance with an authorisation by Forests NSW under section 30I of the *Forestry Act 1916*,
 - b) a miscellaneous forestry operation,
 - c) the provision of roads (including bush tracks) that are not or will not (when constructed or re-opened) be classified under Forests NSW's road classification system (set out in its road and fire trail management plan) as feeder roads or harvesting roads,

- d) the provision of fire trails constructed or re-opened solely for the purpose of emergency fire fighting.

(Nothing in this subclause prevents Forests NSW applying the provisions of this Part to such a forestry operation.)

Division 2 – Planning forestry operations on an annual basis

70. Annual planning to reduce cumulative effect of logging operations

In planning logging operations for a financial year, Forests NSW must, as far as is reasonably practicable, disperse those operations over the Riverina State forests and over time, so as to reduce any cumulative impacts of logging operations in any part of the Riverina State forests.

71. Preparation of annual program of forestry operations

1. Forests NSW is to prepare a program of forestry operations to which this Part applies (other than forest products operations) for each financial year (“annual program”).
2. The annual program is to include the following information in relation to each proposed forestry operation:
 - a) the intended location of the operation (including, if the location is within State forest, the State forest name and the relevant compartment number or numbers),
 - b) the nature of the operation.
3. Forests NSW is to forward a copy of the annual program for a financial year to DECCW and DII (Fisheries) before the commencement of that financial year.
4. The first annual program is required to be prepared for the first full financial year (commencing 1 July) following the commencement of this approval.
5. Forests NSW must keep each annual program until at least the end of the financial year to which the program relates.

72. Annual program – additional information about logging operations

The annual program for each financial year is to include an estimate of the kinds and quantities of timber products that will be yielded from the logging operations proposed for that financial year. The plan is also to indicate the intended order in which the proposed logging operations will be carried out.

73. Annual program – additional information about burning operations

The annual program for each financial year is to indicate the season in which proposed burning operations are intended to be carried out.

74. Departures from annual program – logging operations

Logging operations may be carried out during a financial year other than at the locations and in the order proposed in the annual program for that year, but only if that is necessary or desirable having regard to the particular circumstances and conditions (such as market forces and weather) at the relevant time.

Note: Any departures from the annual program will be apparent from the monthly advice on forestry operations that Forests NSW is required to prepare under Part 1.4.

Division 3 – Planning for each operation

75. What is required before carrying out a forestry operation

Before carrying out a forestry operation to which this Part applies in a compartment or other tract of land, Forests NSW must prepare a site specific operational plan for the operation in accordance with the requirements of:

- a) this Division, and
- b) Part 2.1, and
- c) Division 1 of Part 3.3, and
- d) Part 4.2,

to the extent those requirements are applicable to the operation concerned.

Note: The requirements of Chapters 2, 3 and 4 referred to above relate to the specific matters that need to be addressed in the planning of and preparation for a forestry operation to ensure that the terms or objectives of each licence set out in this approval are met in carrying out the operation.

76. Site specific operational plan for forestry operations – general

1. In preparing a site specific operational plan for any forestry operation to which this Part applies, Forests NSW is to consider the application of this approval to the operation.
2. The plan is to contain one or more operational maps (“operational map”) identifying the location of the proposed operation (by including, if this location is within a State forest, the relevant State forest name and compartment number or numbers).
3. A site specific operational plan may relate to more than one kind of operation, such as a logging operation and ancillary road construction.
4. The site specific operational plan is to contain such information and instructions as Forests NSW considers necessary to enable its members of staff and other persons to carry out the forestry operation concerned in accordance with this approval.
5. The site specific operational plan is to specify any measures that are to be taken to protect heritage items known to be present in the location of the proposed operation from any adverse impacts of the operation.
6. Forests NSW must ensure that a copy of any authorisation or approval by a regional manager of Forests NSW or by DECCW for the purposes of a forestry operation is kept with a copy of the site specific operational plan for the operation and other documents or records relating to the operation.
7. Forests NSW must keep a copy of each site specific operational plan for a forestry operation (as approved by a regional manager of Forests NSW) until the completion of any review or assessment of this approval (as described in clause 98) that relates to the period during which the forestry operation is undertaken.

77. Site specific operational plans for logging operations – additional matters

The site specific operational plan for a logging operation is also to specify the following:

- a) the type of silviculture to be applied in the operation,

- b) the kinds of timber products (for example, sawlogs or residue logs) expected to be produced by the operation.

78. Site specific operational plans for burning operations – additional matters

The site specific operational plan for a burning operation is also to specify the following:

- a) the measures to be taken to minimise any adverse impacts of the operation on the environment and the risk of wildfire resulting from the operation,
- b) the steps to be taken to monitor the impacts of the operation on the environment.

79. Operational map

1. The operational map that must be included in the site specific operational plan for a forestry operation are to be drawn at a scale of at least 1: 50 000. A scale bar is to be included on the map or maps.
2. The operational map is to depict any area in which the operation is prohibited or restricted under this approval (such an environmentally significant area) if that area is represented spatially on the FNSW corporate geodatabase (at the time of preparation of the map) and is of sufficient size to be represented adequately on the map.
3. Any other area in which the operation is not to be carried out (such as an area occupied by an endangered or critically endangered ecological community) is also to be depicted on the map, if known to be present in the compartment or other tract of land concerned at the time of preparation of the map and of sufficient size.
4. If an area in which the forestry operation is prohibited or restricted (being an area that is known to be present in the compartment or other tract of land concerned at the time of preparation of the map) is too small to be represented adequately on the operational map, Forests NSW is to indicate its presence, location and size on the map by another means.
5. Each operational map must show or include the following:
 - a) grid co-ordinates (showing eastings and northings),
 - b) contour lines,
 - c) any compartment boundaries,
 - d) any State forest boundary (within the geographic area represented on the map),
 - e) name and location (if known) of any significant geographical features,
 - f) a title, with reference to the relevant State forest name and compartment number or numbers (in the case of State forest),
 - g) a reference to the applicable topographic map sheet names and numbers,
 - h) a map legend to enable each type of feature or area marked on the map to be correctly identified,

- i) roads, fire trails and bush tracks (including any proposed to be constructed or created), with an indication of which roads, trails and tracks are proposed to be used in the forestry operation concerned,
- j) the location and type of any threatened species.

Note: Chapters 2, 3 and 4 contain additional requirements in relation to the operational map. Schedule 1 sets out a “check-list” of the matters to be depicted or indicated on the operational map. It is for assistance only.

- 6. A road, bush track or fire trail is not required to be shown on the operational map if its total length is no more than 40 metres.

80. Site specific operational plans to be complied with

- 1. Forests NSW, and any other person, must endeavour, in carrying out a forestry operation, to do so in accordance with the site specific operational plan for the operation. However, if the forestry operation departs from the plan, Forests NSW must:
 - a) prepare a document that sets out the reason for the departure, and
 - b) amend the plan, or prepare a document that sets out how the operation departs from the plan and keep this document with the plan.
- 2. To the extent of any inconsistency between this approval and a site specific operational plan, this approval prevails.

PART 1.4 – ADVICE, PLANS AND OTHER REPORTS FOR DECCW AND DII (FISHERIES)

Division 1 – Monthly advice on operations

81. Application of Division

This Division applies only to forestry operations of the following kinds (and only if a site specific operational plan is required to be prepared for the operation under Part 1.3):

- a) a logging operation
- b) a burning operation,
- c) ancillary road construction.

A reference to a forestry operation in this Part is to be construed accordingly.

82. Monthly advice on operations

- 1. By the first working day of each month, Forests NSW is to give DECCW and DII (Fisheries) written advice on:
 - a) each forestry operation to which this Division applies that has been undertaken in the financial year in which that month falls, and
 - b) each forestry operation to which this Division applies proposed to be undertaken in that month or the next month, in accordance with this clause and clause 231 (Additional details for logging operations and road works in monthly advice).

Note: Clause 231 in Chapter 4 specifies additional requirements in relation to the contents of the monthly advice for logging operations and ancillary road construction.

2. In the case of the monthly advice to be provided by the first working day of July in any year, the advice is to deal with each operation undertaken in the preceding financial year (as well as proposed operations as described in subclause (1) (b)). (A copy of each such monthly advice is to be kept by Forests NSW for the remainder of the term of this approval.)
3. The monthly advice is to include the following details in relation to each forestry operation:
 - a) the nature of the operation,
 - b) the location of the operation (by including, if the location is within State forest, the State forest name and the relevant compartment number or numbers),
 - c) if the site specific operational plan has been approved by a regional manager of Forests NSW, the date on which it was so approved,
 - d) the date on which or month in which the operation commenced, recommenced or is proposed to commence or recommence, in the relevant compartment or other tract of land,
 - e) if the operation has been and remains suspended at the date of the advice, the date on which it was suspended,
 - f) if the operation has been completed, the date on which it was completed,
 - g) the net mapped operation area (in hectares) for the proposed operation,
 - h) the number of authorisations given by a regional manager of Forests NSW in relation to the operation.
4. If the operation is a proposed logging operation, the monthly advice is to specify the quantity of timber that Forests NSW estimates the operation will yield. The estimate may be specified by referring to a quantity within a range.
5. If the operation is a proposed logging operation or ancillary road construction, the monthly advice is to specify the total number of threatened species of animal that are listed in the table to clause 198(1) and have known habitat (within the meaning of that subclause) within the relevant compartment or other tract of land (and within 100 metres of it).
6. In relation to each forestry operation listed in the monthly advice, that advice is to indicate whether or not the forestry operation has been included in a previous monthly advice and, if it has been, whether any details in relation to the operation have been amended or are additional.
7. Forests NSW is not required to give details of any forestry operation that has been completed before the commencement of this approval, in a monthly advice required under this clause. A monthly advice is not required to be provided in the calendar month in which this approval commences.

83. Operation not to be undertaken unless specified in monthly advice etc

1. A forestry operation to which this Division applies may be commenced or recommenced in a compartment or other tract of land only if:
 - a) it has been identified as an operation that is to be commenced or recommenced in a monthly advice given to DECCW and DII (Fisheries) under clause 82, and

- b) at least two working days have elapsed since the submission of the monthly advice in which the proposed commencement or recommencement date for the operation is first specified.
2. In addition, the operation may not be commenced or recommenced before the date or month specified, in the current monthly advice, for its commencement or recommencement, unless Forests NSW has given DECCW and DII (Fisheries) written notice of the earlier date or month at least two working days before that earlier date or the first day of the earlier month.
3. A forestry operation may be undertaken only within the location specified in the current monthly advice. However, Forests NSW may extend or otherwise vary the area in which it undertakes the operation, by giving DECCW and DII (Fisheries) written notice of the variation.
4. A forestry operation may be recommenced in the same month in which it was suspended, despite the restrictions on recommencement in subclauses (1) and (2).

84. Monthly advice may be amended at any time

1. Forests NSW may amend the monthly advice it has given to DECCW and DII (Fisheries) at any time, including by adding a proposed forestry operation to it. Forests NSW is to give DECCW and DII (Fisheries) a written outline of the reasons for each amendment.
2. If Forests NSW becomes aware that any details included in the monthly advice it has given to DECCW and DII (Fisheries) are incorrect, it must give an amended advice to DECCW and DII (Fisheries) within 7 days of becoming so aware (unless the next monthly advice is due within that period).
3. The monthly advice as amended (once given to DECCW and DII (Fisheries)) is then the current monthly advice for the purposes of clause 83.

85. Operational map and location map to be given to agencies for each new operation

1. Forests NSW is to give DECCW and DII (Fisheries):
 - a) a copy of the operational map for each forestry operation listed in a monthly advice given to those agencies, and
 - b) a location map that clearly identifies the location within the Riverina State forests of the compartment or other tract of land in which that operation is proposed to be carried out and that shows the roads proposed to be used to access the compartment or other tract of land.
2. The maps are to be given to the agencies at least two working days before the commencement of the forestry operation in the compartment or other tract of land.
3. Forests NSW is to give DECCW and DII (Fisheries) a copy of any amended operational map or location map. If Forests NSW becomes aware that any details shown on an operational map or location map given to those agencies are incorrect, misleading or incomplete, it must give the agencies a copy of an amended map within 7 days of becoming so aware and identify the corrections or additions made when forwarding it.

Division 2 – Annual reports

86. Annual reports on forestry operations

1. Forests NSW is to provide DECCW and DII (Fisheries) with a report on forestry operations undertaken in the Riverina State forests in each financial year. The information that must be included in the annual report is set out in clauses 87 to 90.
2. The first annual report under this Division is required for the first full financial year (commencing 1 July) after the commencement of this approval. However, that report is also to include information on forestry operations undertaken in the remainder of the financial year immediately following the commencement of this approval.
3. Forests NSW may provide the annual report on forestry operations in one document or more than one document. (For example, it may prepare separate documents for each kind of forestry operation, such as logging operations, for the financial year.)

87. Information about logging operations

1. An annual report under this Division is to include the following information in relation to logging operations in the relevant financial year:
 - a) the quantity of timber yielded by those operations (including the quantity of each kind of timber product sold by Forests NSW, such as high quality large logs, low quality logs and residue logs,
 - b) an estimate of the total area over which logging has been carried out, together with the total net operational area (in hectares) for logging operations in that year,
 - c) the location of logging operations (including, if the location of an operation is within State forest, the name of the State forest and the compartment number or numbers).
2. However, Forests NSW is not required to take into account logging operations that comprise miscellaneous forestry operations or that are authorised under section 30I of the *Forestry Act 1916* in compiling the information about logging operations for the purposes of subclause (1).

88. Information about forest products operations

An annual report under this Division for a financial year is to specify the nature of forest products operations that were authorised under the *Forestry Act 1916* in that year and, to the extent to which the information is available, the quantity of each forest product authorised to be taken under the *Forestry Act 1916* in that year.

89. Information about burning operations

An annual report under this Division for a financial year is to include the following information in relation to burning operations, if done, in that year:

- a) the total area within the Riverina State forests in which burning operations were conducted,
- b) the location of each burning operation (including, if the operation is within State forest, the name of the State forest and the compartment number or numbers),

- c) the purpose of each burning operation (for example, bush fire hazard reduction).

90. Information about grazing

An annual report under this Division for a financial year is to specify the total area within State forests in the Riverina State forests over which grazing of domestic stock was authorised by Forests NSW under the *Forestry Act 1916* (whether under new or existing grazing permits or forest leases) in the year.

91. Annual report to be given to DECCW and DII (Fisheries)

The annual report under this Division for a financial year is to be provided to DECCW and DII (Fisheries) by 1 September in the next financial year. (A copy of each annual report under this Division is to be kept by Forests NSW for the remainder of the term of this approval).

PART 1.5 – RECORD KEEPING, COLLECTION OF INFORMATION AND PUBLIC AVAILABILITY OF INFORMATION

92. Operations register

1. Forests NSW must ensure that a register of forestry operations in the Riverina State forests is kept in accordance with this clause.
2. The register is to include, in relation to each forestry operation undertaken or proposed to be undertaken in the Riverina State forests (and listed in a monthly advice forwarded to DECCW and DII (Fisheries)), copies of the following:
 - a) any approval given by DECCW for the purpose of the operation (and any conditions to which the approval is subject),
 - b) any assessment and authorisation given by a regional manager of Forests NSW that is required under this approval before the operation may be undertaken,
 - c) a copy of each monthly advice in which the operation is referred to, and the operational map and location map for the operation (and any amended maps),
 - d) any assessment and approval given by Forests NSW for the purposes of Chapter 5.
3. The documents relating to a forestry operation on the register are to be kept on that register for at least 4 years after the completion of the forestry operation.

93. Compartment histories

Forests NSW must keep records for each compartment in a State forest within the Riverina State forests (“compartment histories”) identifying the following matters:

- a) the forestry operations that have been undertaken in the compartment (at least since the commencement of this approval) and for which site specific operational plans were prepared,
- b) features, records or other things, for example, unmapped drainage features or the location of linkage protection zones that have been recorded during a survey under this approval or found during a forestry operation (as noted, for example, on a copy of the site specific operational plan for the operation).

- c) any forest products operations that have been authorised under the *Forestry Act 1916* for that compartment (in addition to those identified under paragraph (a)),
- d) areas where early thinning has taken place,
- e) areas where regeneration has not occurred 10 years after an AGS operation, being areas where coppicing has occurred or seedlings have been established (i.e. reached 30 cm high and have lignified leaves) in less than 25% of the compartment:
- f) any wildfires that have occurred in the compartment,
- g) any activities undertaken in the compartment to promote regeneration after harvesting timber or forest products,
- h) particulars of any occupation permit (to occupy land for bee-farming or any other purpose) or any grazing permit issued under section 31 of the *Forestry Act 1916* applying to the compartment,
- i) particulars of any forestry lease issued under section 33 of the *Forestry Act 1916* applying to the compartment,
- j) any large scale tree death where more than 50% of trees in the compartment are dead.

94. Records to be legible

Forests NSW must ensure that any written record, approval, register or other document that it makes, gives or keeps for the purposes of this approval is legible. (However, any such record, approval, register or other document may be kept in electronic form under clause 19).

95. Forests NSW required to provide information and copies of records etc.

1. Forests NSW must give DECCW or DII (Fisheries) such information or copies of records (or both) as may be specified by either agency in a written notice to Forests NSW, if the information or record relates to a matter connected with this approval.
2. Any other person must give DECCW or DII (Fisheries) such information or copies of records (or both) as may be specified by either agency in a written notice to the person, if the information or record relates to a forestry operation that the person has carried out, is carrying out or proposes to carry out in the Riverina State forests.
3. Forests NSW or other person must give DECCW or DII (Fisheries) (as the case may be) the information or a copy of each record specified in the written notice:
 - a) within 21 days of receiving the notice or such longer period as may be specified in the notice, and
 - b) in the case of information, in the manner and form specified in the notice (if any).
4. Nothing in this clause requires any person (including Forests NSW) to give DECCW or DII (Fisheries) information or a copy of a record if:
 - a) the person could resist production of the information or record in or in connection with court proceedings, or
 - b) the record is not in the possession of the person or within the person's power to lawfully obtain.

5. Nothing in this clause relieves a person (including Forests NSW) of an obligation to give DECCW or DII (Fisheries) information or records imposed by or under any Act or a term of a licence set out in this approval.
6. In this clause, “record” includes any document that is prepared for the purposes of this approval.

96. Period for which records need to be kept

1. Unless otherwise indicated in this approval, Forests NSW must keep any record, document, plan, program, authorisation or approval that is required under this approval for at least 4 years from the date of its finalisation or from the last date on which it is given effect to or relied on in carrying out a forestry operation (as the case may require).
2. To avoid doubt, subclause (1) does not allow records kept in compartment histories under clause 93 to be discarded at the end of 4 years.

97. Forests NSW to assist DECCW and DII (Fisheries) officers to collect information

Forests NSW must assist DECCW and DII (Fisheries) to collect information with respect to compliance with this approval. In particular, access to any part of the Riverina State forests is to be given to DECCW and DII (Fisheries) officers.

Note: DECCW and DII (Fisheries) officers may rely on this clause to collect information to assist the Minister administering the Forestry and National Park Estate Act 1998 to prepare an annual report referred to in section 21 of that Act.

98. Assessment of effectiveness of this approval

1. Forests NSW must assist DECCW (and DII (Fisheries)) in any assessment or review of this approval that the Minister for Climate Change and the Environment or DECCW decides to carry out, if requested to do so.
2. For the purposes of this clause, an assessment or review of this approval is an assessment or review of the effectiveness of all or any of its terms in achieving their purpose, having regard to the following:
 - a) new information that has become available, and techniques that have been developed, relating to the carrying out of forestry operations, since the approval was granted,
 - b) difficulties in implementing the approval that have become apparent since the approval was granted, including any concerns relating to the enforcement of its terms, and
 - c) such other matters as DECCW considers relevant.

99. Public availability of documents and information

1. Forests NSW must ensure that copies of the following documents are available for public inspection during ordinary office hours at its principal Regional Office for the Riverina State forests:

Documents referred to in Chapter 1

- a) the document entitled, “Forest Management Zoning in State Forests” (State Forests of New South Wales, December 1999),
- b) forest management zoning maps that are copies of the current FMZ layer and that apply to land within the Riverina State forests,

- c) each current pest animal management plan, weed management plan, grazing management plan, burning operations management plan and road and fire trail management plan required under Part 1.2,
- d) the current annual program of forestry operations prepared under Part 1.3,
- e) the current monthly advice on forestry operations prepared under Part 1.4,
- f) each monthly advice prepared under Part 1.4 provided in July of each year,
- g) each annual report on forestry operations prepared under Part 1.4,
- h) the operations register required to be kept under Part 1.5,
- i) when developed or from 29 July 2011, whichever is the earlier: the targeted survey methodology for the regent parrot, as referred to in clause 30.

Documents referred to in Chapter 2

- j) Riverina Forests Drainage Protection Map.
2. Forests NSW must ensure that the following information is available for public inspection during ordinary office hours at the office of Forests NSW responsible for managing the land to which the document relates:
 - a) any harvesting plan prepared under the continued licences within the meaning of Division 3 of Part 1.1 if a forestry operation is continued or commenced in accordance with the plan after the commencement of this approval,
 - b) any site specific operational plan that is required to be kept by Forests NSW under clause 75, and
 - c) records of trees, required to be retained under Division 2 Part 3.4, created by using technology such as GPS.
 3. Any person may take copies of any of the documents (or, if Forests NSW and the person agree, extracts of any of the documents) referred to in subclause (1) or (2) on payment of a reasonable fee to cover the cost of copying (as determined by a regional manager of Forests NSW) or, if no fee has been determined, free of charge.
 4. Despite subclauses (1) to (3), Forests NSW may not make any document available for inspection or copying contrary to any request from DECCW to maintain the confidentiality of information concerning the location of any threatened species, population or ecological community or its habitat (within the meaning of the *Threatened Species Conservation Act 1995*).

PART 1.6 – MISCELLANEOUS

Division 1 – Protection of cultural heritage

Note: For the purposes of this approval, the protection of cultural heritage, including Aboriginal cultural heritage, is to be in accordance with the National Parks and Wildlife Act 1974 and associated Regulations ; and with the Operational Guidelines for Aboriginal Cultural Heritage Management published by Forests NSW on 13 September 2010, as in effect from time to time.

Division 2 – Forests NSW to ensure compliance by certain persons

100. Forests NSW to ensure compliance by certain persons

1. Forests NSW must expressly require as a condition of any licence, permit or other authority that it issues or grants under the *Forestry Act 1916*, authorising the carrying out forestry operations, that the holder of the licence, permit or authority comply with the applicable terms of this approval.

Note: The purpose of the above condition is:

2. to promote awareness among holders of authorities under the *Forestry Act 1916* of their responsibilities under this approval, and
3. to ensure that, by including relevant express conditions in authorities, Forests NSW is effectively able to enforce compliance with this approval under the *Forestry Act 1916*.

Section 26 (2) of the *Forestry and National Park Estate Act 1998* requires that all persons carrying out forestry operations to which an approval applies comply with its terms.

4. Forests NSW must include a condition in such an authority that, if there is an inconsistency between the authority and the approval, the approval prevails.
5. Forests NSW must take all reasonably practicable steps to ensure that, in so far as they are authorised to carry out forestry operations by Forests NSW, the following persons comply with the applicable terms of this approval:
 - a) members of staff,
 - b) licence holders under the *Forestry Act 1916*,
 - c) permit holders under the *Forestry Act 1916*,
 - d) other persons authorised under the *Forestry Act 1916* (including section 30I),
 - e) contractors, subcontractors and agents of Forests NSW.
6. In particular, Forests NSW must:
 - a) ensure that the persons referred to in subclause (3) are given sufficient information about, and training in, their responsibilities under this approval, and
 - b) ensure that those persons are adequately supervised when carrying out forestry operations, that the carrying out of forestry operations is monitored, and that particulars of the supervisory and monitoring arrangements are recorded, and
 - c) ensure that measures are taken to address any breaches of this approval to which a person referred to in subclause (3) may have contributed and that procedures (including supervisory or monitoring arrangements) are reviewed, if necessary, to minimise the risk of any such breach recurring.
7. For the purpose of ensuring adequate supervision of persons involved in the carrying out of a forestry operation (as referred to in subclause (4) (b)) in a compartment or other tract of land, a member of Forests NSW staff must be present in that compartment or other tract of land for at least one full working day a fortnight (in the case of a major operation) and one full working day a month (in the case of a minor operation) during the operation. Forests NSW must ensure that the name of any such member of staff, and the days and times at which he or she was present, are recorded.

CHAPTER 2: DRAINAGE PROTECTION AREAS AND BUFFER STRIPS

(Terms of licences under the *Threatened Species Conservation Act 1995*, *Protection of the Environment Operations Act 1997* and Part 7A of the *Fisheries Management Act 1994*)

PART 2.1 – INTERPRETATION OF CHAPTER AND PLANNING OPERATIONS

Division 1 – Interpretation of Chapter and definitions

101. Chapter sets out terms of licences

1. The provisions of this Chapter are terms of the licences under:
 - a) the *Threatened Species Conservation Act 1995*, and
 - b) the *Protection of the Environment Operations Act 1997*, and
 - c) Part 7A of the *Fisheries Management Act 1994*,as described in clauses 6, 7 and 8 respectively.
2. However, the provisions of this Chapter are only terms of the licence under the *Protection of the Environment Operations Act 1997* in so far as they apply to or in relation to logging operations and ancillary road construction, as referred to in clause 7 of this approval. Parts 2.3 and 2.4 are not terms of that licence.
3. Clauses 112 (3) and 125 (2) (and any other provision of this Chapter in so far as it refers to an approval of DECCW required under either subclause) are only terms of the licence under the *Threatened Species Conservation Act 1995*.

102. Relationship with Chapter 5

Nothing in this Chapter affects any restriction on works relating to a crossing of a drainage protection area (within the meaning of Chapter 5), or on the use of such a crossing, imposed by Chapter 5.

103. Drainage protection areas

The following areas are drainage feature protection areas for the purposes of this approval:

- a) drainage feature protection zones as described in clause 104,
- b) linkage protection zones described in clause 105.

104. Drainage feature protection zones

1. For the purposes of this approval, a drainage feature protection zone is:
 - a) a drainage depression or wetland depression (whether or not it has an exclusion zone shown on the Riverina Forests Drainage Protection Map;
 - b) land within an exclusion zone shown on that map, being land within 20 metres of a drainage depression or wetland depression;
 - c) land within 20 metres of the Murrumbidgee River; and
 - d) land within 20 metres of the Murray River.
2. The 20 metre distance is to be measured:

- a) in the case of a drainage depression, from the top of the bank of the drainage depression, or where there is no defined bank, from the line of trees with a dbhob of 150 mms or more closest to the depression; and
 - b) in the case of a wetland depression, from a line of trees with a dbhob of 150 mms or more closest to the depression.
3. From 1 January 2012, the distances referred to in this clause are to be measured in accordance with a field protocol developed jointly between Forests NSW, Fisheries and DECCW under clause 31.
 4. An exclusion zone and the drainage or wetland depression to which it relates, is to be located in the field.
 5. However, if no drainage or wetland depression (or part of a depression) can be found in the field that relates to an exclusion zone shown on the Riverina Forests Drainage Protection Map a drainage feature protection zone is required as shown on the map.

105. Linkage protection zones

Note: The purpose of a linkage protection zone is to protect connections between drainage features. Where possible, the zones will follow natural features (e.g. a flood runnel).

1. For the purposes of this approval, a linkage protection zone is a 40 metre wide link, generally between drainage and wetland depressions, as shown on the Riverina Forests Drainage Protection Map.
2. A linkage protection zone is to be located in the field, rather than treated as the location indicated on the map. It is to be located by following as closely as possible a corresponding natural feature (for example, a flood runnel). The natural feature may fall within the zone. If the natural feature is more than 40 metres wide in any place, only part of the natural feature need fall within the zone.
3. However, if no corresponding natural feature can be found in the field, the linkage protection zone is required as shown on the map.
4. From 1 January 2012, the distances referred to in this clause are to be measured in accordance with a field protocol developed jointly between Forests NSW, Fisheries and DECCW under clause 31.

106. Buffer strips

Note: One of the purposes of this clause is to ensure interim protection to drainage features which exhibit certain characteristics, but have not been mapped. Any unmapped drainage feature identified in the field must be recorded and will be considered for inclusion on the Riverina Forests Drainage Protection Map as part of the second review of the IFOA. Once added to the Riverina Forests Drainage Protection Map, the drainage feature will be subject to the rules which apply to drainage features mapped on the Riverina Forests Drainage Protection Map.

1. For the purposes of this approval, a buffer strip is an area of land within 30 metres of:
 - a) a linkage protection zone or a drainage feature protection zone shown on the Riverina Forests Drainage Protection Map; and
 - b) a drainage or wetland depression for which no exclusion zone is shown on the Riverina Forests Drainage Protection Map; and
 - c) a drainage feature protection zone on the Murray or Murrumbidgee Rivers.

2. The 30 metre distance is to be measured:
 - a) in the case of a linkage protection zone or a drainage feature protection zone, from the outermost edges of the zone; and
 - b) in the case of a drainage depression for which no exclusion zone is shown on the Riverina Forests Drainage Protection Map, from the top of the bank of the drainage depression, or where there is no defined bank, from the line of trees with a dbhob of 150 mms or more closest to the depression; and
 - c) in the case of a wetland depression for which no exclusion zone is shown on the Riverina Forests Drainage Protection Map, from a line of trees with a dbhob of 150 mms or more closest to the depression.
3. From 1 January 2012, the distances referred to in this clause are to be measured in accordance with a field protocol developed jointly between Forests NSW, Fisheries and DECCW under clause 31.

Division 2 – Planning operations in compartments containing drainage protection areas and buffer strips

107. Requirements of Division additional to requirements of Chapter 1

Nothing in this Division limits the requirements of Part 1.3.

108. Site specific operational plan and operational map

1. The site specific operational plan for a forestry operation in a compartment or other tract of land must address how the provisions of this Chapter that, at the time of preparation of the plan appear to apply to the operation, will be applied to, or be given effect to in, the operation.
2. The operational map for a forestry operation must indicate the following:
 - a) location of any drainage area protection zones (clause 104);
 - b) location of any linkage protection zones (clause 105); and
 - c) any wetland depression or drainage depression for which no exclusion zone is shown on the Riverina Forests Drainage Protection Map (clause 106).

PART 2.2 – LOGGING OPERATIONS IN DRAINAGE PROTECTION AREAS

Note: "Logging operations" refers to the logging operations described in clause 5. The provisions of this Part are terms of the EPL as they relate to logging operations (as well as being terms of the other licences).

109. Certain logging operations excluded from operation of this Part

This Part does not apply to a logging operation that is also an on-going forest management operation expressly permitted under Part 2.4.

110. Logging operations prohibited in drainage protection areas

1. A logging operation to which this Part applies must not be carried out in a drainage protection area, except as provided by this clause.
2. In particular, a log dump must not be established, maintained or up-graded in a drainage protection area for the purpose of (or as part of) a logging operation.

111. Felling of trees into drainage protection areas and their removal

- a) A tree (or part of a tree) must not be felled into a drainage protection area in a logging operation, unless it is the result of an accident.
- b) A tree must not be removed from a drainage protection area unless it was accidentally felled into that area.
- c) Only a mechanical harvester may be used to remove the tree or part of the tree. It must be operated so that the tree (or the part) is lifted off the ground and removed from the area while wholly supported off the ground. The mechanical harvester's wheels or tracks must remain outside the drainage protection area.

112. Extraction of timber through drainage protection areas

1. This clause applies to the removal or extraction of timber, whether by snigging or forwarding, for example from the logging site (that is, the site at which the timber is felled) to a log dump.
2. Timber cut in a logging operation on land outside a drainage protection area may be removed via a route (whether or not an existing extraction track) through the drainage protection area but only if the route is not along the course of a drainage depression and:
 - a) there is no practicable alternative route available, and
 - b) the proposed route crosses the drainage feature; and
 - c) Forests NSW has prepared a report, in the appropriate form set out in Schedule 4, of an assessment that addresses the matters set out on that form, a regional manager of Forests NSW has authorised the use of the proposed route in writing and a copy of the report (and authorisation) has been forwarded to DECCW.
3. If there is a record of a threatened species (within the meaning of clause 137) on the proposed route, the route may be used only if DECCW has first approved the use of the route in writing (following the receipt of the report referred to in subclause (2)(c)).
4. Despite subclause (2)(b), a proposed route may be used, even if it does not cross the drainage feature as long as the route does not come within 5 metres of:
 - a) the top of the bank of a drainage depression, or where there is no defined bank, the edge of the depression, or
 - b) the edge of the wetland depression.
5. The 5 metre distance is to be measured:
 - a) in the case of a drainage depression, from the top of the bank of the drainage depression, or where there is no defined bank, from the line of trees with a dbhob of 150 mms or more closest to the depression; and
 - b) in the case of a wetland depression, from a line of trees with a dbhob of 150 mms or more closest to the depression.
6. From 1 January 2012, the 5 metre distance is to be measured in accordance with a field protocol developed jointly between Forests NSW, Fisheries and DECCW under clause 31.
7. Work may be done to construct, create or re-open an extraction track (for example, by clearing trees or other vegetation) if the authorisation by the

regional manager referred to in subclause (2) (and the approval by DECCW referred to in subclause (3), if required) includes an authorisation to do so.

8. Forests NSW must ensure that all practicable measures are taken to minimise or mitigate any adverse effect on the environment of the removal of timber through a drainage protection area, including any work done to construct, create or reopen an extraction track. Timber must not be removed when the soil is saturated. Any conditions relating to minimising or mitigating any adverse impact of the work on the environment imposed by DECCW as part of an approval under subclause (3) must be complied with.

Note: "Logging operations" involve the cutting and removal of timber as described in clause 5. The above clause deals with removal (or "extraction") of timber from the site of logging to a log dump. The effect of the clause is to allow removal of timber through a drainage protection area in certain circumstances, despite the general prohibition on logging operations in clause 110. Division 5 deals with road construction, re-opening or up-grading, whether carried out at the same time as a logging operation or independently.

113. Use of existing roads, tracks and trails to remove timber cut in logging operation

1. Timber cut on land outside a drainage protection area in a logging operation may be removed via a road, bush track or fire trail in the area if the road, track or trail:
 - a) was constructed before the granting of this approval or was constructed in accordance with this approval, and
 - b) does not run along the course of a drainage depression or a wetland depression.

This clause does not affect the operation of clause 112.

PART 2.3 – FOREST PRODUCTS OPERATIONS AND SIMILAR OPERATIONS IN DRAINAGE PROTECTION AREAS

114. Forest products operations generally prohibited

1. Forest products operations are prohibited within a drainage protection area except for:
 - a) an operation to collect seeds;
 - b) an operation carried out by an Aboriginal person authorised by Forests NSW in accordance with this clause.
2. Forests NSW may authorise an Aboriginal person to carry out a forest products operation in a drainage protection area (other than the collection of firewood prohibited under clause 115), but only if:
 - a) Forests NSW is of the opinion that there is no other land reasonably accessible to the Aboriginal person on which the relevant forest products (being products of trees, shrubs or other vegetation) may be harvested, and
 - b) the scale and intensity of the harvesting to be authorised does not adversely affect the conservation value of the drainage protection area.
3. This clause does not affect any native title rights and interests (within the meaning of the *Native Title Act 1993* of the Commonwealth) existing in relation to any land within a drainage protection area.

115. Collection of firewood under s. 30I from floor of forest prohibited

1. Dry logs and other pieces of wood lying on the floor of the forest must not be collected for firewood from a drainage protection area.
2. In this clause, a reference to a dry log or other piece of wood is a reference to a log or other piece of wood from which the majority of the bark has been separated from the sapwood.

PART 2.4 – ON-GOING FOREST MANAGEMENT OPERATIONS IN DRAINAGE PROTECTION AREAS

116. Felling and removal of trees for the purpose of on-going forest management operations generally prohibited

1. A tree in a drainage protection area must not be felled, cut or destroyed in the course of, or for the purpose of, an on-going forest management operation, except in accordance with this Part.
2. A tree must not be felled into, or removed from, a drainage protection area in the course of, or for the purpose of, an on-going forest management operation.

117. Control of pests etc. and water management activities

1. Trees may be felled, cut or destroyed (including by burning) within a drainage protection area (and removed from that area):
 - a) to assist in the control of a pest, weed or disease (whether the control is to protect or rehabilitate the environment or to protect timber resources); or
 - b) to carry out authorised water management activities.
2. The trees may be removed from the drainage protection area whether or not the timber is removed for use in timber products.
3. However, trees must not be felled, cut or destroyed (and removed from the area) to control a pest, weed or disease without first obtaining the approval of DECCW. That approval may be subject to conditions, including conditions relating to access to the drainage protection area and removal of any timber (or waste) from the area.

118. Bush fire hazard reduction

1. Forests NSW may carry out, or authorise the carrying out of, bush fire hazard reduction work within a drainage protection area to the extent necessary to fulfil its duty under section 63 of the *Rural Fires Act 1997* or any other obligation imposed by or under that Act.
2. Forests NSW may authorise grazing for the purpose of bush fire hazard reduction in a drainage protection area.

119. Other burning operations

1. This clause applies to a burning operation other than bush fire hazard reduction.
2. Forests NSW may carry out such a burning operation, or authorise such an operation, in a drainage protection area:
 - a) for the purpose of maintaining or restoring the ecology of the area, but only in accordance with DECCW 's approval in writing; or

- b) for the purpose of pest, weed or disease control, but only in accordance with DECCW's approval in writing; or
- c) for the purpose of authorised water management activities.

120. Burning operations outside drainage protection area

This Part is not breached if a tree within a drainage protection area is damaged or removed as a result of a fire lit outside the drainage protection area if:

- a) the fire was lit for purposes of an on-going forest management operation:
and
- b) all reasonable precautions were taken to prevent the fire from spreading to the drainage protection area.

121. Beehives

- 1. Native vegetation may be cleared or disturbed within a drainage protection area to maintain an existing beehive set-down site or access to such a site. However:

- a) trees in the area that have a dbhob of 100 mm or more may not be felled or destroyed only for this purpose, and
- b) native vegetation in the area may be cleared or disturbed to maintain access to a beehive set-down site outside the area only if there is no alternative practicable means of access to the site.

In this clause:

- a) “ *existing beehive set-down site*” means a beehive set-down site that existed as at the commencement of this approval or a beehive set-down site that is established after that date other than one established in breach of a term of this approval; and
- b) “native vegetation” has the same meaning as in the *Native Vegetation Act 2003*.

Note: Chapter 3 prohibits the establishment of a new beehive set-down site within an environmentally significant area. However, an area may not become an environmentally significant area for the purposes of Chapter 3 until evidence of a threatened species is found in the area or an area may not be known to be an environmentally significant area until a survey is carried out before a logging operation is undertaken in the compartment in which it is located. Accordingly, a beehive set-down site that is established before either occurrence will not have been established in breach of the approval (that is, it will be an existing beehive set-down site).

PART 2.5 – ANCILLARY ROAD CONSTRUCTION IN DRAINAGE PROTECTION AREAS

122. Application of Part to fire trails

Nothing in this Part restricts or prohibits the construction, re-opening, up-grading, maintenance or use of a fire trail solely for the purposes of emergency fire-fighting.

123. Construction of roads prohibited in wetland depressions

Roads, bush tracks and fire trails must not be constructed, re-opened or up-graded in a wetland depression, whether or not it has an exclusion zone shown on the Riverina Forests Drainage Protection Map.

124. Gravel pits and borrow pits prohibited

Gravel pits and borrow pits must not be located in drainage protection areas.

125. Construction of roads in drainage protection areas restricted

1. A road, bush track or fire trail may be constructed, re-opened or up-graded in a drainage protection area if:
 - a) there is no practicable alternative route available, and
 - b) the road, bush track or fire trail crosses (or is to cross) the drainage protection area, and
 - c) Forests NSW has prepared a report, in the appropriate form set out in Schedule 4, of an assessment that addresses the matters set out on that form, a regional manager of Forests NSW has authorised the proposed works in writing and a copy of the report (and authorisation) has been forwarded to DECCW.
2. If there is a record of a threatened species (within the meaning of clause 137) on the proposed or existing route of the road, track or trail, the works referred to in subclause (1) may be carried out only if DECCW has first approved them in writing (following the receipt of the report referred to in subclause (1) (c)).
3. Despite subclause (1) (b), a road, bush track or fire trail may be constructed, re-opened or upgraded in a drainage protection area even if the road, track or trail does not cross the area, as long as the works do not disturb any area within 5 metres of:
 - a) the top of the bank of a drainage depression, or where there is no defined bank, the edge of the depression, or
 - b) the edge of the wetland depression.
4. The 5 metre distance is to be measured:
 - a) in the case of a drainage depression, from the top of the bank of the drainage depression, or where there is no defined bank, from the line of trees with a dbhob of 150 mms or more closest to the depression; and
 - b) in the case of a wetland depression, from a line of trees with a dbhob of 150 mms or more closest to the depression
5. From 1 January 2012, the 5 metre distance is to be measured in accordance with a field protocol developed jointly between Forests NSW, Fisheries and DECCW under clause 31.
6. Forests NSW must ensure that all practicable measures are taken to minimise or mitigate any adverse effect on the environment of the works referred to in subclause (1), including complying with any conditions relating to minimising or mitigating any adverse impact of the works on the environment imposed by DECCW as part of an approval under subclause (2).
7. To avoid doubt, a road, bush track or fire trail must not be constructed along the course of a drainage depression. A road, bush track or fire trail that runs along the course of a drainage depression must not be re-opened or up-graded.

126. Road and track maintenance and use in drainage protection areas

A road, bush track or fire trail must not be used or maintained for the purpose of, or in the course of, forestry operations if it runs along a drainage depression. To avoid

doubt, this Part does not otherwise restrict or prohibit the use of, or the carrying out of maintenance on, roads, bush tracks and fire trails in drainage protection areas.

127. Bush tracks for certain on-going forest management operations

Despite any other provision of this Part, a bush track may be constructed, re-opened or upgraded in a drainage protection area for the purpose of an on-going forest management operation authorised by clause 117.

PART 2.6 – USE AND OPERATION OF HARVESTING MACHINERY IN DRAINAGE PROTECTION AREAS

128. Use of harvesting machinery in relation to the provision of fire trails for emergency fire fighting

Despite any other provision in this Part, a harvesting machine may enter, and be used within, a drainage protection area for the purpose of the construction, re-opening, up-grading or maintenance of fire trails solely for the purposes of emergency fire-fighting. (To avoid doubt, any machine may be used within a drainage protection area in the course of emergency fire fighting.)

129. Prohibition on use of harvesting machinery in drainage protection areas

1. A harvesting machine must not enter, or be used within, any part of a drainage protection area except in accordance with this Part or clause 111.
2. A harvesting machine must not travel along the course of a mapped drainage depression.
3. A harvesting machine must not enter, or be used within, any part of a drainage protection area where the soil is saturated but may be removed from a part of a drainage protection area where the soil is saturated with the approval of a regional manager of Forests NSW. (Forests NSW must ensure a written record of the approval is made and kept.)
4. In removing the harvesting machine, disturbance to the soil must be minimised and any disturbed area must be remediated as soon as practicable.

130. Operation of harvesting machinery to fell timber outside drainage protection area

A harvesting machine may enter, and be used within, a drainage protection area to fell a tree whose base is outside the drainage protection area in a logging operation. However, the tree must be felled so that it falls away from the protection area and the machine's wheels or tracks must not go any further than 5 metres from the boundary of the protection area adjoining the net operational area for the logging operation.

131. Use and operation of harvesting machinery in a drainage protection area for removal of timber and road works

1. A harvesting machine may enter, and be used within, a drainage protection area:
 - a) for the removal or extraction of timber in a logging operation (including the creation or re-opening of an extraction track) in accordance with Part 2.2, and
 - b) for the purpose of constructing, re-opening or up-grading a road, bush track or fire trail in accordance with Part 2.5.

A harvesting machine may enter, and be used within, a drainage protection area for the purpose of felling, cutting or destroying trees to carry out on-going forestry management operations authorised under clause 116 and 117.

132. Use of roads, tracks etc within a drainage protection area

A harvesting machine:

- a) may be used on a road, bush track or fire trail within a drainage protection area to carry out maintenance on that road, track or trail (or to carry out soil stabilisation measures, to re-shape beds and banks or to fulfil any other requirement of Chapter 5), and
- b) may travel along a road, bush track or fire trail within a drainage protection area, in the course of, or for the purpose of, a forestry operation (such as gaining access to an area proposed to be logged), but only if that road, track or trail was constructed in accordance with this approval or before the granting of this approval.

133. Special provisions regarding maintenance of dams (or tanks)

If a dam or tank, or its surrounding protection zone (as described in clause 196), also lies (wholly or partially) within a drainage protection area, then harvesting machinery (and any other machinery) may enter and be used within the drainage protection area for the purpose of carrying out maintenance work on the dam or tank in accordance with clause 225.

PART 2.7 – BUFFER STRIPS

134. Restrictions in buffer strips

Forestry operations may be carried out in buffer strips in accordance with the other Chapters of this approval (as if it were not a buffer strip) but:

- a) AGS must not be used in any buffer strip; and
- b) if logging is carried out in a buffer strip, a minimum rate of 5 habitat trees and 5 recruitment trees must be retained per hectare of buffer strip.

CHAPTER 3: PROTECTION OF THREATENED SPECIES

(Terms of licence under the *Threatened Species Conservation Act 1995*)

PART 3.1 – GENERAL

Division 1 – Interpretation and application of Chapter

135. Application of Chapter

This Chapter sets out terms of the licence under the *Threatened Species Conservation Act 1995* as described in clause 8. Accordingly, it applies to and in relation to the forestry operations described in that clause.

Note: The area of land to which this approval applies generally fall within the EEC listed under the Fisheries Management Act 1994 (“Aquatic ecological community in the natural drainage system of the lower Murray River catchment (as described in the recommendation of the Fisheries Scientific Committee to list the ecological community)”). Harvesting in this aquatic ecological community is regulated under other provisions of this approval.

136. Definitions for Chapter

In this Chapter, **endangered ecological community, endangered population, species of animal or plant** and **threatened species** have the same meanings as in the *Threatened Species Conservation Act 1995*.

Note: “Species” of animal or plant is defined in the *Threatened Species Conservation Act 1995* (as at the commencement of this approval) as including any defined sub-species and taxon below a subspecies and any recognisable variant of a sub-species or taxon.

137. Records of animals and plants

1. For the purposes of this Chapter, a **record of a species of animal or plant** is evidence that an individual or individuals of that species are (or have been) present at a particular location. That location is to be treated as the location of the record.
2. In the case of a species of animal, evidence that an individual of the species is or has been present at a particular location may comprise (but is not limited to) any of the following:
 - a) an observation of a living or dead individual of that species at that location,
 - b) discovery at that location of any part of an individual such as hair, skin, a bone or a tooth, or discovery of an egg of a kind laid by females of the species,
 - c) any other indication that an individual of that species is present or has been present at that location, such as the distinctive call made by members of the species or distinctive tracks, diggings, incisions, scratchings, scats, remains in a raptor’s pellets or a predator’s scats, a nest, a roost or a den.
3. In the case of a species of plant, evidence that an individual of that species is present at a particular location may be an observation of the plant or discovery of any part of the plant such as its roots, stem, a branch, leaf, fruit, seeds or flower.

4. Evidence that an individual or individuals of a species are or have been present at a particular location is not a record of that species for the purposes of this Chapter unless it also:
 - a) is identified on the Atlas of NSW Wildlife (being the database of animal and plant records maintained by DECCW) as a record that has been assigned a “source” value between 1 to 5 (inclusive), or
 - b) has been made or found by Forests NSW (including in a survey conducted on behalf of Forests NSW for the purposes of this approval), or
 - c) is identified as a record on a database of animal and plant records that Forests NSW maintains.
5. Evidence is not a record for the purposes of this Chapter if:
 - a) in the case of a species of animal, it was made or found more than 20 years before the relevant time in the compartment or other tract of land concerned (that is, the time at which an operation takes place or is to take place in the compartment or tract), or
 - b) it comprises the remains of an animal (such as a bone or tooth) that are established (for example, by applying reliable dating techniques) as being more than 20 years old, or
 - c) DECCW has notified Forests NSW in writing that the evidence is unreliable (including that it cannot be relied on to establish or indicate the location of an individual or individuals of the species concerned), or
 - d) in the case of evidence of a plant, a survey or surveys demonstrates to the satisfaction of DECCW that the species of plant is no longer present at the location of the evidence, or
 - e) it is more than 10 years old, Forests NSW has reviewed it (on the basis that it may no longer be able to be relied on as indicating the continuing presence of individuals of the species in the area) and DECCW has notified Forests NSW in writing that it accepts that the evidence should no longer be treated as a record for the purposes of this Chapter.
6. If evidence (obtained by Forests NSW) of the presence of an individual or individuals of a species is contained in a raptor’s pellets or a predator’s scats, then Forests NSW is to determine, as best it can, the likely location of the individual or individuals. For the purpose of applying the requirements of this approval, the record of the species is taken to be at that location, rather than where the pellets or scats were found. (Forests NSW may consult DECCW when determining the likely location of the individual or individuals.)
7. If evidence (obtained by Forests NSW) of the presence of an individual or individuals of a species is the distinctive call (or a sound recording of it) for members of the species, then Forests NSW is to determine, as best it can, the likely location of the individual or individuals. For the purpose of applying the requirements of this approval, the record of the species is taken to be at that location, rather than where the call was heard or the sound recording was made.
8. Evidence may constitute a record of a species whether or not it was made or found before or during the term of this approval.

138. New records to be forwarded to DECCW

1. Forests NSW must advise DECCW of any record of a threatened species of animal or plant made or found in the Riverina State forests during the term of this approval ("**new record**") if Forests NSW considers it may be suitable for inclusion on the Atlas of NSW Wildlife (referred to in clause 137).
2. The advice is to be given within 3 months of the new record being made or found by Forests NSW or being entered on a database referred to in clause 137 (4) (c).
3. In addition, Forests NSW must give DECCW details of the record within 5 working days if requested to do so by DECCW.
4. Advice concerning new records is to be forwarded electronically to DECCW, to an office and in a manner notified by DECCW to Forests NSW.

139. Recovery plans for endangered species etc.

1. If implementation by Forests NSW of a measure specified in a recovery plan within the meaning of the *Threatened Species Conservation Act 1995* would result in a breach of a provision of this Chapter, Forests NSW is to notify DECCW accordingly and advise DECCW (in writing) of whether it proposes to implement the specified measure in the recovery plan.
2. If Forests NSW has given DECCW that written notification and advice that it proposes to implement the specified measure in the recovery plan, it may take the necessary action to implement the measure. The relevant provision of this Chapter that would otherwise restrict or prohibit the taking of the action does not apply to the extent necessary to enable the measure in the recovery plan to be implemented.
3. Forests NSW is to create and keep a written record of any action it takes to implement a measure in a recovery plan under this clause.

Division 2 – Discovery of records of certain threatened species etc

140. Application of Division

This Division applies to the following species of animal and plant:

- a) Brush-tailed phascogale
- b) Murray/Darling Carpet python
- c) Fishing bat
- d) any species that is presumed extinct (within the meaning of the *Threatened Species Conservation Act 1995*),
- e) any proposed threatened species within the meaning of clause 36 (*Threatened Species Conservation Act 1995* – proposed new listings) that is protected fauna or a protected native plant, while the requirements of that clause apply to it.

141. Forestry operation prohibited without DECCW approval if records found

1. If Forests NSW, when compiling data relevant to a compartment or other tract of land under Division 2 of Part 3.2 or when carrying out a survey for a compartment or other tract of land under this Chapter, becomes aware of, finds or makes a record of a species to which this Division applies in the compartment or other tract of land, or within 100 metres of the boundary of that compartment or tract, Forests NSW must notify DECCW of the record.

2. Unless DECCW advises Forests NSW in writing that the evidence constituting the record is not reliable (and accordingly is no longer a record for the purposes of this Chapter), a forestry operation for which a site specific operational plan is required must not be commenced in the compartment or tract of land concerned without DECCW's written approval.
3. The forestry operation may be carried out only in accordance with any conditions to which DECCW's approval is subject, being conditions relating to measures to mitigate or minimise any adverse effect of the operation on the species concerned (including any requirements to carry out a survey for the species).

142. Forestry operation suspended if records found

1. Forests NSW must suspend a forestry operation for which a site specific operational plan is required, in a compartment or other tract of land, if it becomes aware, during that operation, of a record of a species to which this Division applies, or of the discovery or making of a new record of such a species, in that compartment or tract or within 100 metres of the boundary of the compartment or tract.
2. Forests NSW must notify DECCW of the record within 2 working days of becoming aware of it.
3. The forestry operation must not be recommenced in the compartment or other tract of land concerned without DECCW's written approval unless:
 - a) DECCW advises Forests NSW that the evidence constituting the record is not reliable (and accordingly is no longer a record for the purposes of this Chapter), or
 - b) 7 working days have elapsed from the date on which Forests NSW notified DECCW of the record and Forests NSW has not received written advice from DECCW that DECCW does not approve the recommencement of the forestry operation.
4. The forestry operation, if recommenced, may be carried out only in accordance with any conditions to which DECCW's approval is subject, being conditions relating to measures to mitigate or minimise any adverse effect of the operation on the species concerned (including any requirements to carry out a survey for the species).

143. Compliance with this Division sufficient for compliance with clause 35

1. Forests NSW is taken to have complied with clause 35 (*Threatened Species Conservation Act 1995* – proposed new listings) in its application to a species described in clause 140 in carrying out a forestry operation in a particular compartment or other tract of land if DECCW has approved the carrying out of the operation for the purposes of this Division and any conditions of that approval are complied with.
2. If the requirements of clause 35 (*Threatened Species Conservation Act 1995* – proposed new listings) continue to apply in relation to a threatened species to which this Division also applies, Forests NSW is taken to have complied with that clause in its application to the species in carrying out a forestry operation in a particular compartment or other tract of land if DECCW has approved the carrying out of the operation for the purposes of this Division and any conditions of that approval are complied with.

Division 3 – Other general obligations in relation to protection and management of threatened species etc

144. Reporting potential sightings etc of animals and plants of threatened species

1. If, during a forestry operation in the Riverina State forests, a member of staff of Forests NSW, or the holder of a licence under the *Forestry Act 1916* (including a contractor's licence or operator's licence) sees or otherwise observes, or discovers any other evidence of, an animal or plant that he or she knows belongs, or believes is likely to belong, to a threatened species or an endangered population, he or she must ensure that the sighting, observation or discovery is reported to the supervising forestry officer or other senior officer of Forests NSW.
2. The supervising forestry officer or other senior officer must ensure that the following information is recorded in relation to the sighting, observation or discovery, in so far as it is available:
 - a) name of species or population (or description if seen),
 - b) number of individuals seen (if relevant),
 - c) location of the individuals seen or otherwise observed or the location of any other evidence (by referring to its grid co-ordinates), accurate to within 100 metres (if the type of evidence permits this degree of accuracy),
 - d) if the location is within a State forest, the name of the State forest and the compartment number,
 - e) type of evidence (for example, a sighting, a heard call, scats or remains),
 - f) date on which the sighting, observation or other discovery was made,
 - g) name of person who made the sighting, observation or discovery (if the person consents),
 - h) date on which the supervising forestry officer or other senior officer records the information set out in the preceding paragraphs,
 - i) name of the supervising forestry officer or other senior officer.
3. A person is not required to report a sighting or observation of an animal or plant, or discovery of other evidence of an animal or plant, to the supervising forestry officer or other senior officer under subclause (1), if the person believes that the presence of the animal or plant, or the presence of the evidence of the animal or plant, has already been reported or is otherwise known to the supervising forestry officer or other senior officer. The supervising forestry officer or other senior officer is not required to record information about the sighting, observation or discovery in accordance with subclause (2) if the officer believes the information is already recorded.
4. A member of staff or holder of a licence under the *Forestry Act 1916* must also ensure that if, during a forestry operation in the Riverina State forests, he or she finds an ecological community that he or she knows or believes is an endangered ecological community, that discovery is reported to the supervising forestry officer or other senior officer of Forests NSW. However, a person is not required to report the discovery if he or she believes the presence of the community has already been reported or is otherwise known to the supervising forestry officer or other senior officer.

5. The supervising forestry officer or other senior officer must ensure that the following information is recorded in relation to the discovery of the ecological community:
 - a) the name of the ecological community,
 - b) the location of that part of the community found,
 - c) if the location is within a State forest, the name of the State forest and the compartment number or numbers,
 - d) the species characteristic of the community that appear to be present (if known),
 - e) date on which the discovery was made,
 - f) name of the person who made the discovery (if the person consents),
 - g) date on which the supervising forestry officer or other senior officer records the information set out in the preceding paragraphs,
 - h) name of the supervising forestry officer or other senior officer.
6. The supervising forestry officer or other senior officer is not required to record information about the discovery in accordance with this subclause if the officer believes the information is already recorded.
7. A reference to a threatened species in this clause includes a proposed threatened species referred to in clause 140(a), (b) or (c).

145. Ground habitat protection

1. Forests NSW must endeavour to protect the ground habitat of native animals from the impact of forestry operations to the extent that the nature of those operations allows and to the extent that it is practicable to do so.
2. Harvesting must minimise disturbance to logging debris and naturally fallen woody debris existing prior to the current operation.
3. In this clause, **ground habitat** includes understorey vegetation, groundcover vegetation, thick leaf litter and fallen timber.

146. Collection of residue from floor of forest prohibited

1. Dry logs and other pieces of wood lying on the floor of the forest must not be collected as part as a logging operation from any area within 300 metres of records of Gilbert's Whistler.
2. Logging debris and naturally fallen woody debris lying on the floor of the forest must not be collected as part as a logging operation if removal would result in the density and nature of woody debris across the net operational area not being representative of a natural forest, as represented in the photo standards in Schedule 6 to this approval.
3. In this clause, a reference to a **dry log or other piece of wood** is a reference to a log or other piece of wood from which the majority of the bark has been separated from the sapwood.

147. Protection of endangered ecological communities generally

1. A fire trail must not be constructed, re-opened or upgraded on land on which an endangered ecological community is present unless:
 - a) there is no practicable alternative route, and

- b) Forests NSW has prepared a report, in the appropriate form set out in Schedule 4, of an assessment that addresses the matters set out on that form, a regional manager of Forests NSW has authorised the proposed works in writing and forwarded a copy of the report (and authorisation) to DECCW (before the works are commenced).
2. Forests NSW must ensure that all practicable measures are taken to minimise any adverse effect of the works on the environment.
 3. This clause does not restrict:
 - a) any emergency fire fighting acts within the meaning of the *Rural Fires Act 1997* (including the provision of a fire trail in an emergency), or
 - b) the use or maintenance of a fire trail solely in the course of, or for the purpose of, emergency fire fighting.

PART 3.2 – PLANT AND ANIMAL SURVEYS BEFORE COMMENCEMENT OF LOGGING AND ROAD WORKS

Division 1 – Key concepts, requirements and application of Part

148. Application of Part to logging operations and ancillary road construction

1. This Part applies to a forestry operation of either of the following kinds if a site specific operational plan is required to be prepared for it:
 - a) a logging operation
 - b) ancillary road construction.
2. Except where the context otherwise requires, a reference in this Part to ancillary road construction is a reference only to ancillary road construction to which this Part applies that is not undertaken (or is not to be undertaken) in conjunction with a logging operation to which this Part also applies.
3. To avoid doubt, for the purposes of applying clause 149 (1) and the other requirements of this Part, a reference to the compartment or other tract of land in the case of ancillary road construction is a reference to the area of land comprising the footprint of the road or proposed road.

149. Compliance with Part before commencement of operation

1. A forestry operation to which this Part applies must not be commenced in a compartment or other tract of land unless:
 - a) a search of records of animal and plant species has been carried out in relation to the compartment or other tract of land (but no more than 5 years before the operation commences in the compartment or tract), and a report of the results of the search has been prepared, in accordance with Division 2, and
 - b) a traverse survey for the compartment or other tract of land has been carried out in accordance with Division 3 (but no more than 5 years before the operation commences in the compartment or tract), and
 - c) each targeted animal survey required under Division 4 for the compartment or other tract of land has been carried out in accordance

with the requirements of that Division (but no more than 5 years before the operation commences in the compartment or tract), and

- d) a report of surveys carried out for the compartment or other tract of land has been prepared in accordance with Division 5 following compliance with Divisions 2, 3 and 4.

Special provisions for road works

2. This subclause applies if a logging operation is undertaken (or is to be undertaken) in conjunction with ancillary road construction and the compartment or other tract of land for the logging operation wholly contains the area of land on which the ancillary road construction is undertaken or is to be undertaken (at the same, or about the same, time). In these circumstances, subclause (1) and the other requirements of this Part are to be applied as if the logging operation were the only operation being undertaken.
3. The surveys required by subclause (1) before ancillary road construction is commenced in a compartment or other tract of land (being the footprint of the road or proposed road) are taken to have been carried out if surveys that otherwise comply with the requirements of this Part have been carried out for an area of land that includes the footprint of the road or proposed road. It does not matter that the requirements of this Part in relation to surveys would be applied differently if carried out on the basis that the only proposed operation was ancillary road construction.

Purposive interpretation to be preferred over literal interpretation

4. If, in particular circumstances, the strict or literal application of provisions of this Part leads to a manifestly unreasonable result, then Forests NSW is to instead interpret and apply the provisions so as to give effect to the purposes underlying this Part.

150. Surveys to be undertaken by experts

Forests NSW must ensure that each traverse survey and targeted animal or plant survey under this Part is carried out by a person or persons having the necessary skills and expertise to do so.

151. Data compilation to be provided to surveyors etc.

Forests NSW must ensure that the most recent report prepared under clause 153 relating to a compartment or other tract of land is provided to those persons responsible for planning any forestry operation in the compartment or other tract of land for which a site specific operational plan is required or involved in carrying out any survey under this Part or under Part 3.3.

Division 2 – Compilation of data for compartment or other tract of land (clause 149(1)(a))

152. Data compilation

1. Forests NSW must search the Atlas of NSW Wildlife and other databases of records (and relevant written documents) held or maintained by Forests NSW, for the following records relevant to the compartment or other tract of land:
 - a) records of regent parrot within the compartment or other tract of land and within 5 kilometres of it,

- b) records of animals and plants of other threatened species (and any proposed threatened species) within the compartment or other tract of land and within 2 kilometres of it.

153. Report of data found

1. A traverse survey under Division 3, and any targeted animal survey required under Division 4, for the compartment or other tract of land, must not be carried out until Forests NSW has prepared a report of the results of its search for records of animals (relevant to that compartment or other tract) under clause 152 that contains the following information:
 - a) date of report and dates on which the search was carried out,
 - b) location of the compartment or other tract of land for which the search was carried out (by including, if the location is within State forest, the State forest name and compartment number or numbers),
 - c) name of person or persons who carried out the search,
 - d) a list of all records found and a summary of each record.
2. The summary of each record required under subclause (1) must include the following, if available:
 - a) name of species to which the record relates,
 - b) grid co-ordinates of the record's location,
 - c) date on which the record was made or found,
 - d) type of record (such as a sighting, a heard call, road kill, hair or scats),
 - e) name of person who made or found the record,
 - f) source of record (for example, Atlas of NSW Wildlife).

Division 3 – Compartment traverse survey (clause 149 (1)(b))

154. Traverse survey – requirements

For the purposes of clause 149(1)(b), a traverse survey for the compartment or other tract of land must be planned and carried out, and the results of the survey recorded, in accordance with this Division.

155. Planning traverse route

1. The route of the traverse survey for the compartment or other tract of land must:
 - a) cover at least the distance calculated at the rate of 1.2 kilometres per 100 hectares of the compartment or other tract of land, and
 - b) pass through the full range of forest types and environments known, at the time of planning the route, to be present in the compartment or other tract of land.
2. The route of the traverse survey must extend beyond the boundary of the compartment or other tract of land into any area within 100 metres of the boundary if that area:
 - a) is known to contain a forest type or a type of environment not present in the compartment or other tract of land itself, and
 - b) is located within State forest.

3. Subclauses (1) and (2) do not apply to ancillary road construction. In that case, the route of the traverse survey is the route of the road or proposed road.

156. Mapping traverse route

The route of the traverse survey for the compartment or other tract of land must be mapped at a scale of at least 1:50 000 before the traverse survey is commenced. The map must also indicate the forest types and types of environments known to be present (at the time of preparation of the map) within the compartment or tract and within 100 metres of the compartment or tract (if located within State forest).

157. Traverse survey – field methodology

1. The person or persons conducting the traverse survey must search for the following along the traverse route:
 - a) wetland depressions and drainage depressions,
 - b) dams and tanks,
 - c) nests and roosts of birds of the species referred to in clause 198,
 - d) bat tree roosts as referred to in clause 199,
 - e) evidence of koalas,
 - f) superb parrot nests,
 - g) Gilbert's Whistler nests,
 - h) dens of the squirrel glider,
 - i) glider sap feed trees within the meaning of clause 181,
 - j) trees containing raptor nests,
 - k) nests (other than mud nests) of any species of bird that is protected fauna,
 - l) evidence of species listed in clause 140(a), (b) or (c),
 - m) endangered ecological communities.
2. If any of the features or other things referred to in subclause (1) are found in the traverse survey, they must be marked in the field, where it is practicable to do so.
3. Despite subclauses (1) and (2), it is not necessary to search for, or mark, glider sap feed trees, trees containing raptor nests and bird nests (other than those referred to in clause 198) more than 10 metres from the compartment or other tract of land.
4. The person or persons conducting the traverse survey are not required to search for any feature or other thing referred to in subclause (1), at a particular location along the traverse route, if it is not possible for the feature or other thing to be present in the type of forest or environment at that location.
5. The traverse route must be searched for at least the amount of time calculated at the rate of 1 hour per 100 hectares of the compartment or other tract of land. However, in the case of ancillary road construction, the traverse route (being the road or proposed road) must be searched for at least the amount of time calculated at the rate of 1 hour per 1.2 kilometres of the route.
6. If a forest type or type of environment that was not known to be present in the compartment or other tract of land (or in any area within 100 metres of the

compartment or tract) at the time the traverse route was planned (as referred to in clause 155(1)(b)) is encountered during the traverse survey, then a portion of the time calculated under subclause (5) is to be spent in searching that forest type or environment for the features or other things referred to in subclause (1).

7. If any person conducting the traverse survey sees, hears or finds other evidence of any threatened species (or an endangered population) not referred to in subclause (1), he or she must nevertheless ensure that details of the observation or evidence, as described in clause 158(2), are recorded so that they can be incorporated in the report under clause 158.

158. Traverse survey report

1. Forests NSW must ensure that the following information concerning the traverse survey and its results is recorded:
 - a) location of the area in which the traverse survey was conducted (by including, if within State forest, the name of the State forest and the compartment number or numbers),
 - b) date on which the traverse survey was conducted,
 - c) name of person or persons conducting the survey,
 - d) the traverse route (by marking it on a map),
 - e) length of the traverse route,
 - f) the time spent in the field conducting the traverse survey (but not including any time spent travelling to and from the survey location),
 - g) details of all features or other things referred to in clause 157(1) that were found in the traverse survey,
 - h) details of any evidence of a threatened species (or an endangered population) of plant or animal (in addition to those included under paragraph (g)) that was found in the traverse survey.
2. The details required under subclause (1)(g) and (h) must include the following:
 - a) the location of the feature or other thing or evidence (as the case may be), by reference to its grid co-ordinates and accurate to within 100 metres (if possible),
 - b) in the case of evidence of a threatened species (or an endangered population) of plant or animal, the name of the species (or population) and the type of evidence (for example, sighting, heard call or scats),
 - c) in the case of evidence of an endangered ecological community, the name of the community and the species characteristic of the community that appear to be present.

Division 4 – Targeted surveys for animal species (clause 149(1)(c))

159. Key concepts and definitions for Division

1. In this Division:
 - known habitat** of a particular species means any area within 2 kilometres of a record of that species;
 - targeted survey**, means a survey or surveys for the regent parrot carried out in relation to the compartment or other tract of land that complies (or cumulatively comply) with the requirements set out in Schedule 5.

160. Targeted surveys for regent parrot – when are they required?

1. This clause applies to forestry operations carried out on or after 1 February 2012 in a compartment or other tract of adjoining any of the following:
 - a) The Murray River,
 - b) The Murrumbidgee River, and
 - c) The lower reaches of the Darling River.
2. However, it does not apply to land in the Koondrook, Perricoota and Campbell's Island State forests.
3. Before commencing logging operations or ancillary road constructions to which this clause applies, a targeted survey is required for the regent parrot both in the compartment or tract, and in the area within 100m of the compartment or tract.
4. The targeted survey must be carried out in the regent parrot breeding season (August to January) immediately prior to the forestry operation. For example, if a forestry operation is planned for May 2013, the targeted survey must have been carried out in the period August 2012 to January 2013.
5. The targeted survey must be carried out in accordance with the methodology developed under clause 30.

161. Report to be prepared of each targeted survey for regent parrot

Forests NSW must ensure that a report of each targeted survey for the regent parrot (carried out under clause 160), that complies with the reporting requirements set out in the methodology developed under clause 30 of this approval, is completed during or following the survey.

162. Evidence of threatened species and endangered populations to be recorded

Any person involved in carrying out a targeted survey for the regent parrot under this Division who sees, hears or finds other evidence of any animal or plant of a threatened species, species of bat, or an endangered population, is to ensure that details of the observation or other evidence, is recorded, so that it can be incorporated in the report under clause 161 or 162, respectively.

Division 5 – Survey reports for compartment

163. Report of data and surveys for compartment

1. Forests NSW must prepare a report for the compartment or other tract of land that includes the following:
 - a) the report of the results of its search for records of animal species prepared under clause 153,
 - b) the information relating to, and the results of, the traverse survey for the compartment or other tract of land recorded under clause 158,
 - c) a list of known habitat of the regent parrot is present within the compartment or other tract of land or within 100 metres of the compartment or other tract of land,
 - d) each report of a targeted regent parrot survey carried out for the compartment or other tract of land, prepared for the purpose of clause 161,

- e) all data sheets used in the field for the purpose of a traverse survey under Division 3 and any targeted regent parrot survey under Division 4,
- f) a map of the compartment or other tract of land indicating the location of records of threatened species, bat roosts or endangered populations, and the location of evidence of any endangered ecological community, that is found or made during a survey for the compartment or tract under this Part.

Forests NSW must ensure that information in the report prepared under subclause (1) relating to the location of each record of a threatened species, or species of bat, that is specified in Part 1 of Schedule 4 is given to any person involved in carrying out a survey under Part 3.3. Information in the report relating to the location of evidence of an endangered ecological community must also be given to the person.

PART 3.3 – PLANNING AND OTHER PREPARATION FOR FORESTRY OPERATIONS

Division 1 – Planning forestry operations to comply with TSCL

164. Requirements of Division additional to requirements in Chapter 1

Nothing in this Division limits the operation of Part 1.3.

165. Site specific operational plan to address requirements of this Chapter

The site specific operational plan for a forestry operation in a compartment or other tract of land must address how the provisions of this Chapter that, at the time of preparation of the plan, appear to apply to the operation will be applied to, or be given effect to in, the operation.

166. Operational map for forestry operation

The operational map for a forestry operation is to indicate the location of any of the following features or other things known, at the time of preparation of the map, to be present within the compartment or other tract of land in which the forestry operation is to be undertaken:

- a) any record of a species to which a species protection zone relates (and the boundaries of any such protection zone),
- b) any other environmentally significant area, as described in Part 3.6
- c) glider sap feed trees within the meaning of clause 181,
- d) trees containing raptor nests.

Division 2 – Compartment surveys and marking-up of features and boundaries

167. “Compartment mark-up survey” for nests, roosts, dens, scats etc.

1. This clause applies to a forestry operation of any of the following kinds if a site specific operational plan is required for the operation and has been prepared:
 - a) a logging operation, and
 - b) ancillary road construction.

Note: At the end of a survey carried out as required by this clause, a copy of the operational map (which is part of the site specific operational plan for the forestry operation) should be able to be used to identify

the net operational area for the operation. Clause 75 describes the forestry operations for which a site specific operational plan is required.

2. A forestry operation to which this clause applies must not be undertaken on any part of the compartment or other tract of land unless:
 - a) that part, and any area within about 200 metres of that part (including land outside the compartment or other tract of land, if accessible), have first been surveyed in accordance with the requirements of this clause and clauses 155 to 158 (inclusive), and
 - b) any necessary notations (as a result of the survey) have been made on a copy of the site specific operational plan in accordance with clauses 168(2) and (4), 169(6) and 170(2).
3. The survey must be carried out in a part of the compartment or tract as close as practicable to the commencement of the operation concerned in the compartment or other tract of land, or in stages as the operation progresses through the compartment or tract.

Note: A traverse survey under Part 3.2 must be completed before an operation is physically commenced in the compartment or other tract. It may be carried out up to 5 years before the operation is so commenced.

168. Search for nests, dens, roosts, plants etc.

1. The survey required by clause 167 must include a thorough search for the following:
 - a) nests and roosts of birds of the species referred to in clause 198,
 - b) bat tree roosts as referred to in clause 199,
 - c) glider sap feed trees within the meaning of clause 181,
 - d) trees containing raptor nests,
 - e) nests (other than mud nests) of any species of bird that is protected fauna,
 - f) evidence of species listed in clause 140(a), (b) or (c),
 - g) silver wattle *Acacia rivalis*
 - h) exocarpos,
 - i) in the Western Lands Leases, solanum,
 - j) Yellow Gum *E. leucoxyton*
 - k) endangered ecological communities.
2. If any of the features or other things referred to in subclause (1) are found, they must be marked in the field, where it is practicable to do so. A copy of the site specific operational plan for the forestry operation is also to be annotated to indicate the presence and location of the feature or other thing, if not already referred to in the plan.
3. However, the following are not required to be searched for, or marked if they are more than 10 metres beyond the compartment or other tract of land in which the forestry operation is carried out:
 - a) glider sap feed tree
 - b) silver wattle *Acacia rivalis*

- c) exocarpos,
 - d) in the Western Lands Leases, solanum,
 - e) Yellow Gum E. *leucoxyton*
 - f) endangered ecological communities.
4. If a new record of an animal or plant of a threatened species (in addition to any species referred to in subclause (1)) is made or found during the survey, the location of the record and any other information necessary to give effect to the provisions of this Chapter in relation to the record are to be noted on a copy of the site specific operational plan.

169. Search for koalas and koala high use areas

1. The survey required by clause 167 must include a search to establish whether koalas are present, or have been recently present, in the net mapped operation area for the forestry operation and the extent of their presence, in accordance with this clause.
2. Koalas are to be looked for in river red gums within the net mapped operation area. The ground under the canopy of such trees must be searched for koala scats.
3. If a koala is found in a tree, or koala scats are found under a tree, then the ground under the canopy of that tree, and under the canopies of 10 other trees in the vicinity of that first tree, must be thoroughly searched for koala scats. The 10 other trees may be of any species, but each must have a dbhob of 100 mm or more. They must be the 10 trees with such a dbhob that are located closest to that first tree in which the koala is found or under which koala scats are found. (It does not matter if one or more of the 10 trees is outside the net mapped operation area.)
4. If koala scats are found under three or more of the 10 trees searched, the area containing those three or more trees (as well as the tree that triggered the thorough search) is a koala high use area.
5. The thorough search described in subclause (3) must also be carried out in the vicinity of each of the three or more trees in a koala high use area under which koala scats are found and that is within the net mapped operation area. (Any overlapping koala high use areas may be treated as a single koala high use area.)
6. The location of any koala high use area, together with the location of any tree outside such an area in which a koala is found or under which 40 or more koala scats are found (or both), are to be indicated on a copy of the operational map for the forestry operation.
7. To avoid doubt:
 - a) even if a thorough search under subclause (3) does not result in the discovery of a koala high use area, a further thorough search as described in subclause (3) must be carried out in the vicinity of any tree in the area in which a koala is found, or under which koala scats are found, and
 - b) the general obligation to look for koalas in a part of the net mapped operation area under subclause (2) is not affected by a requirement to carry out a thorough search for koala scats in that part also.

170. Search for landscape features

1. The survey required by clause 167 must also include a thorough search for any of the following landscape features that may be present in the compartment or other tract of land (in addition to those already identified in the site specific operational plan for the operation):
 - a) Wetland depression;
 - b) Drainage depression.
2. If any of the landscape features referred to in subclause (1) are found, the location of the feature, and any other information necessary to give effect to the provisions of this Chapter or Chapter 2, are to be noted on a copy of the site specific operational plan for the operation.

171. Expertise to carry out survey

Forests NSW must ensure that the survey required by clause 167 is carried out by persons who have the necessary expertise or skills to search for and identify the features or other things listed in clauses 168, 169 and 170.

172. “Marking-up” of boundaries of protected areas

1. This clause applies to a forestry operation of any of the following kinds if a site specific operational plan is required for the operation:
 - a) a logging operation,
 - b) ancillary road construction.
2. Forests NSW must ensure, as far as practicable, that a forestry operation to which this clause applies does not come within 50 metres of any part of a boundary of an area of land that is protected in relation to that operation (as described in subclause (4)) unless that part of the boundary has been first “marked up”.
3. For the purposes of this clause, an **environmentally significant area** (as described in Chapter 3), and a **drainage feature protection zone** (as described in Chapter 2), is an area of land that is protected in relation to a particular forestry operation if the forestry operation is prohibited in the area.
4. Accordingly, an environmentally significant area is not an area of land that is protected, for example, in relation to any of the following forestry operations if the operation is carried out within the area with the authorisation of a regional manager of Forests NSW or of DECCW (or both) under Part 3.7:
 - a) weed, pest or disease control involving the felling of trees,
 - b) authorised water management activities,
 - c) a burning operation,
 - d) the construction, re-opening or up-grading of a road, bush track or fire trail, and no part of the boundary of such an area needs to be “marked-up” under this clause before or during the operation within the area.
5. However, a logging operation is prohibited in an environmentally significant area for the purposes of this clause even though timber cut in the operation may be removed via a route through the area with the authorisation of a regional manager of Forests NSW or approval of DECCW (or both).

6. The boundary of an environmentally significant area is required to be “marked-up” only if the presence of the area in the compartment or other tract of land concerned is known.

173. “Marking-up” required only if boundary adjoins net operational area

1. Despite clause 172, part of a boundary of an area of land that is protected in relation to a forestry operation under that clause is required to be “marked-up” only if that part adjoins the net operational area for the forestry operation.
2. The following are examples of circumstances where the entire boundary or boundaries of an area may not be required to be marked up (because of subclause (1)):
 - a) an environmentally significant area overlaps or intersects with another environmentally significant area,
 - b) an environmentally significant area has two boundaries, one of which is also the boundary of another environmentally significant area (for example, a protection zone surrounding a dam, the inner boundary of which is also the boundary of the dam).
3. Subclause (1) does not exempt part of a boundary of an environmentally significant area (or a drainage feature protection zone) from the requirement to be “marked-up” if that part of the boundary runs through or is shared with another environmentally significant area in which an aspect of the operation concerned (such as timber removal in a logging operation) is to be carried out.

174. “Marking-up” – boundary to be determined in field

For the purposes of “marking-up” a boundary of an area, the location of the boundary of the area is to be determined in the field, if possible, by reference to the feature or other thing that constitutes or is protected by the area, such as a dam, rather than solely by reference to its location as shown on the operational map for the forestry operation (or the FMZ layer).

175. “Marking-up” not required if impenetrable vegetation

1. Despite clause 172, a part of a boundary of an area of land that is protected for the purposes of that clause is not required to be “marked-up” if it is inaccessible because of thick and impenetrable vegetation or other landscape features.
2. Where an area is not marked-up because of thick and impenetrable vegetation or other landscape features, Forests NSW must record the location of the thick and impenetrable vegetation or other landscape features and note that it was not marked up.

PART 3.4 – CONDITIONS RELATING TO TREE RETENTION IN CARRYING OUT LOGGING OPERATIONS AND OTHER FORESTRY OPERATIONS

Division 1 – Interpretation and application of Part

176. Definitions and interpretation of Part

1. In this Part:

fell, in relation to a tree, includes cut, remove and destroy; and ***road works*** means the construction, re-opening, up-grading or maintenance of a road,

bush track or fire trail to enable or assist in the carrying out of forestry operations.

2. To avoid doubt, **logging operation**, in this Part, includes the removal of timber (including the creation of an extraction track) and the construction and up-grading of a log dump.
3. A reference in this Part to the **dominance class of a tree** (including by use of words such as “dominant”, “co-dominant”, “sub-dominant” and “suppressed”) is a reference to the crown dominance of the tree within its stand of trees as determined in accordance with the principles of classification described in RG Florence, *Ecology and Silviculture of Eucalypt Forests*, CSIRO Publishing, 2004.

177. Selection of trees for retention and felling may be done progressively

Trees may be selected for retention as the operation progresses through the compartment or other tract of land. Nothing in this Part requires trees to be selected for felling or for retention before that operation is commenced in the compartment or tract.

178. Exemption of miscellaneous forestry operations and operations authorised under s. 30I Forestry Act

Miscellaneous forestry operations and operations to take timber or other products authorised by Forests NSW under section 30I of the *Forestry Act 1916* are not required to comply with this Part.

Division 2 – Tree retention and protection in logging

179. Retention of habitat trees and recruitment trees

1. Forests NSW must ensure that, at the completion of any logging operation, an average of at least two living river red gum habitat trees (as described in subclause (2)) and at least two living river red gum recruitment trees (as described in subclause (3)) remain in each hectare of land within the net mapped operation area.
2. From among the trees in the net mapped operation area, habitat trees must be selected with the objective of retaining trees having as many of the following characteristics as possible:
 - a) hollow-bearing,
 - b) good crown development,
 - c) minimal butt damage,
 - d) belong to a cohort of trees with the largest diameters at breast height over bark.
3. From among the trees in the net mapped operation area, recruitment trees must be selected with the objective of retaining trees that will develop hollows, being trees having as many of the following characteristics as possible:
 - a) be mature or late mature,
 - b) have potential for developing hollows,
 - c) have good crown development,
 - d) have minimal butt damage,
 - e) be dominant, co-dominant or sub-dominant (but not suppressed).

4. If it is not possible to comply with this clause because there are insufficient living trees that have the relevant characteristics within the net mapped operation area before the commencement of logging operations, then at least 4 trees must be retained per hectare.
5. Trees must be selected for the purposes of subclause (4) in the following descending order of preference:
 - a) living trees that have the relevant characteristics described in subclause (2) or (3); and if the total of 4 cannot be reached,
 - b) living trees with some of the characteristics in subclause (2) or (3) (as many as possible); and if the total of 4 cannot be reached,
 - c) dead trees with some of the characteristics in subclause (2) (as many as possible).
6. Compliance with this requirement will be audited in accordance with the auditing methodology approved under clause 29.
7. In this clause, "***hollow-bearing***", in relation to a tree, means a tree having a base, trunk or limb that contains a visible hollow, hole or cavity or a visible deformity such as a burl, protuberance or broken limb that indicates that a hollow is likely to be present.

180. Retention of large river red gum trees

A river red gum tree having a dbhob of 120 cm or more must not be felled in a logging operation.

181. Glider sap feed trees must not be felled

1. Glider sap feed trees must not be felled in any logging operation or in the course of, or for the purpose of, road works.
2. In this clause, ***glider sap feed tree*** means a living tree that exhibits incisions, including V-notch incisions, made less than two years before the relevant logging operation or road works (as evidenced by the non-occlusion of the incisions), by a gliding possum for the purpose of feeding on exuding sap.

182. Trees that contain raptor nests must not be felled

A tree (whether living or dead) that contains a raptor nest must not be felled in a logging operation.

183. Koala scat trees must not be felled

A tree (whether living or dead) must not be felled in any logging operation if 40 or more koala scats have been, or are, found under the canopy of the tree either in the survey carried out as required by clause 167 for the purpose of the operation or in the course of the operation.

184. Trees retained for one purpose may be treated as retained for other purposes

Except as otherwise expressly provided in this Part, a tree that is retained for the purpose of a provision of this Division (or that must not be felled under a provision of this Division) may be counted or treated as a tree retained for the purposes of one or more other provisions of this Division or Part, if it also meets the criteria for retention relevant to those other provisions. For example: a tree with a dbhob over 120cm which contains a raptor nest may be treated as a large tree selected for retention under clause 180 and 182 (respectively).

185. Protection of certain flora

1. Damage to the following types shrubs must be avoided or minimised to the greatest extent practicable during logging operations:
 - a) Exocarpos
 - b) Silver wattle
 - c) Solanum, in the Western Lands Leases
 - d) Yellow Gum *E. leucoxyton*
2. If a nest (other than a mud nest) of any species of bird that is protected fauna is found before or during a logging operation, damage to the nest, and the tree, shrub or ground cover vegetation that contains the nest, must be avoided or minimised to the greatest extent practicable during that operation.
3. In this clause, **protected fauna** has the same meaning as in the *National Parks and Wildlife Act 1974*.

186. Protection of undisturbed patches of vegetation

1. This clause applies following an environmental disturbance event such as wildfire, drought, flood and the occurrence of disease) that kills or substantially damages at least 70% of the trees in a single area of at least one hectare.
2. A forestry operation (including a logging operation) must not be carried out in:
 - a) any patch of vegetation that, although surrounded (or substantially surrounded) by the area devastated or substantially damaged by the environmental disturbance event, has not been disturbed (or has only been partially disturbed) by the event, and
 - b) any area of land within 10 metres of that patch, until the area devastated or substantially damaged by the environmental disturbance event recovers from that event.

Division 3 – Marking trees for purposes of Division 2

187. Purpose of Division

In requiring trees to be marked during certain logging operations, this Division has two purposes:

- a) to minimise the risk of trees that must not be felled under, or that are retained for the purposes of, Division 2 being felled by mistake, and
- b) to facilitate the auditing of compliance with the requirements of Division 2.

188. Rules for marking trees in logging operations

1. River red gum trees required to be retained under Division 2 must be marked either:
 - a) by marking trees that are selected for felling (“marked for removal”), or
 - b) by marking trees that are selected for retention (“marked for retention”).More than one approach may be used in the same operation.
2. No more than the minimum number of trees required to be retained to meet the requirements of Division 2 is required to be marked for retention.
3. A tree is not required to be marked (whether for retention or removal) if the tree is inaccessible because of impenetrable vegetation.

4. This Division does not apply to or in relation to a forestry operation for which a site specific operational plan is not required to be prepared.
5. Nothing in this Division affects the operation of clause 189. Accordingly, a tree marked for retention in one operation may be felled in a subsequent operation if that is allowed under clause 189.

Division 4 – Protection of retained trees in subsequent operations and general auditing provisions

189. Protection of retained trees generally

1. Damage to trees that must not be felled under, or are retained for the purposes of, this Part in a logging operation must be avoided or minimised to the greatest extent practicable in carrying out that operation or any other forestry operation (whether carried out at the same or subsequent time).
2. Despite subclause (1), different trees to those retained in an earlier operation may be retained in a subsequent logging operation to ensure that the requirements of this Part continue to be complied with. Nevertheless, in so far as those requirements allow, trees retained in the earlier operation are to be retained in the subsequent logging operation.
3. This clause does not affect the duty of Forests NSW under section 63 of the *Rural Fires Act 1997* or any other obligation imposed by or under that Act with respect to bush fire hazard reduction work. Accordingly, subclause (1) is subject to that duty and any such other obligation.
4. In the case of any **koala scat** tree that must not be felled under clause 183 in a logging operation referred to in that clause, this clause applies only with respect to that operation and not a subsequent operation.

190. Specific measures to protect retained trees

1. In this clause, **protected tree** means a tree that must not be felled under, or that is retained for the purposes of, this Part. However, in the case of any “koala scat” tree which must not be felled under clause 183, the tree is a protected tree only for the duration of the logging operation referred to in that clause.
2. This clause does not affect the generality of the duty under clause 189.
3. Directional felling is to be used so as to reduce the potential for damage to protected trees.
4. Routes of new roads and for the extraction of timber are to be planned so as to reduce the potential for damage to protected trees.
5. Such trees must not be used as bumper trees when snigging.
6. Logging debris must be prevented, to the greatest extent practicable, from accumulating within 5 metres of any protected tree during a logging operation. If logging debris does accumulate, then it must be flattened to a height of less than one metre or removed before any post-harvest burning is carried out. However, in flattening or removing the logging debris, disturbance to the ground surface and the understorey must be avoided to the greatest extent practicable.
7. In carrying out a logging operation, disturbance to the ground surface and understorey within 5 metres of any protected tree must be avoided or minimised to the greatest extent practicable.

8. In this clause, **directional felling** means the felling of a tree at a particular angle so that it falls in a pre-determined direction.

191. Auditing compliance with Part – table for calculating dbhob using stump dimensions

1. For the purposes of this Part, a tree that has been felled in an operation, leaving a stump of a particular height and diameter, is taken to have had (before being felled) a dbhob calculated in accordance with the auditing methodology referred to in clause 29.

Note: The subtraction of 1 cm from the relevant dbhob specified in the table is necessary to accommodate the approximate margin of error in the prediction of the dbhob from stump height.

2. For the purposes of this clause, the height of a tree stump from the ground is to be determined in accordance with the auditing methodology referred to in clause 29.

192. Records to be kept of removal of dangerous trees

Where a dangerous tree (as described in 'Forests NSW Safety Standard 1.3.9 "Dealing with Dangerous Trees"', as current from time to time) which would otherwise have to be retained under this approval (for example, because it has a dbhob of 120cm or more) is removed (because it is a dangerous tree), Forests NSW is to ensure the following information is recorded:

- a) the location of the dangerous tree (by reference to its grid co-ordinates),
- b) the date on which the dangerous tree was removed,
- c) the diameter of the tree stump left,
- d) the species of the dangerous tree (if known).

Note: Clause 17 (Part 1.1) makes it clear that duties under occupational health and safety laws (including Forests NSW's internal safety standards) prevail over any restriction imposed by the approval. Accordingly, a tree that would otherwise be required to be retained under this Part may be removed, if it is dangerous. However, if a dangerous tree is removed, Forests NSW must record the information in the above clause.

PART 3.5 – CONDITIONS RESTRICTING CERTAIN FORESTRY OPERATIONS GENERALLY

193. Dispersal of operations authorised under s. 30I of the *Forestry Act 1916*

Forests NSW is to endeavour to limit the adverse cumulative impacts of operations pursuant to authorisations under section 30I of the *Forestry Act 1916* on the habitat of ground dwelling threatened species and protected fauna:

- a) by dispersing the areas within the Riverina State forests in which operations are authorised over the term of this approval, and
- b) by having regard to the extent to which that habitat has already been disturbed or reduced by the collection of firewood in the relevant area, when determining an application made under section 30I of the Act.

194. Impact of miscellaneous forestry operations and operations under s. 30I of the *Forestry Act 1916*

1. This clause applies to the following small-scale logging operations:
 - a) miscellaneous forestry operations described in paragraphs (a) and (b) of clause 11 (that is, felling of trees to provide Forests NSW with timber to

construct or maintain infrastructure and felling of trees for training purposes),

- b) logging operations authorised by Forests NSW under section 30I of the *Forestry Act 1916*.
2. Forests NSW or the holder of an authorisation under section 30I of the *Forestry Act 1916* (as the case may require) must ensure that no more than 20 cubic metres of logs is obtained from any one small-scale logging operation.
 3. Forests NSW or the holder of an authorisation under section 30I (as the case may require) must ensure that, at the completion of a small-scale logging operation:
 - a) the stump of any tree felled in the operation that had a dbhob of less than 200 mm is at least 3 metres from the stump of any other tree felled in the same operation, and
 - b) the stump of any tree (“**T**”) felled in the operation that had a dbhob of 200 mm or more is at least the distance (“**M**”) from the stump of any other tree felled in the same operation, calculated by applying the following formula:
 - c) **M = Z x 50**, where **Z** is the dbhob of the tree **T** before it was felled.
 4. The following trees must not be felled in a small-scale logging operation:
 - a) any tree in which a nest of a species of bird that is protected fauna (within the meaning of the *National Parks and Wildlife Act 1974*) is found during the operation,
 - b) any tree under which a koala scat or scats are found, or any tree in which a koala is found, during the operation,
 - c) any tree with visible hollow, hole or cavity.Damage to any such tree must also be avoided as far as is practicable during the small-scale logging operation.
 5. A tree with a dbhob of 120cm or more must not be felled in a small-scale logging operation authorised under section 30I of the *Forestry Act 1916*.
 6. A small-scale logging operation is not required to comply with the restrictions of this clause if the following provisions are complied with instead, before or during the operation (as the case may require):
 - a) Part 3.2 (Plant and animal surveys before commencement of logging and road works),
 - b) Division 2 of Part 3.3 (Compartment surveys and marking-up of features and boundaries),
 - c) Part 3.4 (Conditions relating to tree retention in carrying out logging operations and other forestry operations).

195. Burning operations – annual planning

1. In planning burning operations on an annual basis, Forests NSW is to consider the following matters:
 - a) the frequency and intensity of fires (including wildfires) that have occurred in the Riverina State forests and in relation to which Forests NSW has records,
 - b) the minimum fire intervals for threatened species of plants and endangered ecological communities present in the Region, as referred to

in the *Bush Fire Environmental Assessment Code for New South Wales* as in force from time to time, under Division 8 of Part 4 of the *Rural Fires Act 1997*,

- c) when available, post-fire age class distributions for vegetation types in the Riverina State forests. Post-fire age class distributions for vegetation types in the Riverina State forests are to be considered with a view to identifying over-represented age classes, the burning of which may assist in restoring ecological integrity.
2. Before including a burning operation in an annual program of forestry operations,
 - a) Forests NSW must carry out a comparative assessment of the environmental impact of carrying out the operation and of not carrying out the operation. The comparative assessment is to address the matters described in subclause (1) as applied to the particular tract of land for which the burning operation is being considered.
 3. For the purposes of subclause (1) (c), Forests NSW must, within the 5 years following the commencement of this approval:
 - a) identify and map vegetation types within the Riverina State forests and prepare post-fire age class distribution maps for those vegetation types, and
 - b) develop a theoretical post-fire age class distribution model for those vegetation types to enable a comparison to be made with actual post-fire age class distribution for those types, in accordance with the process outlined in Forests NSW's Corporate Fuel Management Plan 2008 (Chapter 6.2.2).
 4. Forests NSW is to make and keep a written record of its consideration of matters under subclause (1) in planning burning operations on an annual basis and of each comparative assessment carried out under subclause (2).
 5. This clause does not restrict the carrying out of bush fire hazard reduction work by Forests NSW for the purpose of fulfilling its duty under section 63 of the *Rural Fires Act 1997* or any other obligation imposed by or under that Act.

PART 3.6 – IDENTIFYING ENVIRONMENTALLY SIGNIFICANT AREAS

196. What are environmentally significant areas?

The following are environmentally significant areas for the purposes of this approval:

- a) any area of land designated or described as a species protection zone under this Part,
- b) endangered ecological communities,
- c) any dam or tank,
- d) any area of land within 10 metres of a dam or tank ("protection zone"),
- e) any area of land that is classified as Forest Management Zone 3A.

The area of land referred to in paragraph (d) is a protection zone for the purposes of this Chapter.

197. Presence of environmentally significant areas must be determined

1. Before and during the course of a forestry operation of a kind that is restricted or prohibited in an environmentally significant area, Forests NSW is to ascertain if such an area lies within the compartment or other tract of land in which the operation is being undertaken, or is proposed to be undertaken.
2. Nothing in this clause requires Forests NSW to carry out surveys or searches in addition to those expressly required by this Chapter in relation to the forestry operation concerned. Accordingly, Forests NSW is taken to have satisfied its obligation under this clause if it ascertains the environmentally significant areas that lie within the compartment or other tract of land in which the forestry operation is undertaken on the basis of the following information:
 - a) information that it holds at the time of the preparation of any site specific operational plan for the forestry operation or other documentation relevant to the operation, such as information on the Forests NSW corporate geodatabase and records of animals and plants (including the Atlas of NSW Wildlife referred to in clause 137 and the results of traverse and targeted animal surveys undertaken under Part 3.2),
 - b) the results of any survey undertaken as required by clause 167 in the compartment or other tract of land in connection with the forestry operation,
 - c) any observations made in the field in the course of the forestry operation.

198. Species protection zones for bird nests and roost sites

1. Any area of land within the distance specified in column 2 of the table below from a nest or roost of a bird or birds of the species described (on the same row) in column 1 of that table is a species protection zone. This subclause applies only to a nest or roost of which there is a record; or which is found in the course of a forestry operation.

Column 1	Column 2
Superb parrot nest	100m
Regent parrot nest	100m
Square-tailed kite nest or roost	200m
Little eagle nest or roost	200m
Any threatened owl nest or roost	200m
Spotted harrier nest or roost	200m
Bush stone curlew nest	100m
Gilbert's Whistler nest	20m

2. Despite subclause (1), an area of land around a nest (other than a nest of an owl or regent parrot) is not, or is no longer, a species protection zone, in relation to a forestry operation being carried out in the compartment or tract of land containing the nest (or adjoining the land containing the nest), if the nest has not been used by birds of that species:
 - a) for at least two consecutive breeding seasons, and

- b) during the breeding season immediately preceding the forestry operation (if the latter of the two consecutive breeding seasons referred to in paragraph (a) is not the breeding season immediately preceding the operation).
- 3. Forests NSW may rely on subclause (2) only if surveys conducted during breeding seasons show, to DECCW's satisfaction (as recorded in writing), that the nest has not been used by birds of the relevant species during those seasons.
- 4. To avoid doubt, if a nest, or tree containing a nest or roost, is destroyed (for example, in a storm or fire), or a nest is dislodged from a tree, the area of land around the former site of the nest or tree is no longer a species protection zone. An area of land ceases to be a species protection zone around a threatened owl roost if the site of the roost no longer exhibits signs of continuing use by threatened owls.
- 5. In this clause a reference to
 - a) a nest of a species of bird is a reference to any structure built by birds, or to any hollow in a tree, stag or log, or to any site (including on the ground or in a cave), that is used (or has been used) by birds of the species to lay and incubate their eggs or rear their young (or both), and
 - b) a reference to a threatened owl roost is a reference to a site where there is an accumulation of threatened owl pellets, remains of animals of species preyed upon by threatened owls or threatened owls' excreta, indicating frequent and recent use by threatened owls; and
 - c) a reference to a square-tailed kite roost, a little eagle roost or a spotted harrier roost is a reference to a site where there is an accumulation of excreta of a square-tailed kite, little eagle or spotted harrier or remains of animals of species preyed upon by square-tailed kites, little eagles or spotted harriers, indicating use by square-tailed kites, little eagles or spotted harriers.

199. Species protection zones for bat tree roosts

- 1. Any area of land within 30 metres of a bat roost tree (of which there is a record or that is found during the course of a forestry operation) is a species protection zone for a bat tree roost.
- 2. In this clause, a reference to a bat roost tree is a reference to a tree (including a dead standing tree) that exhibits signs of use by bats of a microchiropteran species.
- 3. To avoid doubt, an area of land ceases to be a species protection zone under this clause if the tree around which it is centred no longer exhibits signs of use by bats of a microchiropteran species.

200. Species protection zones for koalas (*Phascolarctos cinereus*)

- 1. The following areas are species protection zones for koalas:
 - a) a koala high use area, as identified in a survey required by clause 167 and 169 and recorded on a copy of a site specific operational plan under clause 168,
 - b) any area within 100 metres of such a koala high use area,

- c) any area within 30 metres of a tree in which a koala has been found in a survey required by clause 167 or is found in the course of a forestry operation.
2. The areas referred to in subclause (1) (a) and (b) (koala high use areas and their surrounding areas) are species protection zones only for the duration of the forestry operation for the purposes of which the survey referred to in subclause (1) was carried out.
3. An area referred to in subclause (1) (c) is a species protection zone only for the duration of the forestry operation for the purposes of which the survey referred to in subclause (1) (c) was carried out or for the remainder of the forestry operation in the course of which the koala was found.
4. An area referred to in subclause (1) (c) is no longer a species protection zone if the koala (or all the koalas) have left the area. However, if the koala or koalas move to another tree (whether or not within 30 metres of the tree in which they were first found), any area within 30 metres of that tree may also be a species protection zone under this clause for the remainder of the forestry operation concerned.

Note: Although an area referred to in subclause (1) (c) is no longer a species protection zone when the koala or koalas are no longer in the tree on which the zone was centred, the tree itself may still be protected under Part 3.4 if 40 or more koala scats were found under it in the survey preceding the relevant operation.

PART 3.7 – RESTRICTED OPERATIONS IN ENVIRONMENTALLY SIGNIFICANT AREAS

Division 1 – Breaches of Part

201. Knowledge of environmentally significant areas

1. Nothing done in an environmentally significant area, in the course of a forestry operation, gives rise to a breach of this Part if, despite compliance with Part 3.2 and Part 3.3, Forests NSW (or other person involved in the forestry operation) did not know the area was an environmentally significant area.
2. However, if Forests NSW becomes aware, during the course of a forestry operation, that the operation has encroached upon an environmentally significant area, Forests NSW is to ensure that the operation encroaches no further into the area.

202. Environmentally significant areas only partially within compartment

Without limiting the operation of clause 201, nothing done in an environmentally significant area that lies only partially within a compartment or other tract of land in which a forestry operation is carried out gives rise to a breach of this Part if the environmentally significant area is a protection zone around a dam or tank, and the dam or tank, respectively, lies wholly outside the compartment or other tract of land.

Division 2 – Logging operations in environmentally significant areas

Note: “Logging operations” refers to the logging operations described in clause 5.

203. Certain logging operations excluded from operation of Division

1. This Division does not apply to the collection of firewood from the floor of the forest, to the extent that the operation is a logging operation.

2. To avoid doubt, this Division also applies to any on-going forest management operation to the extent to which timber cut in the operation is removed for the purpose of its sale or use in timber products. However, the Division does not restrict an operation of either of the following kinds (even though timber products may be produced from that operation) in the environmentally significant area in which the operation is carried out:
 - a) the cutting and removal of timber for pest, weed or disease control, in accordance with an approval of DECCW under clause 212, and
 - b) the cutting and removal of timber to carry out authorised water management activities.

204. Logging operations prohibited in environmentally significant areas

1. A logging operation must not be carried out in an environmentally significant area, except in accordance with this Division.
2. In particular, a log dump must not be established, maintained or up-graded in an environmentally significant area for the purpose of (or as part of) a logging operation.

205. Felling of trees into environmentally significant areas and their removal

1. A tree (or part of a tree) must not be felled into an environmentally significant area in a logging operation. However, this subclause is not breached where a tree is accidentally felled into an environmentally significant area.
2. A tree (or part of a tree) that has been felled into an environmentally significant area in a logging operation must not be removed, unless the tree or part has been accidentally felled into that area.
3. Only a mechanical harvester may be used to remove the tree or part of the tree. It must be operated so that the tree (or the part) is lifted off the ground and removed from the area while wholly supported off the ground. The mechanical harvester's wheels or tracks must remain outside the environmentally significant area.

206. Logging operations in koala protection zones

1. A logging operation may be carried out in the outer 70 metres of a species protection zone around a koala high use area (as described in clause 200(1)(b)).
2. To avoid doubt, subclause (1) also authorises the removal or extraction of timber (including by snigging and whether cut within the outer 70 metres of the species protection zone or outside the species protection zone) via a route through the outer 70 metres of that zone.

Note: The construction, re-opening or up-grading of a road or bush track for the purpose of removing timber through a species protection zone around a koala high use area is not authorised under this clause. See clause 217.

3. A tree or part of a tree that has been accidentally felled into the inner 30 metres of a species protection zone around a koala high use area (in the course of a logging operation in the outer 70 metres of the zone) may be removed in accordance with clause 205. However, the wheels or tracks of a mechanical harvester used to remove the tree or part must remain within the outer 70 metres of the zone while doing so.
4. Timber may be removed (including by snigging) via a route through a species protection zone around a tree in which a koala is found (as described in clause

200(1)(c)), but only if no trees within the zone are felled or otherwise destroyed for that purpose. Damage to trees in the zone is to be avoided to the greatest extent practicable when snigging or forwarding.

207. Extraction of timber through certain environmentally significant areas

1. This clause applies to the removal or extraction of timber, whether by snigging or forwarding, generally from the logging site (that is, the site at which the timber is felled) to a log dump. It applies to the following environmentally significant areas:
 - a) endangered ecological communities, and
 - b) species protection zones, except as provided by subclause (2).
2. This clause does not apply to that part of a species protection zone referred to in :
 - a) clause 200(1)(b) (that is, the zone around a koala high use area) within 70 metres of the outer boundary of the zone, and
 - b) clause 200 (1)(c) (that is, any area within 30 metres of a tree in which a koala is found).
3. Timber cut on land outside an environmentally significant area to which this clause applies in a logging operation may be removed via a route (whether or not an existing extraction track) through the area, but only if:
 - a) there is no practicable alternative route available,
 - b) Forests NSW has prepared a report, in the appropriate form set out in Schedule 4, of an assessment that addresses the matters set out on that form, a regional manager of Forests NSW has authorised the use of the proposed route in writing and a copy of the report (and authorisation) has been forwarded to DECCW;
4. If there is a record of a threatened species on the proposed route, the route may be used only if DECCW has first approved the use of the route in writing (following the receipt of the report referred to in this clause).
5. Work may be done to construct, create or re-open an extraction track (for example, by clearing trees or other vegetation) if authorised by the regional manager and DECCW as referred to in this clause.
6. Forests NSW must ensure that all practicable measures are taken to minimise or mitigate any adverse effect on the environment of the removal of timber through the environmentally significant area, including any work done to construct, create or reopen an extraction track. Any conditions relating to minimising or mitigating any adverse impact of the work on the environment imposed by DECCW as part of an approval must be complied with.

Note: "Logging operations" involve the cutting and removal of timber as described in clause 5. The effect of the above clause is that removal of timber (or "extraction") through certain environmentally significant areas is not prohibited, despite the general prohibition on logging operations in clause 204. Division 5 deals with road construction and road re-opening, whether carried out at the same time as a logging operation or other forestry operation or as an independent operation.

208. Use of existing roads, bush tracks or fire trails to remove timber cut in logging operation

1. Timber cut on land outside an environmentally significant area in a logging operation may be removed via a road, bush track or fire trail in the area if the road, track or trail was constructed before the granting of this approval or constructed in accordance with this approval.
2. This clause does not affect the operation of clause 207.

Division 3 – Forest products operations and similar forestry operations in environmentally significant areas

209. Forest products operations generally prohibited

1. A forest products operation must not be carried out within an environmentally significant area, except as provided by this clause.
2. Seeds may be collected from an environmentally significant area.
3. Forests NSW may authorise an Aboriginal person to carry out a forest products operation in an environmentally significant area but only if:
 - a) Forests NSW is of the opinion that there is no other land reasonably accessible to the Aboriginal person on which the relevant forest products (being products of trees, shrubs or other vegetation) may be harvested, and
 - b) the scale and intensity of the harvesting to be authorised does not adversely affect the conservation value of the environmentally significant area.
4. This clause does not affect any native title rights and interests (within the meaning of the *Native Title Act 1993* of the Commonwealth) existing in relation to any land within an environmentally significant area.

210. Collection of firewood under s.30I from floor of forest prohibited

1. Dry logs and other pieces of wood lying on the floor of the forest must not be collected for firewood from:
 - a) an environmentally significant area; or
 - b) from any area within 300 metres of records of Gilbert's Whistler.
2. In this clause, a reference to a ***dry log or other piece of wood*** is a reference to a log or other piece of wood from which the majority of the bark has been separated from the sapwood.

Division 4 – On-going forest management operations in environmentally significant areas

Note: "On-going forest management operations" are on-going forest management operations described in clause 5. They include bush fire hazard reduction, grazing, beekeeping, authorised water management activities, weed and pest control and other silvicultural activities including activities to manipulate or affect forest stand structure or composition by, for example, the use of fire. This Division restricts or prohibits the conduct of on-going forest management operations in environmentally significant areas.

211. Felling of trees for the purpose of on-going forest management operations generally prohibited

1. A tree in an environmentally significant area must not be felled, cut or destroyed in the course of, or for the purpose of, an on-going forest management operation, except as provided by this Division.
2. A tree must not be felled into, or removed from, an environmentally significant area in the course of, or for the purpose of, an on-going forest management operation.

212. Tree felling allowed if for pest, weed or disease control or for authorised water management activities

1. Trees may be felled, cut or destroyed (including by burning) within an environmentally significant area (and removed from that area) for the purpose of
 - a) assisting in the control of a pest, weed or disease (whether for the protection or rehabilitation of the environment or for the protection of timber resources), or
 - b) authorised water management activities.
2. An operation may be carried out under this clause even though timber in trees felled in the operation is removed for use in timber products.
3. However, an operation may not be carried out under this clause without DECCW's approval in writing.
4. The operation must be carried out in accordance with any conditions imposed by DECCW as part of its approval, including conditions relating to access to the environmentally significant area and removal of any timber (or waste) from the area.
5. To avoid doubt, if water management activities or pest, weed or disease control do not involve the felling or destruction of trees, it may be carried out in an environmentally significant area without approval under subclause (3). For example, pesticides, herbicides and insecticides may be applied in an environmentally significant area without DECCW's approval or a regional manager's authorisation.

213. Bush fire hazard reduction work restricted

1. Forests NSW must not carry out, or authorise the carrying out of, bush fire hazard reduction work within an environmentally significant area, except to the extent necessary to fulfil its duty under section 63 of the *Rural Fires Act 1997* or any other obligation imposed by or under that Act.
2. Subclause (1) is not breached if a fire is lit outside an environmentally significant area for the purpose of bush fire hazard reduction but, despite the taking of all reasonable precautions to prevent it from doing so, the fire spreads to an environmentally significant area.
3. A tree may be felled in (or into) an environmentally significant area (and removed from that area) if necessary for Forests NSW to fulfil its duty under section 63 of the *Rural Fires Act 1997* or any other obligation imposed by or under that Act.
4. This clause does not restrict grazing for the purpose of bush fire hazard reduction in an environmentally significant area.

214. Burning for other silvicultural purposes restricted

1. This clause applies to a burning operation other than bush fire hazard reduction.
2. Forests NSW must not carry out a burning operation, or authorise such an operation, in an environmentally significant area except:
 - a) in accordance with clause 211 for the purpose of pest, weed or disease control, or
 - b) for the purpose of authorised water management activities, or
 - c) in accordance with subclause (4) for the purpose of maintaining or restoring the ecology of the area.
3. Subclause (2) is not breached if a fire is lit outside an environmentally significant area, but despite the taking of all reasonable precautions to prevent it from doing so, the fire spreads to an environmentally significant area.
4. Forests NSW may carry out a burning operation, and authorise such an operation, in an environmentally significant area for the purpose of maintaining or restoring the ecology of the area, with DECCW's approval in writing.
5. Any such burning operation may be carried out only in accordance with any conditions imposed by DECCW as part of its approval, including any conditions relating to access to the environmentally significant area.

215. Bee-keeping restricted

1. A beehive set-down site must not be established within an environmentally significant area.
2. Native vegetation may be cleared or disturbed within an environmentally significant area to maintain an existing beehive set-down site or access to such a site. However:
 - a) trees in the area that have a dbhob of 100 mm or more may not be felled or destroyed only for this purpose, and
 - b) native vegetation in the area may be cleared or disturbed to maintain access to a beehive set-down site outside the area only if there is no alternative practicable means of access to the site.
3. Forests NSW must take measures to ensure, when native vegetation is cleared or disturbed in an environmentally significant area under subclause (2), that if the area is a species protection zone for a species of animal, individuals of the species are not harmed and any native plant that represents an important aspect or feature of the species' habitat is not destroyed or damaged.
4. In this clause:
existing beehive set-down site means a beehive set-down site that existed as at the commencement of this approval or a beehive set-down site that is established after that date other than one established in breach of a term of this approval; and

Note: An area may not become an environmentally significant area for the purposes of this approval until evidence of a threatened species is found in the area or an area may not be known to be an environmentally significant area until a survey is carried out before a logging operation is undertaken in the compartment in which it is located. Accordingly, a beehive set-down site that is established before either occurrence will not have been established in breach of this approval (that is, it will be an existing beehive set-down site as defined above).

native vegetation has the same meaning as in the *Native Vegetation Act 2003*.

Division 5 – Ancillary road construction in environmentally significant areas

216. Application of Part to fire trails

Nothing in this Division restricts or prohibits the construction, re-opening, up-grading, maintenance or use of a fire trail solely for the purposes of emergency fire-fighting.

217. Construction of roads in endangered ecological communities and species protection zones

1. A road, bush track and fire trail may be constructed, re-opened or up-graded in an endangered ecological community and a species protection zone , but only if:
 - a) there is no practicable alternative route available, and
 - b) Forests NSW has prepared a report, in the appropriate form set out in Schedule 4, of an assessment that addresses the matters set out on that form, a regional manager of Forests NSW has authorised the use of the proposed route in writing and a copy of the report (and authorisation) has been forwarded to DECCW.
2. If there is a record of a threatened species on the proposed or existing route of the road, track or trail, the works referred to in subclause (1) may be carried out only if DECCW has first approved them in writing (following the receipt of the report referred to in subclause (1) (b)).
3. Forests NSW must ensure that all practicable measures are taken to minimise or mitigate any adverse effect of the road, track or fire trail construction, re-opening or upgrading on the environment, including complying with any conditions relating to minimising or mitigating any adverse impact of the works on the environment imposed by DECCW as part of an approval under subclause (2).

218. Road, track and trail maintenance and use

To avoid doubt, this Division does not restrict or prohibit the use of, or the carrying out of maintenance on, roads, bush tracks and fire trails in environmentally significant areas.

219. Bush tracks for certain on-going forest management operations

Despite any other provision of this Division, a bush track may be constructed or re-opened in an environmentally significant area for the purpose of an on-going forest management operation authorised or approved under Division 4 by a regional manager of Forests NSW or DECCW (as the case may require), but only in accordance with the authorisation or approval.

Division 6 – Use and operation of harvesting machinery in environmentally significant areas

220. Prohibition on use of harvesting machinery in environmentally significant areas

A harvesting machine must not enter, and must not be used within, an environmentally significant area, for the purpose of, or in the course of, a forestry operation except in accordance with this Division or clause 205.

221. Use of harvesting machinery in relation to emergency fire fighting

A harvesting machine may enter, and be used within, an environmentally significant area for the purpose of emergency fire-fighting.

222. Use and operation of harvesting machinery within environmentally significant areas for removal of timber and road works

A harvesting machine may enter, and be used within, an environmentally significant area:

- a) for the cutting or removal of timber in a logging operation (including the creation or reopening of an extraction track) in accordance with Division 2, and
- b) for the purpose of constructing, re-opening or up-grading a road, bush track or fire trail in accordance with Division 5.

223. Use of existing roads, tracks etc within environmentally significant areas

A harvesting machine:

- a) may be used on a road, bush track or fire trail within an environmentally significant area to carry out maintenance on that road, track or trail, and
- b) may travel along a road, bush track or fire trail within an environmentally significant area, in the course of, or for the purpose of, a forestry operation (such as gaining access to an area proposed to be logged),

but only if that road, track or trail was constructed in accordance with this approval or before the granting of this approval.

224. Harvesting machinery for authorised water management activities or pest, weed or disease control

A harvesting machine may enter, and be used within, an environmentally significant area for the purpose of felling, cutting or destroying trees to

- a) assist in the control of a pest, weed or disease in accordance with clause 212, or
- b) carry out authorised water management activities.

225. Special provisions regarding maintenance of dams and tanks

1. A harvesting machine (and any other machine designed to be propelled by a motor) may enter, and be used, within a dam or tank and its surrounding protection zone for the purpose of carrying out maintenance work on the dam or tank, but only if:

- a) Forests NSW has prepared a report of an assessment of the proposed maintenance work that addresses any relevant matters set out on the

appropriate form in Schedule 4 and the other requirements of this clause, and a regional manager of Forests NSW has authorised that work, and

- b) a copy of the report (and authorisation) has been forwarded to DECCW (before the maintenance work is commenced).
2. If a dam or tank and its surrounding protection zone is wholly or partially within another environmentally significant area (including a species protection zone), or an area of land that is classified as a Forest Management Zone 2 or 3A, then a harvesting machine (and any other machine) may still enter and be used within that area (in accordance with subclause (1)) if a regional manager of Forests NSW:
- a) considers that that is necessary in order to carry out the dam or tank maintenance work, and
 - b) is satisfied, where the other area is a species protection zone, that any habitat of the threatened species or protected fauna within the zone will (whether in the short-term or longer term) be enhanced by the dam or tank maintenance work or that the benefits of carrying out the work outweigh any detrimental impacts of the work on that habitat, and
 - c) is satisfied that any adverse impact on the environment would not be reduced by carrying out the dam or tank maintenance work in another season (for example, a season which is not the breeding season for animals of a species protected by the zone).

The report referred to in subclause (1) must include a record of the regional manager's assessment of the matters referred to in paragraphs (2)(a), (b) (if relevant) and (c).

3. The report referred to in subclause (1) must also indicate whether it is proposed to carry out other dam or tank maintenance work (using machinery) within 20 km of the dam or tank to which the report and authorisation relate. If so, the report must include details of that other work, including the location of each dam or tank on which maintenance work is proposed, the proposed date of that work and the type of work proposed.
4. A report and authorisation may relate to more than one dam or tank.
5. Forests NSW must ensure that all practicable measures are taken to minimise any adverse impact of the dam or tank maintenance work on the environment, particularly threatened species of animals and plants and protected fauna, and their habitat.
6. Maintenance work (using harvesting machinery) may not be carried out on the inside of a dam or tank, or so as to disturb the inside of the dam or tank, when standing water is visible within it.
7. The following are to be noted on the report and authorisation under subclause (1) (or a copy):
 - a) the dates on which the maintenance work on any dam or tank to which the authorisation relates was commenced and completed, and
 - b) if maintenance work is carried out on the inside of a dam or tank, the name of any person who has checked that there is no standing water visible within it when the work is carried out (and the date or dates on which he or she did so).
8. For the purposes of this clause, "maintenance work on a dam or tank" includes work to de-silt the dam or tank, work to re-shape or stabilise its outlet

structures, catch drains or embankments, and work to control or eliminate regrowth on the inside of the dam or tank or on its embankments.

CHAPTER 4: PROTECTION OF WATER AND THE AQUATIC ENVIRONMENT FROM POLLUTION – PLANNING AND REPORTING ON MATTERS

(Terms of licences under the Protection of the Environment Operations Act 1997 and Part 7A of the *Fisheries Management Act 1994*)

PART 4.1 – APPLICATION OF THIS CHAPTER AND INTERPRETATION

226. Application of Chapter

1. This Chapter sets out terms of the licence under the *Protection of the Environment Operations Act 1997* as described in clause 7. However, the provisions of this Chapter are only terms of the licence under the *Protection of the Environment Operations Act 1997* in so far as they apply to or in relation to logging operations or ancillary road construction (as referred to in clause 7).
2. The provisions of this Part and Part 4.2 are also terms of the licence under Part 7A of the *Fisheries Management Act 1994* as described in clause 8. Accordingly, to the extent that the provisions of this Chapter are terms of that licence, they apply to (and in relation to) the forestry operations described in that clause.
3. A reference to a forestry operation in this Chapter is to be construed according to whether the provision in which the reference occurs is being applied as a term of the licence under the *Protection of the Environment Operations Act 1997* or as a term of the licence under Part 7A of the *Fisheries Management Act 1994*.

227. Requirements of Part 4.2 additional to requirements of Chapter 1

Nothing in Part 4.2 limits the operation of Part 1.3.

PART 4.2 – PLANNING FORESTRY OPERATIONS TO COMPLY WITH EPL AND FML

228. Relevant matters when planning logging operations and road works etc.

Forests NSW is to take into account, determine or identify the matters set out in Schedule 5, to the extent that they are relevant, in planning a logging operation and ancillary road construction for which a site specific operational plan is required.

229. Site specific operational plan for logging operations and road works

1. The site specific operational plan for a forestry operation must:
 - a) address the application of the provisions of Chapter 5 to the operation, in so far as these appear to be relevant to the operation concerned, and
 - b) specify how they will be applied to, or be given effect to in, the operation. For example, in the case of a proposed logging operation, the application of Part 5.3 to any existing roads or bush tracks within the compartment or tract that are proposed to be used in the operation needs to be addressed in the plan.
2. If Forests NSW develops site specific measures under clause 246 for a forestry operation before the commencement of the operation, those

measures are to be included in the site specific operational plan for the operation.

230. Operational map requirements

1. For the purposes of Chapter 5, the operational map for a logging operation or ancillary road construction is to show or include the following information:

Existing roads

- a) location of any existing natural surface roads, bush tracks and fire trails,
- b) location of any existing sealed or gravelled roads,
- c) names of any existing roads (if available),

New roads and other proposed road works

- d) location of any natural surface roads, bush tracks and fire trails proposed to be constructed, created, re-opened or up-graded in the forestry operation,
- e) location of any sealed or gravelled roads proposed to be constructed or upgraded in the forestry operation,
- f) names of any proposed roads (if available),

Drainage feature and wetland crossings

- g) location of any drainage depression or wetland depression crossings (by roads, bush tracks or fire trails),
- h) in the case of a logging operation, approximate location of any drainage depression or wetland depression crossing by an extraction track,

Log dumps, borrow pits, gravel pits

- i) in the case of a logging operation, the location of any existing or proposed log dump (other than a log landing) or any gravelled loading bay, proposed to be constructed or used in the operation,
 - j) in the case of a logging operation, the location of any log landing proposed to be constructed or used in the operation or the areas along relevant roads where they may not be constructed,
 - k) the location of any gravel pit or borrow pit proposed to be created or used in the operation.
2. The operational map is to clearly distinguish between any existing roads, bush tracks and fire trails and any roads, bush tracks and fire trails proposed to be constructed in the operation. Further, the operational map is to indicate, in relation to each existing road, bush track and fire trail shown on the map, whether:
 - a) it is proposed to use the road, track or trail in the operation, and
 - b) it is proposed to re-open or up-grade or maintain the road, track or trail in the operation.

(The names shown on the map for roads are to be the same as the names used for those roads in the other sections of the site specific operational plan of which the map forms a part.)

Note: See also clause 79 in Chapter 1 which requires the operational map to indicate which roads, bush tracks and fire trails are proposed to be used in the operation concerned. (Schedule 3 summarises the

matters or information that must be included on an operational map under various provisions of this approval.)

A road, bush track or fire trail is not required to be shown on the operational map if its total length is no more than 40 metres.

231. Additional details for logging operations and road works in monthly advice

The monthly advice required to be given to DECCW and DII (Fisheries) under Part 1.4 is to contain the following additional information in relation to proposed logging operations and ancillary road construction included in the advice:

- a) the event ID for the operation,
- b) if the operation is a logging operation, the total length of existing roads and bush tracks proposed to be used in the operation,
- c) the total length of any roads or bush tracks proposed to be constructed, re-opened or upgraded in, or in connection with, the operation,
- d) the number of drainage feature crossings proposed to be constructed in, or in connection with, the operation,
- e) if the operation is a logging operation, the number of drainage depression or wetland depression crossings proposed to be used in the operation.

232. Retaining written records of matters relevant to planning forestry operations

1. In addition to the records required to be made and kept under Chapter 5, Forests NSW must ensure that a written record of the following is kept (for at least 4 years):
 - a) any design calculation or other assessment for the purpose of clause 262 to determine whether a culvert crossing will contain the peak flow from a floodplain level flow,
 - b) any calculation of the cross-sectional area under a bridge or through a culvert for the purpose of clause 261 or 262 respectively.
2. Any approval given by Forests NSW for the purposes of Chapter 5 is to be kept for at least 4 years.
3. A copy of a written record or approval referred to in this clause is to be provided to DECCW or DII (Fisheries) if requested.

PART 4.3 – REGISTERS, REPORTS AND OTHER RECORD KEEPING REQUIREMENTS FOR PURPOSES OF EPL

Note: The provisions of this Part are terms of the licence under the *Protection of the Environment Operations Act 1997* only. Accordingly, they apply only in relation to logging operations and ancillary road construction.

Division 1 – Interpretation

233. Interpretation

In this Part, a reference to the EPL is a reference to the terms of the licence under the *Protection of the Environment Operations Act 1997* set out in this approval.

Division 2 – Registers, records and notifications to DECCW regarding compliance

234. Complaints register

1. Forests NSW must keep a register of complaints (made to or received by any of its offices for the Riverina Region) that:
 - a) water pollution has resulted (or may have resulted) from the carrying out of a logging operation or ancillary road construction in the Region, or
 - b) a term of the EPL has been (or may have been) breached in, or in relation to, carrying out a logging operation or ancillary road construction.
 - c) The register must include the following details in relation to each complaint:
 - d) date on which complaint was made,
 - e) how the complaint was made (for example, in person or by phone, letter or Email),
 - f) name, address and telephone number of the complainant or other contact person (if such details were provided by the complainant),
 - g) name of member of staff to whom the complaint was made (if made in person or by phone) or to whom the complaint was addressed (if made by letter or by Email),
 - h) any action taken by Forests NSW in relation to the complaint (including any follow-up contact with the complainant or other contact person).
 - i) The register must also include the following details if provided by the complainant:
 - j) if the complaint is that water pollution has resulted (or may have resulted) from a logging operation or ancillary road construction:
 - k) the location of the source of the pollution,
 - l) the location of the water that has been or may have been polluted, and
 - m) the substance (and its quantity) that has caused or may have caused the pollution, and
2. if the complaint is that a term of the EPL has been (or may have been) breached in carrying out a logging operation or ancillary road construction, the location of the operation (by including, if known to the complainant, the name of the State forest and the compartment number) and the term allegedly breached.

235. Compliance register

1. Forests NSW must keep a register relating to breaches of the terms of the EPL (in carrying out logging operations and ancillary road construction).
2. The register must include the following details in relation to each breach (in so far as these details can be provided, given the nature of the breach):
 - a) the date on which the breach occurred,
 - b) the nature of the breach (identifying the term of the EPL that was breached, by referring to the relevant clause or clauses of this approval),
 - c) the duration of the breach,

- d) the date on which Forests NSW became aware of the breach,
 - e) the location of the breach (by marking the operational map for the operation concerned or by giving the grid co-ordinates),
 - f) the reasons for the breach,
 - g) whether the breach resulted in water pollution,
 - h) any action taken by Forests NSW or other person to remedy the breach and the dates on which it was taken,
 - i) any measures taken or proposed to be taken by Forests NSW to prevent the breach recurring or to mitigate the effects of such a breach,
 - j) any action taken by Forests NSW against members of staff, licensees or contactors or agents and when any such action was taken.
3. Details relating to a breach must be included on the register within 14 days of Forests NSW becoming aware of the breach.

236. Notification and reports of pollution incidents causing or threatening material harm to the environment

1. In this clause:

authorised officer means an authorised officer appointed by the Environment Protection Authority under the *Protection of the Environment Operations Act 1997*;

material harm to the environment and **pollution incident** have the same meanings as in the *Protection of the Environment Operations Act 1997*; and

relevant information about a pollution incident means the information set out in section 150 of the *Protection of the Environment Operations Act 1997*.

- 2. If a pollution incident occurs in the course of a logging operation or ancillary road construction so that material harm to the environment is caused or threatened, Forests NSW (and any other person) may, for the purpose of fulfilling a duty to notify under section 148 of the *Protection of the Environment Operations Act 1997*, telephone DECCW's Environment Line service on 131 555 or any other officer of DECCW nominated by the Director-General of the Department of Environment, Climate Change and Water for this purpose.
- 3. Written notification of the pollution incident (and all relevant information about it or the information set out in subclause (5)) must also be provided to DECCW, within 7 days of Forests NSW becoming aware of the incident.
- 4. If an authorised officer (with reasonable grounds for suspecting that such a pollution incident has occurred) requires Forests NSW, by written notice, to give DECCW a written report on the suspected incident, Forests NSW must do so within the time specified in the notice.
- 5. The written report is to include such of the following information as is specified in the notice that Forests NSW is able to provide:
 - a) the time, date, nature, duration and location of the incident,
 - b) the location of the place where pollution is occurring or is likely to occur,
 - c) the nature, the estimated quantity or volume and the concentration of any pollutants involved,
 - d) the circumstances in which the incident occurred (including the cause of the incident, if known),

- e) contact details of any person who witnessed the incident,
 - f) any action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution (including any follow-up contact with any complainant in relation to the incident),
 - g) any measures taken or proposed to be taken by Forests NSW to prevent the breach recurring or to mitigate the effects of such a breach.
6. Forests NSW must make all reasonable inquiries to enable it to provide the information specified in the written notice. An authorised officer may require, by further notice in writing to Forests NSW, additional information if not satisfied with the report provided. Forests NSW is to provide that information (if able to do so) within the time specified in the notice.
 7. This clause applies only to the extent that it is not inconsistent with any regulation made under the *Protection of the Environment Operations Act 1997* prescribing the manner and form of notifying a pollution incident under section 148 of the Act.

237. Records relating to logging operations and ancillary road construction

1. Forests NSW is to ensure that records are kept of the following dates in relation to logging operations and ancillary road construction:
 - a) date on which works relating to a bridge (as referred to in clause 261) are completed if soil stabilisation measures are required after that date,
 - b) date on which works relating to a culvert crossing (as referred to in clause 262) are completed if soil stabilisation measures to protect a fill batter surrounding the culvert are required after that date,
 - c) dates on which a causeway is inspected to assess its stability for the purpose of clause 263,
 - d) the date on which the bed or bank of a drainage feature is disturbed by removal of spoil or tree debris if re-shaping and soil stabilisation measures are required after that date (as referred to in clause 266).
2. It is sufficient compliance with this clause if the supervising forestry officer for an operation makes notes of the matters referred to in this clause in his or her work diary for the operation, and that diary is retained.

Division 3 – Special EPL annual return

238. Special annual return to be given to DECCW

1. In addition to the annual report required to be prepared under Chapter 1, Forests NSW is to prepare and give to DECCW an annual return relating to logging operations and ancillary road construction regulated by the terms of the EPL.
2. An annual return is to be prepared in respect of each calendar year. The first year with respect to which an annual return must be prepared is the first full calendar year after the commencement of this approval. However, that return is also to relate to logging operations and ancillary road construction undertaken in the remainder of the year immediately following the commencement of this approval.
3. An annual return is to comprise:
 - a) a statement of compliance in accordance with clause 239, and

- b) an operational and complaints summary in accordance with clause 240, and
- c) a compliance summary in accordance with clause 241 (if required).

239. Contents of statement of compliance

The statement of compliance that must be included in a return for a year is a statement as to whether any term of the EPL has been breached in, or in relation to, the carrying out of a logging operation or ancillary road construction in the year.

240. Operational and complaints summary

The operational and complaints summary that must be included in a return for a year is a summary of the following:

- a) details given in each monthly advice for logging operations and ancillary road construction commenced or continued in that year,
- b) details of each complaint made in that year and entered on the complaints register under clause 234,
- c) Forests NSW's assessment of the efficacy of the terms of the EPL in protecting water quality,
- d) Forests NSW's response to any information provided to Forests NSW by DECCW regarding the results of an audit by DECCW of compliance with the terms of the EPL, including details of any improvements made by Forests NSW to its systems and practices to safeguard against any breach of a term recurring.

241. Compliance summary

If the statement of compliance under clause 239 identifies a term or terms of the EPL that have been breached in the relevant year, a compliance summary must be included in the annual return. The compliance summary must specify the approximate number of breaches that have occurred, as recorded in the compliance register kept under clause 235.

242. Certification of annual return by senior officer of Forests NSW

A return for a year is not to be forwarded to DECCW unless it has first been certified as correct by a senior officer of Forests NSW on behalf of Forests NSW.

243. When must annual return be forwarded to DECCW?

A return for a year must be forwarded to DECCW within 60 days of the end of the year by registered post and by Email.

CHAPTER 5: PROTECTION OF WATER AND THE AQUATIC ENVIRONMENT FROM POLLUTION – OPERATIONAL MATTERS

(Terms of licences under the *Protection of the Environment Operations Act 1997* and Part 7A of the *Fisheries Management Act 1994*)

PART 5.1 – GENERAL

244. Application of Chapter

1. This Chapter sets out terms of the licence under the *Protection of the Environment Operations Act 1997* as described in clause 7. To the extent to which the provisions are terms of that licence, they apply to (and in relation to) the forestry operations described in that clause, namely logging operations and ancillary road construction.
2. The following provisions of this Chapter are also terms of the licence under Part 7A of the *Fisheries Management Act 1994* as described in clause 8. As terms of the licence under Part 7A of the *Fisheries Management Act 1994*, they apply to (and in relation to) the forestry operations described in that clause.
3. A reference to a **forestry operation** in this Chapter is to be construed according to whether the provision in which the reference occurs is being applied as a term of the licence under the *Protection of the Environment Operations Act 1997* or as a term of the licence under Part 7A of the *Fisheries Management Act 1994*.

245. Interpretation of Chapter

1. In this Chapter:
road works means the construction, re-opening, up-grading or maintenance of a road to enable or assist in the carrying out of forestry operations;
works relating to a crossing of a wetland depression means maintaining a crossing (being a crossing that exists when this approval commences) of a wetland depression (whether or not it has an exclusion zone shown on the Riverina Forests Drainage Protection Map) to enable or assist in the carrying out of forestry operations; and
works relating to a drainage feature crossing or **works relating to a crossing of a drainage feature** means constructing, re-opening, up-grading or maintaining a crossing of a drainage feature to enable or assist in the carrying out of forestry operations.
2. The duration of a forestry operation, for the purposes of this Chapter, is the period between:
 - a) the date specified by Forests NSW in a monthly advice as the date on which the operation commenced, and
 - b) the date specified by Forests NSW in a monthly advice as the date on which the operation was completed, if these dates are specified in the relevant advices.
3. For the purposes of a prohibition or restriction in this Chapter on the doing of any thing without the approval of Forests NSW (however expressed), the

approval of Forests NSW may be given by the supervising forestry officer for the relevant operation or a more senior member of staff of Forests NSW.

246. Site specific measures to be developed to prevent water pollution

1. If it becomes apparent to Forests NSW (whether before or during the carrying out of a forestry operation) that compliance with any requirement of this Chapter will not, in the circumstances, effectively and efficiently protect the aquatic environment from pollution or is not practical, Forests NSW is to develop instead site specific measures to effectively and efficiently protect the aquatic environment from pollution.
2. Forests NSW is to make and keep a written record of the measures it develops under subclause (1), clearly identifying the area to which they apply. The record must also identify the requirement of this Chapter that is not to apply to the operation concerned and explain how the site specific measures proposed instead will achieve the objective referred to in subclause (1).
3. Forests NSW is to ensure that the measures are implemented in the area for which they are developed in carrying out the relevant forestry operation.
4. If the site specific measures developed under subclause (1) are implemented, the relevant requirement of this Chapter no longer applies to the operation concerned.

247. Circumstances preclude compliance with specified time frame

1. Forests NSW (and any other person carrying out operations to which this approval applies) is not in breach of a provision of this Chapter merely because of a failure to do something within a time specified in the provision if Forests NSW (or other person) has a reasonable excuse for the failure.
2. Subclause (1) applies only if Forests NSW ensures that a written record of the reasons for the failure is made and kept (for 4 years).
3. Forests NSW must ensure that the thing required to be done by the relevant provision of this Part is done as soon as practicable, even though Forests NSW (or other person) has a reasonable excuse for failing to do the thing in the time specified in the provision.

248. Training in sediment control and prevention of water pollution and soil erosion

Forests NSW must ensure that persons involved in the carrying out or planning of logging operations and ancillary road construction in Riverina State forests (including any person who holds an operator's licence issued under regulations made pursuant to the *Forestry Act 1916*) have completed a course in sediment control and prevention of water pollution and soil erosion, being a course that:

- a) has been accredited by the NSW Vocational Education and Training Accreditation Board (constituted by the *Vocational Education and Training Act 2005*), and
- b) is delivered by a registered training organisation within the meaning of the *Vocational Education and Training Act 2005*.

PART 5.2 – CONSTRUCTION OF ROADS ETC

249. Marking proposed roads in the field

Before commencing work to construct a road, the route of the proposed road must be marked in the field.

250. Construction of roads in vicinity of drainage protection area

A road may not be constructed within a drainage protection area except in accordance with Chapter 2.

251. Disturbance of soil and clearing vegetation to be minimised

Disturbance of soil, and clearing of vegetation, outside the road prism must be minimised during road works.

252. Roads – blading-off

1. In this clause, **blading-off** in relation to a road means the removal of surface soil from the road in wet conditions in order to expose a drier or firmer surface for use by machinery.
2. The blading-off of a road may not be carried out unless Forests NSW has first assessed and approved it in the form set out in Part 3 of Schedule 4. Forests NSW may approve blading-off only if any damage to the road surface and road drainage structures can be repaired.
3. Any soil removed in blading-off must be stockpiled (in a recoverable position) and respread on the road surface on the completion of the forestry operation concerned. Any damage to the road's drainage structures must be repaired.
4. Forests NSW must create and keep a written record of the date on which, and the location at which, blading-off occurs and the reasons why it was approved.
5. Blading-off may not be carried out on an extraction track or bush track.

PART 5.3 – DRAINAGE OF ROADS, BUSH TRACKS AND EXTRACTION TRACKS

253. When (and to what) does this Part apply?

1. This Part applies to any road, bush track, extraction track and fire trail within a compartment or other tract of land that is used for the purposes of a logging operation:
 - (a) that is undertaken in that compartment or other tract of land, and
 - (b) for which a site specific operational plan is required.
2. This Part also applies to a road, bush track or extraction track that is constructed (or created), re-opened or up-graded in a compartment or other tract of land for the purpose of, or in the course of, a forestry operation, if a site specific operational plan is required to be prepared for the works concerned (whether or not as part of the other forestry operation).
3. The requirements of this Part have effect only during the logging operation referred to in subclause (1) or during the construction, re-opening or up-grading of the road, bush track or extraction track referred to in subclause (2), except as otherwise provided in this Part. The requirements of this Part have no operation during any period in which the logging operation or the works

relating to the road, bush track or extraction track are suspended in the compartment or other tract of land concerned.

4. A reference in this Part to the relevant forestry operation, in connection with a road, bush track, extraction track or fire trail, is a reference to the logging operation referred to in subclause (1) in which the road, track or trail is used or to the construction, reopening or up-grading of the road, bush track or extraction track referred to in subclause (2).
5. A reference in this Part (other than in this clause) to:
 - (a) an extraction track includes a reference to a fire trail to which this Part applies, in the case of a fire trail that is used in the relevant logging operation as an extraction track, and
 - (b) a road includes a reference to a fire trail to which this Part applies, in any other case in which a fire trail is used in the relevant logging operation.

PART 5.4 – DRAINAGE FEATURE CROSSINGS

254. Application of Part and relationship with Chapter 2

1. Nothing in this Part affects any restriction on the construction, re-opening or up-grading of roads, bush tracks, extraction tracks or fire trails, or any restriction on removal of timber, within or through drainage protection areas, imposed by Chapter 2. The requirements and restrictions of this Part are additional to those in Chapter 2.
2. To avoid doubt, this Part does not apply to works relating to a fire trail or to a crossing of a drainage feature or a wetland by a fire trail carried out solely for the purpose of emergency fire fighting or to the use of such a crossing during emergency fire fighting.

255. No construction of crossing unless approved by Forests NSW

1. A crossing of a drainage feature may be constructed, for the purpose of enabling or assisting the carrying out of forestry operations, only if:
 - (a) it is a bridge, culvert crossing or causeway, and
 - (b) Forests NSW has first approved (in writing) its location and its type.
2. A gully stuffer (including a gully stuffer made out of logs) must not be constructed.
3. In this clause, ***gully stuffer*** means a crossing by a road or track of a drainage feature that is made by filling the drainage feature with trees, tree debris, spoil, soil, rock or other material to the level of the road or track.

256. Permissible types of drainage feature crossings

A crossing of a drainage feature by a road, bush track, extraction track or fire trail may be used in a forestry operation only if:

- (a) it consists of a stable structure, namely, a bridge, culvert crossing or causeway, and
- (b) its pavement consists of a stable natural surface or an erosion resistant material.

257. Drainage feature crossing to be constructed at right angles to feature

1. A crossing of a drainage feature may be constructed for the purpose of enabling or assisting the carrying out of forestry operations only at (or as close as practicable to) right angles to the drainage feature unless an angled approach reduces soil disturbance.
2. Vegetation may be cleared, for the purpose of works relating to a drainage feature crossing, only at (or as close as practicable to) right angles to the water flow unless an angled approach reduces soil disturbance.

258. Disturbance to bed and banks to be minimised

Disturbance to the bed and banks of a drainage feature must be minimised when carrying out works relating to a crossing of the drainage feature or the wetland.

259. Stable drainage feature cross section

Any works relating to a crossing of a drainage feature must be carried out in such a way that a stable cross section of the drainage feature or the wetland results.

260. Vegetation disturbance restricted

1. When carrying out works relating to a crossing of a drainage feature, or its associated road, bush track, extraction track or fire trail, vegetation in the drainage protection area for the drainage feature or the buffer strip that is more than 5 metres upstream or downstream from the crossing or road, track or trail must not be disturbed or cleared.
2. Despite subclause (1), vegetation that is more than 5 metres upstream or downstream of the crossing or the road, track or trail may be cleared or disturbed, if this is necessary for carrying out the works and Forests NSW has first assessed and approved of the clearing or disturbance in the form set out in Part 3 of Schedule 4.

261. Bridges

1. Any bridge that is constructed (including any bridge that replaces an existing bridge) during the term of this approval (for the purpose of enabling or assisting the carrying out of forestry operations) must be designed and constructed so that the cross-sectional area of the opening under the bridge never reduces by more than 10% the cross-sectional area of the drainage feature, up to the level of the surrounding floodplain at the site of the bridge if the bridge had not been in place.
2. If soil or gravel is used as the pavement of a bridge over a drainage feature in relation to which works are carried out or that is used in a forestry operation, Forests NSW must ensure that structures are in place to prevent the soil or gravel from entering the drainage feature during the works or during the operation.

262. Culverts

1. This clause applies to a culvert crossing that is constructed or installed across a drainage feature during the term of this approval for the purpose of enabling or assisting the carrying out of forestry operations, including any culvert crossing in which the culvert is replaced during the term of this approval or that wholly replaces a crossing that was in place before this approval commenced.
2. Forests NSW must ensure that a culvert in a culvert crossing to which this clause applies is designed and constructed so that cross-sectional area of the

- opening through the culvert never reduces by more than 10% the cross-sectional area of the drainage feature, up to the level of the surrounding floodplain, at the site of the crossing if the culvert crossing had not been in place.
3. Forests NSW must ensure that a culvert crossing to which this clause applies (including the culvert) is designed and constructed so as to withstand the peak flow from a floodplain level flow.
 4. Forests NSW must ensure that a base of a culvert in a crossing to which this clause applies is designed and constructed so the upper surface of the base varies by no more than 100 mm from the invert level of the drainage feature, both upstream and downstream of the culvert. When maintenance is being carried out on the base, Forests NSW must ensure that the base continues to comply with this requirement.
 5. Forests NSW must ensure, whenever maintenance is being carried out on a culvert crossing to which this clause applies or it is being up-graded, that the crossing will continue to withstand the peak flow from a floodplain level flow.
 6. Forests NSW must also ensure that the maintenance or upgrading does not result in the cross-sectional area through the culvert ever reducing by more than 10% the cross-sectional area of the drainage feature at the site of the crossing if the culvert crossing had not been in place.
 7. If works are carried out to construct, up-grade or maintain a culvert crossing to which this clause applies and an upstream or downstream fill batter surrounding the culvert is unstable or unvegetated, soil stabilisation measures must be taken to protect the batter. The measures must be completed within 10 days of the works.
 8. During any works to construct, up-grade or maintain a culvert crossing to which this clause applies, Forests NSW must ensure that the culvert discharges so that scouring of the outlet of the pipe does not occur.
 9. Any work to recover (or remove) a culvert (whether or not part of a crossing to which this clause applies) or remove any associated soil fill of the crossing must be carried out in a manner that minimises disturbance to the bed and banks of the drainage feature concerned.

263. Causeways

1. Forests NSW must ensure that any causeway that is constructed (including a causeway that replaces an existing causeway) during the term of this approval (for the purpose of enabling or assisting the carrying out of forestry operations) must be designed and constructed so that the upper surface of the causeway varies by no more than 100 mm from the invert level of the drainage feature, both upstream and downstream of the causeway. When any maintenance is being carried out on the causeway, Forests NSW must ensure that the causeway continues to comply with this requirement.
2. If a causeway across a drainage feature is used in a forestry operation (for which a site specific operational plan is required), it must be inspected during that operation to assess its stability.
3. If an inspection shows that the causeway is eroding, then it must be replaced, or the causeway surface must be armoured with a stable natural surface or a non-erosive material, within 10 days of the inspection.

PART 5.6 – MISCELLANEOUS

264. Wet weather restrictions

1. An extraction track must not be used in a logging operation if one or more ruts with a depth of 20cm below natural ground level and a length of 10 metres are present on the extraction track.
2. A log dump may not be used if one or more ruts 25cm deep and 10m long are present.
3. A natural surface road or a bush track must not be used if there is active run-off from the road or bush track surface or table drains. However, a haulage vehicle may be driven out of the compartment or other tract of land concerned, if unloaded or only partially loaded with timber. (A “natural surface road or bush track” means a road or bush track that is unsealed or not gravelled).
4. Mechanical felling or processing may not occur when harvesting machinery creates one or more ruts with a depth of 20cm below natural ground level and a length of 10 metres.

265. Walkover techniques to be used in timber extraction

As far as practicable:

- a) walkover techniques must be used during the extraction of timber in a logging operation (so as to prevent the removal of and minimise disturbance to the natural groundcover), and
- b) groundcover must be retained on the surface of any extraction track used in the logging operation.

266. Tree debris and spoil management generally

1. Any spoil or tree debris that results from a forestry operation must not be deposited in a drainage protection area.
2. However, if any such spoil or tree debris is deposited in a drainage protection area, then it must be removed, and it must be removed in a manner that avoids or minimises disturbance to the bed and banks of any drainage depression or wetland depression.
3. If the removal of spoil or tree debris disturbs the bed or a bank of a drainage depression or wetland depression, then the disturbed area must be re-shaped and soil stabilisation measures must be taken to achieve a stable cross section.
4. Re-shaping and soil stabilisation measures, for the purpose of subclause (3), must be completed within 5 days of the disturbance unless the soil is saturated.
5. If the soil is saturated, then machinery must not enter or be operated within the disturbed area, for the purposes of re-shaping it and stabilising the soil. However, temporary soil stabilisation measures must still be taken within 5 days of the disturbance. Re-shaping of the bed or bank of the drainage depression or wetland depression, and permanent soil stabilisation measures, must be completed as soon as practicable when the soil is no longer saturated.

267. Storage and handling of hazardous substances

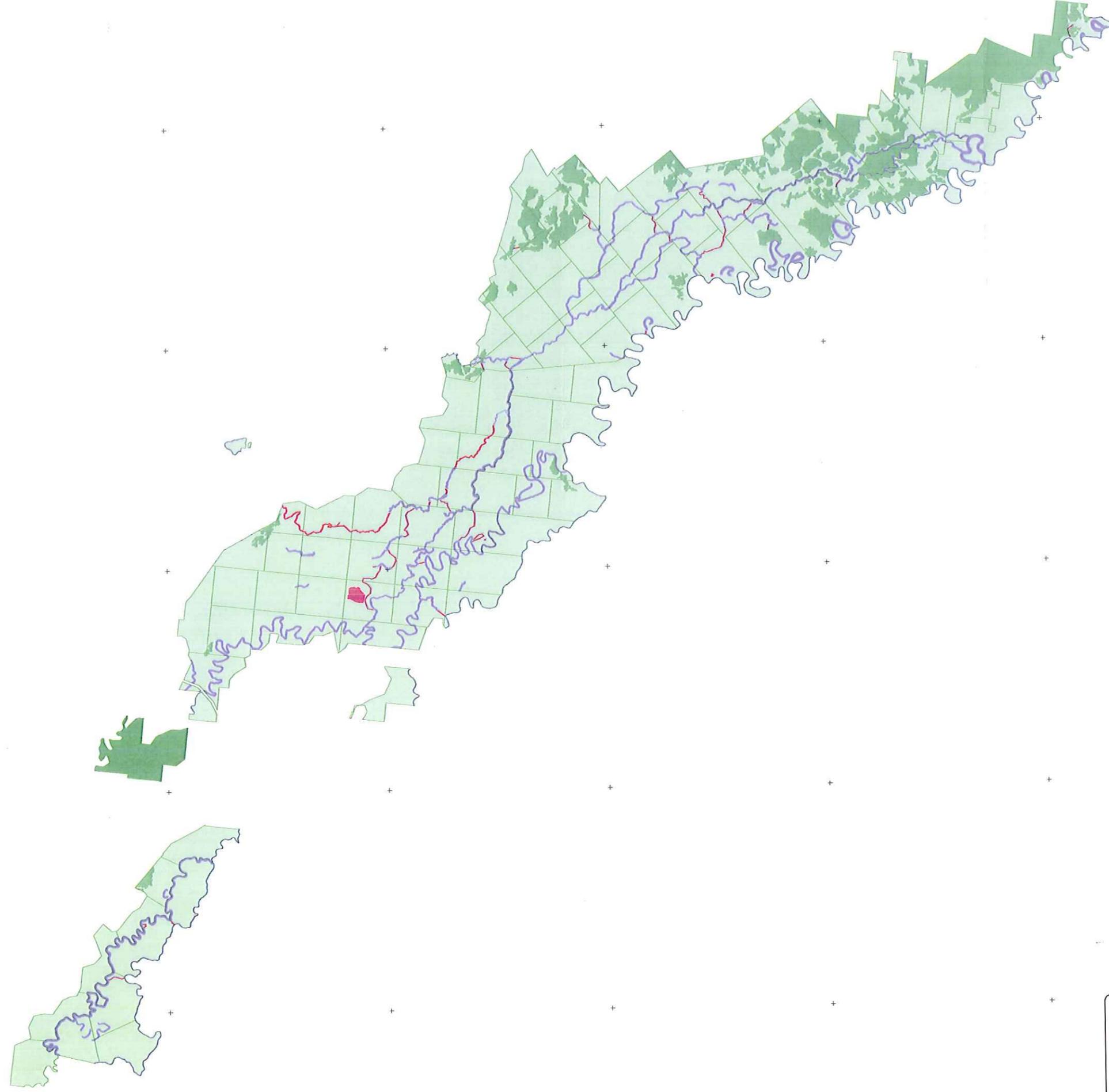
1. Any chemicals used in a forestry operation must be stored and handled in compliance with the requirements of AS 1940 (as in force from time to time) being the Australian standard entitled "The storage and handling of flammable and combustible liquids".
2. A mobile fuel tank (for use in a forestry operation) must not be located within, or within 10 metres of the boundary of, a drainage protection area.
3. The transportation and storage of fuel for use in a forestry operation, and the refuelling of equipment for an operation, must be carried out in a manner that prevents the pollution of water.
4. All servicing and repairs of equipment, during a forestry operation, must be carried out in a manner that prevents the pollution of surface and ground water.

268. Disposal of waste

1. In this clause, waste includes tyres, drums, wire rope, sump oil and litter, but does not include forest or logging debris or spoil.
2. Waste from a forestry operation in a compartment or other tract of land must be removed from the compartment or tract within 10 days of the completion of the operation and disposed of in a proper and efficient manner, at an appropriate facility. In particular, it must not be buried or otherwise deposited within a State forest or other Crown-timber lands.
3. Until such waste is removed from the compartment or other tract of land, it must be stored properly.

**SCHEDULE 1 – RIVERINA FORESTS DRAINAGE
PROTECTION MAP**

Riverina Forests Drainage Protection Map (Koondrook/Pericoota FMZ - Drainage & Linkage Protection Map)



Legend

- Linkage Protection Zones
- Buffer Strips
- Compartments

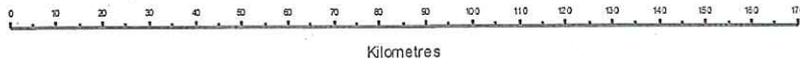
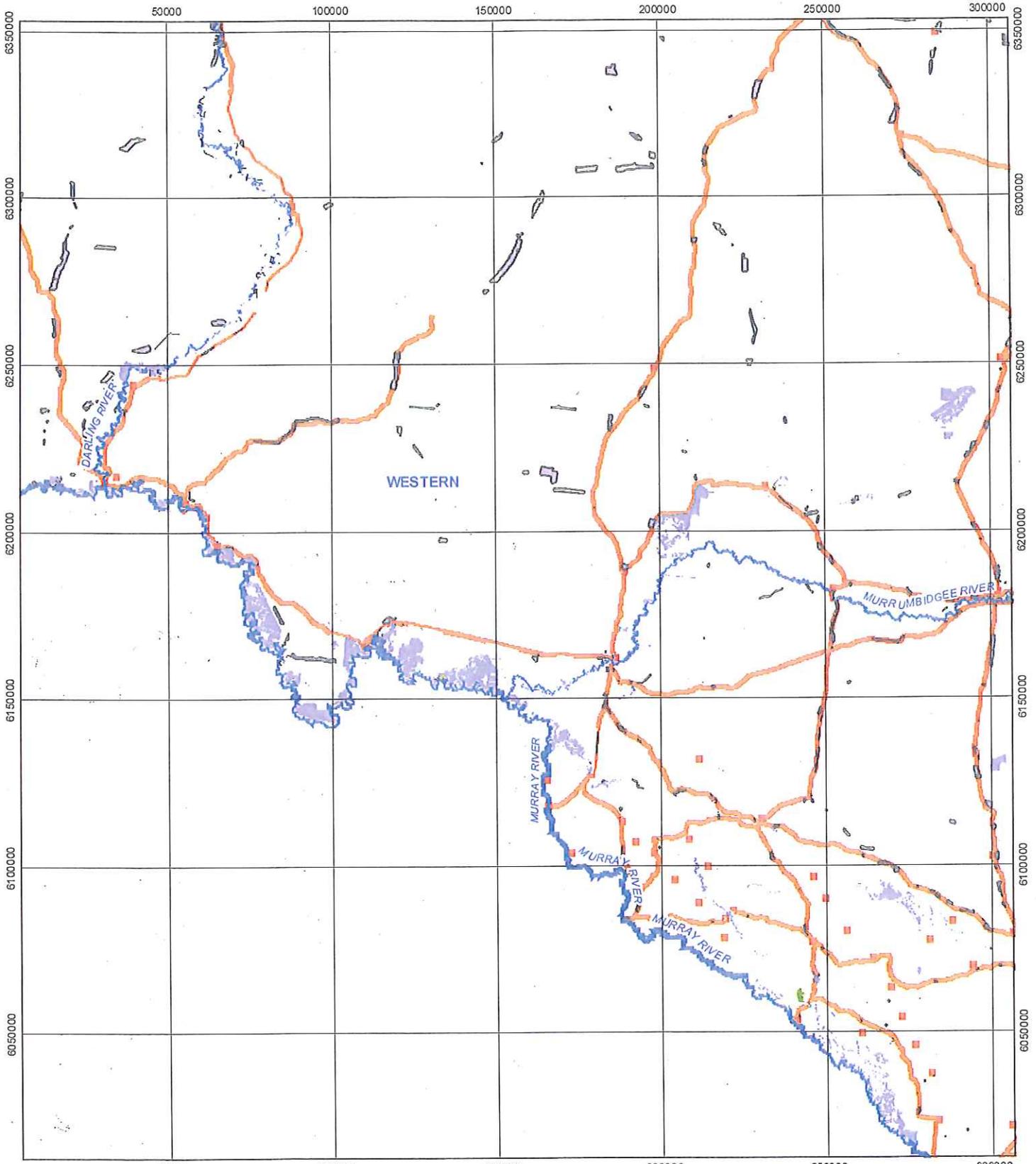
Koondrook_FMZ

- Dominant, Minor
- Flora, N/A
- Flora, Wildlife (Fauna)
- Tourism/Recreation, N/A
- Wildlife (Fauna), Flora
- Koondrook_FMZ

Koondrook/Pericoota FMZ

- Special Protection (Zone 1)
- Special Management (Zone 2)
- Damage Protection (Zone 3A)
- Special Prescription (Zone 3B)
- General Management (Zone 4)
- Hardwood Plantations (Zone 5)

RIVERINA DRAINAGE FEATURE PROTECTION MAP - CROWN TIMBER LANDS



Legend

- Localities
- Main Roads
- Drainage (rivers)
- Travelling Stock Reserves
- NF Region Boundary
- Special Protection (Zone 1)
- Special Management (Zone 2)
- Harvesting Exclusion (Zone 3A)
- Special Prescription (Zone 3B)
- General Management (Zone 4)
- Hardwood Plantations (Zone 5)
- Softwood Plantations (Zone 6)
- Non-forestry use (Zone 7)

This map is produced on the Geodetic Datum of Australia 1994 (GDA 94)
Map Grid of Australia (MGA) - Zone 55

SCHEDULE 2 – AREAS PROJECTED TO BE WETTER



CAMPBELLS ISLAND - SITE QUALITY MAP



Roads

- Existing - natural surface
- Proposed - natural surface
- Crossings
- Water Courses/Drainage Lines
- Drainage
- Debris Free Runnels/Lagoons

Harvest Area

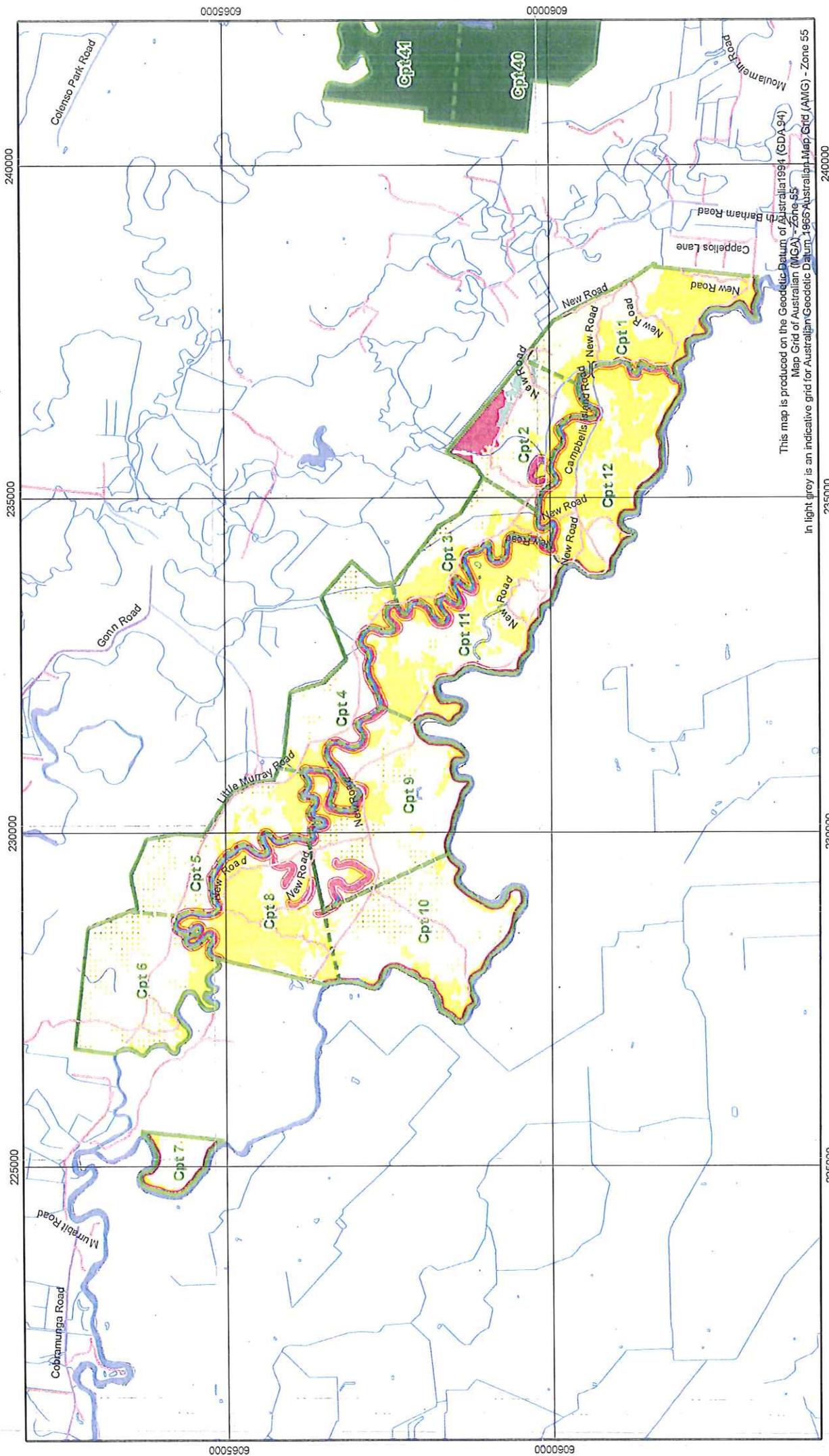
- Red Gum SQ1
- Red Gum SQ2
- Red Gum SQ3
- Red Gum/Box
- Boundaries
- Compartments
- State Forest Boundary

Non-Harvest Area

- Special Protection (FMZ 1)
- Special Management (FMZ 2)
- Harvesting Exclusion
- Box
- Open Plain or Swamp
- Modified Harvest Area
- Special Prescription (FMZ 3B)
- Habitat Corridor/Buffer

Features

- Biodata
- Atlas Fauna
- Atlas Flora
- Cultural Heritage Points
- Inventory Plot
- Permanent Growth Plot
- Research Plot
- Non-Indigenous Heritage Point



This map is produced on the Geodetic Datum of Australia 1994 (GDA 94)
 Map Grid of Australia (MGA) - Zone 55
 1965 Australian Map Grid (AMG) - Zone 55

In light grey is an indicative grid for Australian Geodetic Datum 1965

SCHEDULE 3 – OPERATIONAL MAP FOR FORESTRY OPERATION

This Schedule contains a “check-list” of matters that are to be represented or indicated on an operational map for a forestry operation for which a site specific operational plan is required. It is for assistance only, and does not form part of the approval.

Part 1.3 requires a site specific operational plan to be prepared for certain forestry operations before carrying out those operations. An operational map is part of a site specific operational plan. Clause 79 sets out general requirements for the operational map. In addition, Chapters 2, 3 and 4 require specific features or other things relevant to compliance with the terms of each licence set out in the approval to be shown or indicated on the map.

The following “check-list” is a summary of the general requirements relating to the operational map in Chapter 1 and the more specific requirements of the subsequent Chapters.

The operational map for a forestry operation is to represent, include or indicate the following:

Chapter 1

Clause

1. location of the forestry operation (including, if within State forest, the name of the relevant State forest and compartment number or numbers),
2. any area (known at the time of preparation of the map) in which the forestry operation is prohibited or restricted under the approval or is not to be carried out (for example, because it constitutes an endangered ecological community or critical habitat within the meaning of the *Threatened Species Conservation Act 1995*),
3. scale bar
4. grid co-ordinates (showing eastings and northings),
5. contour lines,
6. any compartment boundaries,
7. any State forest boundary (within the geographic area represented on the map),
8. name and location (if known) of any creeks or mountains,
9. a title, with reference to the relevant State forest name and compartment number or numbers (in the case of State forest),
10. a reference to the applicable topographic map sheet names and numbers,
11. a map legend to enable each type of feature or area marked on the map to be correctly identified,
12. (if greater than 40 metres) roads, fire trails and bush tracks (including any proposed to be constructed or created), with an indication of which roads, trails and tracks are proposed to be used in the forestry operation concerned,

Chapter 2

13. location of any drainage area protection zones (clause 104)
14. location of any linkage protection zones (clause 105)
15. any wetland depression or drainage depression for which no exclusion zone is shown on the Riverina Forests Drainage Protection Map (clause 106)

Chapter 3

(FNSW is required to show or indicate the following only if it knows of their existence within the compartment or other tract of land at the time of preparation of the map)

16. location of any record of a species to which a species protection zone relates (and the boundaries of any such protection zone),
17. nests and roosts of birds of the species referred to in clause 198,
18. bat tree roosts as referred to in clause 199,
19. glider sap feed trees within the meaning of clause 181,
20. trees containing raptor nests,
21. nests (other than mud nests) of any species of bird that is protected fauna,
22. evidence of species listed in clause 140 (a), (b) or (c),
23. location of silver wattle *Acacia rivalis*
24. location of exocarpos,
25. location of solanum (in the Western Lands Leases)
26. location of Yellow Gum *E. leucoxylon*
27. endangered ecological communities.

Chapter 4

Existing roads (if greater than 40 metres)

28. location of any existing natural surface roads, bush tracks and fire trails,
29. location of any existing sealed or gravelled roads,
30. names of any existing roads (if available),

New roads (if greater than 40 metres)

31. location of any natural surface roads, bush tracks and fire trails proposed to be constructed, created, re-opened or up-graded in the forestry operation,
32. location of any sealed or gravelled roads proposed to be constructed or up-graded in the forestry operation,
33. names of any proposed roads (if available),

Drainage feature and wetland crossings

34. location of any drainage feature crossings (by roads, bush tracks or fire trails),
35. if the forestry operation is a logging operation, approximate location of any drainage feature crossing by an extraction track.

Log dumps, borrow pits, gravel pits

36. if the forestry operation is a logging operation, location of any existing or proposed log dump (other than a log landing) or any gravelled loading bay, proposed to be constructed or used in the operation,
37. if the forestry operation is a logging operation, location of any log landing proposed to be constructed or used in the operation or the areas along relevant roads where they may not to be constructed,
38. location of any gravel pit or borrow pit proposed to be created or used in the forestry operation.

The operational map is to clearly distinguish between any existing roads, bush tracks and fire trails and any roads, bush tracks and fire trails proposed to be constructed in the operation. Further, the operational map is to indicate in relation to each existing road, bush track and fire trail shown on the map whether:

- (a) it is proposed to use the road, track or trail in the operation,
- (b) it is proposed to re-open or up-grade or maintain the road, track or trail in the operation.

SCHEDULE 4 – PROPOSED OPERATIONS REQUIRING ASSESSMENT AND APPROVAL

Part 1 – Proposed Operations Requiring Regional Managers Approval

The field assessment to determine the suitability of the proposal must be undertaken by a suitably qualified person. This assessment forms part of the Operations Register.

Event ID (if applicable)	Operational plan code	State Forest OR Other identifier (if not SF – eg county parish, lot DP, etc)	Compartment OR other identifier (eg property, lease)	Location/s (grid reference/s) <i>shown on attached operational map</i>	Datum: <input type="checkbox"/> AMG 66 <input type="checkbox"/> MGA 94

Activity requiring this report <i>Tick the boxes relevant to the proposed action</i>	Relevant IFOA clause
<input type="checkbox"/> maintain a dam / tank (<i>attach the report required by the IFOA</i>)	
<input type="checkbox"/> construct / <input type="checkbox"/> re-open / <input type="checkbox"/> upgrade A <input type="checkbox"/> road / <input type="checkbox"/> bush track / <input type="checkbox"/> fire trail <i>through</i> : <input type="checkbox"/> a drainage protection area AND / OR <input type="checkbox"/> remove (by snig/forward) timber [<i>including</i> <input type="checkbox"/> construct, create or re-open an extraction track before it can be removed] <i>through</i> (with no TSp record on the route): <input type="checkbox"/> FMZ 2 or 3A <input type="checkbox"/> EEC <input type="checkbox"/> any other ESA	
Quantity of product that would otherwise be inaccessible: about m ³ /t	

Dimensions of the area of protection zone or ESA that will be affected by the activity Other explanation / details are <input type="checkbox"/> attached	Length m x Width m	<i>Tick the boxes relevant to the proposed action</i>
For construct/open/upgrade a road/track/trail and/or remove timber (including extraction track work) through the zone:	<input type="checkbox"/> There is no practicable alternative route available – an explanation is attached.	
Ameliorative measures to reduce impacts on environment (including threatened species, threatened species habitat or water quality) will include	Application of: <input type="checkbox"/> IFOA conditions, <input type="checkbox"/> Other standard conditions (list is attached). <input type="checkbox"/> The attached site-specific measures.	
Threatened animal species records within 100m of the activity:	<input type="checkbox"/> There are no records. OR <input type="checkbox"/> The attached site-specific measures limit risk to the species.	
Barriers/threats to threatened animal species Other explanation / details are <input type="checkbox"/> attached.	<input type="checkbox"/> The activity is not likely to create a barrier to the movement of threatened animal species. <input type="checkbox"/> The activity is not likely to increase the threats to threatened animal species.	
Habitat features Other explanation / details are <input type="checkbox"/> attached.	<input type="checkbox"/> The activity is not likely to significantly affect important habitat features, such as hollow-bearing trees, waterbodies or threatened species habitat.	
Introduction of pests and weeds Other explanation / details are <input type="checkbox"/> attached.	<input type="checkbox"/> The activity is not likely to increase the presence of pests or weeds. OR <input type="checkbox"/> The attached site-specific measures limit risk posed by possible pests and weeds.	

Prepared

by .. / .. /
 FNSW (date) (signed) (name) (position)

| Authorised

| by .. / .. / Regional Manager
 FNSW (date) (signed) (name) (position)

1	Area of zone or ESA affected _____
2	Confirm the absence of a practicable alternative route _____
3	Specific measures to limit risk to Threatened species, their habitat, and water quality _____
4	Site-specific measures to limit risk to: <i>[include the species and proximity to the activity site]</i> Threatened animal species within 100m _____
5	Barriers/threats to threatened animal species _____
6	Habitat features _____
7	Introduction of pests and weeds _____

Part 2 – Proposed Operations Requiring Assessment and DECCW Approval

The field assessment to determine the suitability of the proposal must be undertaken by a suitably qualified person. This assessment forms part of the Operations Register.

Event ID (if applicable)	Operational plan code	State Forest OR Other identifier (if not SF – eg county parish, lot DP, etc)	Compartment OR other identifier (eg property, lease)	Location/s (grid reference/s) <i>shown on attached operational map</i>	Datum: <input type="checkbox"/> AMG 66 <input type="checkbox"/> MGA 94

Activity requiring this report	Relevant IFOA clause
<p><i>Tick the boxes relevant to the proposed action</i></p> <p><input type="checkbox"/> construct / <input type="checkbox"/> re-open / <input type="checkbox"/> upgrade A <input type="checkbox"/> road / <input type="checkbox"/> bush track / <input type="checkbox"/> fire trail <i>through</i>: <input type="checkbox"/> a drainage protection zone</p> <p>AND / OR <input type="checkbox"/> remove (by snig/forward) timber [<i>including</i> <input type="checkbox"/> construct, create or re-open an extraction track before it can be removed] <i>through</i> (with a TSp record on the route): <input type="checkbox"/> FMZ 2 or 3A</p> <p><input type="checkbox"/> other ESA</p>	
<p><input type="checkbox"/> remove (by snig/forward) timber [<i>including</i> <input type="checkbox"/> construct, create or re-open an extraction track before it can be removed] <i>through</i> species protection zone or other ESA</p> <p>AND / OR <input type="checkbox"/> construct / <input type="checkbox"/> re-open / <input type="checkbox"/> upgrade A <input type="checkbox"/> road / <input type="checkbox"/> bush track / <input type="checkbox"/> fire trail <i>through</i> a species protection zone or other ESA</p>	
Quantity of product that would otherwise be inaccessible: about m ³ /t	
Vegetation affected: (floristics / structure)	

Dimensions of the area of protection zone/ESA/FMZ 2 or 3A that will be affected by the activity Other explanation / details are <input type="checkbox"/> attached	Length m x Width m	<i>Tick the boxes relevant to the proposed action</i>
Reason for approving the activity:	<input type="checkbox"/> There is no practicable alternative route available – an explanation is attached.	
Ameliorative measures to reduce impacts on threatened species, threatened species habitat or water quality will include	Application of: <input type="checkbox"/> IFOA conditions, <input type="checkbox"/> Other standard conditions (list is attached). <input type="checkbox"/> The attached site-specific measures.	
Threatened animal species records within 100m of the activity:	<input type="checkbox"/> There are no records. OR <input type="checkbox"/> The attached site-specific measures limit risk to the species.	
Barriers/threats to threatened animal species Other explanation / details are <input type="checkbox"/> attached.	<input type="checkbox"/> The activity is not likely to create a barrier to the movement of threatened animal species. <input type="checkbox"/> The activity is not likely to increase the threats to threatened animal species.	
Habitat features Other explanation / details are <input type="checkbox"/> attached.	<input type="checkbox"/> The activity is not likely to significantly affect important habitat features, such as hollow-bearing trees, waterbodies or threatened species habitat.	
Introduction of pests and weeds Other explanation / details are <input type="checkbox"/> attached.	<input type="checkbox"/> The activity is not likely to increase the presence of pests or weeds. OR <input type="checkbox"/> The attached site-specific conditions limit risk posed by possible pests and weeds.	

Prepared
 by / /
 FNSW (date) (signed) (name) (position)

| Approved
 | by / /
 | DECC (date) (signed) (name) (position)

Authorised
 by / /
 FNSW (date) (signed) (name) (position)

Further information as indicated on page 1 – DECC approval form

1	Area of zone/ESA affected
2	Confirm the absence of a practicable alternative route
3	Specific measures to limit risk to Threatened species, their habitat, and water quality
4	Site-specific measures to limit risk to: <i>[include the species and proximity to the activity site]</i> * Threatened animal species within 100m
5	Barriers/threats to Threatened animal species
6	Habitat features
7	Introduction of pests and weeds

Part 3 – Matters Requiring Assessment and Forests NSW Approval

The field assessment to determine the suitability of the proposal must be undertaken by a suitably qualified person.

Event ID (if applicable)	Operational plan code	State Forest OR Other identifier (if not SF – eg county parish, lot DP, etc)	Compartment OR other identifier (eg property, lease)	Location/s (grid reference/s) <i>shown on attached operational map</i>	Datum: <input type="checkbox"/> AMG 66 <input type="checkbox"/> MGA 94

Activity requiring this report	<i>Tick the boxes relevant to the proposed action</i>	Relevant IFOA clause
(a) <input type="checkbox"/> blading-off a road		
(b) <input type="checkbox"/> clear beyond 5m upstream or downstream from a drainage feature crossing		

	<i>Tick the boxes relevant to the proposed action</i>
Reasons why the activity must be undertaken Other explanation / details are <input type="checkbox"/> attached.	(b) <input type="checkbox"/> To allow sufficient clearing to properly construct/maintain the crossing. (a & c) <input type="checkbox"/> To allow removal of (1) the machine or (2) timber and/or vehicles and/or equipment.
<i>For (b) why not wait until conditions dry out?</i> Other explanation / details are <input type="checkbox"/> attached.	<input type="checkbox"/> It is needed so the operation can move from the area. <input type="checkbox"/> It is needed to supply a customer whose timber stocks are low. <input type="checkbox"/> Other:
(a) <i>For clearing beyond 5m upstream or downstream of a crossing:</i> Other explanation / details are <input type="checkbox"/> attached.	<input type="checkbox"/> The additional clearing will be limited to the extent necessary, being: metres upstream and metres downstream.
(b) <i>For blading-off a road:</i> Other explanation / details are <input type="checkbox"/> attached.	<input type="checkbox"/> Topsoil will be stockpiled in a recoverable position. <input type="checkbox"/> Topsoil will be respread on completion of the operation. <input type="checkbox"/> Any damage to the road surface or drainage structures will be repaired.

Prepared

| Authorised

by / / | by / / Regional Manager
FNSW (date) (signed) (name) (position) | FNSW (date) (signed) (name) (position)

Further information as indicated on page 1 – FNSW approval form

	Reasons why the activity must be undertaken
a)	Why not wait until conditions dry out
a)	Clearing beyond 5m upstream or downstream
b	Blading-off

SCHEDULE 5 – PLANNING CONSIDERATIONS FOR THE PURPOSES OF EPL AND FML

<u>ENVIRONMENTAL FEATURES</u>
A1. form, extent and location of historical or existing erosion across the landscape (including on roads) including gully erosion and sheet and rill erosion; and
B1. condition of existing vegetation and ground cover, including <ol style="list-style-type: none"> 1. forest litter, 2. existing logging slash, 3. effect of seasonal conditions, and 4. impacts of recent fires.
C1 rainfall characteristics, including annual average rainfall, monthly average rainfall and predicted rainfall.
<u>OPERATIONAL SYSTEMS</u>
E. For each New Road to be constructed (including major realignment work) greater than 40 metres in length
E1. length of new road to be constructed;
E2. site-specific soil stabilisation techniques of disturbed areas;
E3. any site-specific soil erosion and sediment control techniques.
F. For each Existing Road to be used
F1. total length of all existing road to be used in logging operations;
F2. length of existing road requiring maintenance works (ie. reshaping/reforming) prior to commencement of logging operation;
F3. description of road maintenance required;
F4. maximum width proposed for clearing on either side of the road prism;
F5. site-specific details on roads to be re-opened: <ol style="list-style-type: none"> 1. length of road re-alignment; 2. lowering of road grade; and 3. placement/disposal of spoil material
F6. any site-specific soil erosion and sediment control techniques.
G For each new drainage feature crossing to be constructed for roads, bush tracks, extraction tracks or fire trails
G1. type of drainage feature crossing to be constructed;
G2. location of any drainage feature crossing to be constructed;
G3. site-specific techniques to be used to prevent the deposition of spoil material into the drainage

feature during construction (including sediment control structures);
G4. road reforming to be undertaken on the crossing approaches;
G5. reshaping of the bed and banks that will be required;
G6. site-specific techniques to dispose of excess spoil material;
G7. any site-specific soil erosion and sediment control techniques.
New Culvert Construction
G8. site-specific techniques to be used to stabilise fill material around inlets and outlets of pipes;
G9. site-specific techniques to be used to prevent pavement or surface material from entering the drainage feature.
New Bridge Construction
G10. soil stabilisation measures to be used to protect the banks from table drain discharge;
G11. structures to be used to prevent material used for pavement of bridge from entering the drainage feature.
New Causeway Construction
G12. site specific techniques to be used to minimise disturbance to the bed and banks of the drainage feature;
G13. type of causeway pavement material proposed.
H For each Existing Drainage Feature Crossing
H1. type of existing drainage feature crossing proposed for maintenance, upgrading or replacement;
H2. location of existing drainage feature crossing (shown on operational map);
H3. stability of existing pavement on the drainage feature crossing or type of pavement to be used on the drainage feature crossing if the crossing pavement requires maintenance;
H4. reshaping of the bed and banks that will be required;
H5. any additional site-specific soil erosion and sediment control techniques for drainage feature crossings;
H6. site-specific techniques to dispose of excess spoil material.
Existing culvert crossings
H7. site-specific techniques to be used to prevent spoil entering the drainage feature when replacing or removing culverts;
H8. site-specific techniques to be used to stabilise fill material around inlets and outlets of pipes;
H9. site-specific techniques to be used to stabilise outlet discharge areas;
H10. site-specific techniques to be used to prevent pavement or surface material from entering the drainage feature.
Existing bridge crossings
H11. site-specific techniques to be used to stabilise the bed and banks from table drain discharge;

H12.	site-specific techniques to be used to prevent road pavement material from entering the drainage feature.
Existing causeway crossings	
H13.	site-specific techniques to be used to protect the bed and banks of the drainage feature;
H14.	type and stability of running surface on causeway crossings.
I Borrow Pits & Gravel Pits Active or Used for the Licensed Operation	
I1.	site-specific techniques to ensure that runoff does not discharge from borrow pits or gravel pits into drainage features.
J, K Harvesting Factors (Items must be assessed for harvest planning)	
J1.	gross area of the relevant compartment or other tract of land;
J2.	net mapped area of the compartment or other tract of land;
J3.	extraction method (eg wheeled skidder, forwarder, etc);
K1.	location of log dumps (on map) if applicable;
K2.	location along roads where log landings are not permitted (on map) if applicable.

SCHEDULE 6 – PHOTO STANDARD FOR WOODY DEBRIS



DICTIONARY

In this approval, except as the context or subject matter otherwise indicates or requires:

AGS refers to the silvicultural practice known as Australian Group Selection in which trees are selected in a group for logging in a harvesting operation as described in clause 41;

ancillary road construction means the provision of roads and fire trails and the maintenance of existing railways, to enable or assist in forestry operations;

authorised water management activities means the construction, management and maintenance of water infrastructure, being:

- a) activities necessary or required to implement a water management plan approved by the Murray Darling Basin Authority; or
- b) activities duly notified under Part 7 of the Fisheries Management Act.

basal area of a tree means the cross-sectional area of a tree calculated using the dbhob of the tree;

batter means an earth slope formed by the placing of fill material or by cutting into the natural hillside;

borrow pit means a pit from which fill material is extracted for road, track or trail construction, re-opening, upgrading or maintenance;

bridge means a structure that carries a road, bush track, extraction track or fire trail over a drainage feature or wetland by spanning it;

buffer strip means a strip described in clause 106;

burning operation means burning for the purpose of bush fire hazard reduction or for any other silvicultural purpose, such as burning to manipulate or affect forest stand structure or composition;

bush fire hazard reduction work has the same meaning as in the *Rural Fires Act 1997*;

bush track means an identifiable route (other than an extraction track) between two or more places that is created without earthworks or any other formal construction and that is used (whether or not only occasionally) primarily by cars, trucks, 4WDs and AWDs, for the purpose of enabling or assisting the carrying out of forestry operations;

causeway means a natural or man made crossing (other than a bridge or a culvert crossing) that enables motor vehicles to cross a drainage feature;

culvert means an enclosed conduit (or adjacent enclosed conduits) for conveying water in a drainage feature underneath a road, bush track, extraction track or fire trail;

dam means an artificial pond or other water body that has been constructed for the purpose of watering domestic stock or for fire fighting (or both) and that:

- a) is capable of holding more than 20 cubic metres of water, and
- b) has been built by placing an earthen bank across a natural gully or depression;

dbhob, or **diameter at breast height over bark**, means the diameter of a tree (including its bark) measured, using a diameter tape, at right angles to the axis of the tree and:

- a) at 1.3 metres above the ground (on the up slope side of the tree, if the tree is on a slope), or
- b) where the tree is deformed, or is branched, at 1.3 metres above the ground, at a point above that height (but as close to it as possible) where the trunk or stem becomes more cylindrical;

DECCW means the Department of Environment, Climate Change and Water and, in the case of a reference in a provision that is a term (or that is applied as a term) of the licence under the *Protection of the Environment Operations Act 1997*, or in connection with such a provision, is a reference to the Environment Protection Authority constituted by the *Protection of the Environment Administration Act 1991*;

DII (Fisheries) means that group of staff within the Department of Industry and Investment principally involved in the administration of Part 7A of the *Fisheries Management Act 1994*;

Note: The Fisheries Ecosystems Branch of the Department of Industry and Investment was the group of staff principally responsible for the administration of Part 7A of the Fisheries Management Act 1994 as at the commencement of this approval.

drainage depression means a landscape feature:

- a) that is a level to gently inclined shallow, open channel down which surface water naturally concentrates and flows; and
- b) that is on average greater than 5.0m wide and 0.5m deep (both measured from top of bank); and
- c) that is greater than 500m contiguous length; and
- d) where live trees greater than 150mm DBHOB are naturally absent within the confines of the banks.

Evidence of active erosion in the form of sand beds, scour holes and nick points or an incised channel may be present, but such evidence is not required to determine the feature.

drainage feature means a drainage depression or wetland depression.

drainage feature protection areas means:

- a) drainage feature protection zones as described in clause 104,
- b) linkage protection zones described in clause 105.

drainage structure, in relation to a road, bush track, extraction track or fire trail, means a structure designed to direct water along, across or underneath the road, track or trail, and includes a catch drain, mitre drain, table drain, relief pipe, rollover bank and crossbank;

early thinning is the method for selecting trees to be cut and removed as described in clause 44;

endangered ecological community means an endangered ecological community listed in Schedule 1 to the *Threatened Species Conservation Act 1995*,

environmentally significant area means an environmentally significant area as described in Part 3.6;

event ID, in relation to a forestry operation, means a unique identification number generated by Forests NSW's harvest tracking system to refer to that operation;

extraction track means an identifiable route between two or more places used (whether or not only occasionally) primarily for the removal or extraction of timber cut in a logging operation, using either snigging or forwarding machinery, and generally from the logging site to the site of the log dump;

fill means excavated material that is used to raise the surface of an area;

FMZ layer means the Geographic Information System theme in ESRI Feature Class format (as current from time to time) that is called "ForestManagementZones" under the Feature Dataset "ForestFeatures" in Forests NSW's Corporate Enterprise Geodatabase that indicates the classification of land in accordance with the Forest Management Zoning System;

Forest Management Zoning System means the Forest Management Zoning (FMZ) land classification system described in the document entitled, "Forest Management Zoning in State Forests" (State Forests of New South Wales, December 1999);

forest type or **FT** means a forest type as described in the publication entitled, "Research Note 17 Forest Types of New South Wales" (Forestry Commission, 1989);

forestry operations means logging operations, forest products operations, on-going forest management operations and ancillary road construction;

forest products operations means the harvesting of products of trees, shrubs and other vegetation (other than timber) that are of economic value;

Forests NSW or FNSW means the Forestry Commission of New South Wales constituted by the *Forestry Act 1916*;

Note: The Forestry Commission may use the name "Forests NSW" under section 7 (4) of the Forestry Act 1916.

gravel pit means a pit formed by extraction of gravel (being a naturally occurring mixture of coarse mineral particles larger than 2.0 millimetres and smaller than 75 millimetres in diameter);

harvesting machine means any mechanical or other harvester, rubber-tired skidder, bulldozer or any other wheeled or tracked machine that is designed to be propelled by a motor that forms part of the machine and that is used for the cutting or removal of timber;

Heritage Council means the Heritage Council of New South Wales constituted under the *Heritage Act 1977*;

heritage item means any of the following:

- a) an item of the environmental heritage within the meaning of the *Heritage Act 1977*,
- b) an Aboriginal object within the meaning of the *National Parks and Wildlife Act 1974*,
- c) an Aboriginal place within the meaning of the *National Parks and Wildlife Act 1974*;

log dump means an area where timber, or logs or other timber products, are assembled for processing or sorting before being loaded onto a truck, and includes a log landing and log stockpile;

logging operations means the cutting and removal of timber from land for the purpose of timber production;

maintain a road, bush track or fire trail means to carry out work within the existing prism of the road, track or trail to enable it to continue to be trafficable, but only if the majority of the stems of trees (of native species) growing within the prism of the road, track or trail (and requiring removal) have a dbhob of 100 mm or less and no such stem has a dbhob of more than 200 mm;

marking-up means physically marking trees or other features in the field, or marking trees by using the Geographic Information System and the Global Positioning System, or any other device that can accurately identify or locate the boundary (or relevant part of the boundary) of the area of land concerned in the field;

merchantable, in relation to a tree, means a tree that, in the opinion of a supervising forestry officer, appears capable of yielding a log or logs or other timber product that will meet a set of product specifications issued by Forests NSW (other than for firewood);

Ministers means those Ministers who are authorised to amend this approval;

monthly advice means the written advice prepared, or required to be prepared, each month by Forests NSW, on forestry operations, as referred to in Division 1 of Part 1.4;

net mapped operation area and ***net operational area*** are defined in clause 13.

on-going forest management operations means activities relating to the management of land for timber production such as bush fire hazard reduction, bee-keeping, grazing, weed, pest and disease control and activities to construct and maintain water infrastructure and other silvicultural practices;

operational map for a forestry operation means the operational map or maps prepared, or required to be prepared, under Division 3 of Part 1.3 as part of the site specific operational plan for the forestry operation;

pest animal means any animal identified in Forests NSW's pest animal management plan (as current at the relevant time) as a pest animal present in the Riverina State forests or part of the Region;

pollution has the same meaning as in the *Protection of the Environment Operations Act 1997*;

regional manager of Forests NSW means a regional manager of Forests NSW responsible for managing land within the Riverina State forests or a more senior officer of Forests NSW;

road means an identifiable route (other than an extraction track) between two or more places that is built with some degree of formal construction involving earthworks and that is used (whether or not only occasionally) by cars, trucks, 4WDs and AWDs, for the purpose of enabling or assisting the carrying out of forestry operations;

Riverina forests drainage protection map means the maps titled attached to this approval at Schedule 1.

Riverina State forests means the land to which this approval applies as described in clause 4.

runoff means that portion of rainfall that becomes surface flow;

saturated soil means soil that cannot absorb or accept any more moisture;

site specific operational plan for a forestry operation means the site specific operational plan for a forestry operation that is referred to in Division 3 of Part 1.3 and is prepared, or is required to be prepared, in accordance with this approval;

soil stabilisation measure means a measure to prevent or control soil erosion by providing an energy-absorbent or energy resistant barrier on the soil surface;

species protection zone means a species protection zone for the protection of a threatened species or protected fauna as described in Part 3.6, being any of the species protection zones described in the following provisions:

- a) clause 198;
- b) clause 199; and
- c) clause 200.

spoil means excess soil, rock or other material excavated during a forestry operation;

STS regeneration is the silvicultural practice known as Single Tree Selection in which trees are selected for logging in a harvesting operation having regard to the diameter of the trees proposed to be logged and the basal area of the trees remaining after logging, as described in clause 43;

STS release is the silviculture practice known as Single Tree Selection in which trees are selected for logging in a harvesting operation having regard to the diameter of the trees proposed to be logged and the basal area of the trees remaining after logging, as described in clause 42;

tank means an artificial pond or other water body that has been built for the purpose of watering domestic stock or for fire fighting (or both) and:

- a) is capable of holding more than 20 cubic metres of water, and
- b) has been built by excavating a depression and placing an earthen bank around all or part of the depression excavated to a level above the surrounding natural ground level;

Note: A tank may or may not have graded catch drains guiding surface water into it.

thinning is the method of selecting trees to be cut and removed for the purpose of promoting the growth of other trees that have the potential to yield timber as described in clause 45;

up-grade a road or bush track means to widen, straighten the alignment (whether horizontal or vertical) of or otherwise improve the road or bush track;

western land lease means land held under a lease granted or issued under the Western Lands Act 1901;

wetland depression means a landscape feature:

- a) that is a visible shallow, open depression at least 400 square metres in area; and
- b) where live trees greater than 150mm dbhob are naturally absent.

A wetland depression may typically have a seasonal, permanent or intermittent water table at or slightly above the floor of the depression. Wetland depressions may or may not be hydraulically connected to other drainage features.

Note: a "visible" depression will generally be an average of greater than 0.5m deep (at at least one point, when compared with the general ground level beyond the edge of the wetland depression)