**Environment Protection Authority** 

# **Environment Protection Licence**

Section 55 Protection of the Environment Operations Act 1997

- Licence number: 0003957 (Lower North East Region)
- Licence holder: Forestry Commission of NSW
  - File number: 600000/B01

#### AMENDMENT 5 1 March 2013

All instances of "Summary of Operations" throughout licence replaced with "monthly advice"

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#### AMENDMENT 5 1 March 2013 Condition 10

replaced

AMENDMENT 5

#### 1 March 2013 Condition 114 replaced

#### AMENDMENT 5 1 March 2013 Condition 15 omitted

#### AMENDMENT 5 1 March 2013 Conditions 17.4, 17.5 and 18

AMENDMENT 5 1 March 2013 Conditions 19A and 19B replaced

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Schedule 2	Factors to be taken into account when planning scheduled and non- scheduled forestry activities
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Figure 1	Land west of the Great Dividing Range

Figure 2

#### Information about this licence

#### **Dictionary**

The licence contains a dictionary, which defines the terms used in the licence. It is found in the middle of the licence.

#### **Responsibilities of State Forests**

Separate to the requirements of this licence, the general obligations of State Forests are set out in the *Protection of the Environment Operations Act 1997* ("the Act") and the Regulations made under the Act. These include obligations to:

- Ensure persons associated with State Forests comply with this licence, as set out in section 64 of the Act.
- Control the pollution of waters (see for example sections 120-123 of the Act).
- Report incidents causing or threatening material environmental harm to the environment, as set out in Part 5.7 of the Act.

#### Fees and annual return to be sent to the EPA

The licence requires State Forests to forward to the EPA an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints).

The Annual Return must be submitted within 60 days after the end of each reporting period.

For each licence fee period you must pay an administrative fee.

See conditions 23 - 27 of this licence regarding the Annual Return requirements.

The EPA publication "A Guide to Licensing" contains information about how to calculate licence fees.

#### Public register and access to monitoring data

Part 9.5 of the Act requires the EPA to keep a public register of details and decisions of the EPA in relation to, for example:

- licence applications
- licence conditions and variations
- statements of compliance

Monitoring data submitted to the EPA is available to the public.

For the purpose of fulfilling Section 66 of the Act, FCNSW must publish monitoring data that relates to pollution on its website within 14 days of obtaining that data.

#### Pollution incident response management plan

In accordance with Part 5.7A of the Act, FCNSW must prepare, keep, test and implement a pollution incident response management plan.

#### AMENDMENT 5

1 March 2013 Information on Public register and access to monitoring data modified

AMENDMENT 5 1 March 2013 Information on Pollution incident response management plan added

#### **Administrative Conditions**

#### 1. What the licence authorises and regulates

1.1 This licence authorises the carrying out of the scheduled activity listed below for the premises specified in condition 2.1 of this licence:

"Scheduled forestry activities" carried out on State Forest or Crown-timber lands, being:

- (1) the cutting and removal of timber (being sawlog and pulplogs) from a compartment, where:
  - (a) at least 20% of the compartment has a slope greater than 18 degrees, and
  - (b) at least 30 timber stems (at least 40 cm in diameter at breast height) are cut and removed from each hectare of the compartment when averaged over the net harvestable area of the compartment, or
- (2) the construction of new access roads within a compartment for cutting and removal of timber as referred to in paragraph (1), or
- (3) the construction of new access roads for hauling timber from more than one compartment.

This item does not include any activity on a timber plantation and does not include any activity west of the Great Dividing Range (refer to Figure 1).

[Note: The phrase "logging operations" has been replaced by the phrase "forestry activities". This amendment does not change the meaning or scope of the licence, but is simply to clarify that the licence covers a subset of the "forestry operations" referred to in the Forestry and National Park Estate Act 1998].

1.2. This licence also controls the carrying out of the non-scheduled forestry activities listed below at the premises specified in condition 3.1 of this licence, for the purpose of regulating water pollution.

"Non-scheduled forestry activities" being the:

- (1) cutting and removal of timber; or
- (2) post-harvest burning associated with and following within 18 months of the cutting and removal of timber; or
- (3) construction of roads to enable or assist the cutting and removal of timber; or
- (4) maintenance or upgrading of roads, logged areas, log dumps, extraction tracks and snig tracks associated with the cutting and removal of timber except where the licence specifies otherwise.

Note: The phrase "logging operations" has been replaced by the phrase "forestry activities". This amendment does not change the meaning or scope of the licence, but is simply to clarify that the licence covers a subset of the "forestry operations" referred to in the Forestry and National Park Estate Act 1998.

#### 2. Premises to which this licence applies – Scheduled Forestry Activities

2.1. In respect of scheduled forestry activities, this licence applies in the Lower North East Region to premises that is notified as scheduled forestry activities under condition 7.2 of this licence.

### 3. Premises to which this licence applies – Non-Scheduled Forestry Activities

- 3.1. In respect of non-scheduled forestry activities, this licence applies to any premises that is notified as non-scheduled forestry activities under condition 7.3 of this licence:
  - (a) any premises in the Lower North East Region that are notified as being premises on which non-scheduled forestry activities are being carried out and for which State Forests has forwarded to the EPA a written notice in accordance with conditions 7, 8, 9, and 10 of this licence and which has not been the subject of a notice in accordance with condition 20 of this licence; or
  - (b) any premises in the Lower North East Region that have been notified by State Forests in accordance with conditions 30.1 32.3 of the 1998/99 licence or conditions 6, 7 and 8 of the 1999/2000 licence and which have not been the subject of a notice in accordance with condition 42.1 42.4 of the 1998/99 licence or condition 18 of the 1999/2000 licence.

#### 4. Objects of this licence

4.1 The objects of this licence are to require practical measures to be taken to protect the aquatic environment from water pollution caused by forestry activities and to ensure monitoring of the effectiveness of the licence conditions in achieving the relevant environmental goals.

In formulating this licence, the environmental goals that have been adopted by the EPA for all forests in NSW are the *protection of aquatic ecosystems* and *primary contact recreation*.

These goals are defined in the "Australian Water Quality Guidelines for Fresh and Marine Waters" (Australian and New Zealand Environment and Conservation Council, 1992). The goals were identified as applying to all forested catchments in Australia by the Joint Australian and New Zealand Environment and Conservation Council - Ministerial Council for Forestry, Fisheries and Aquaculture National Forest Policy Statement Implementation Sub-Committee.

For areas where the quality of water extracted for agricultural water supply or for drinking water supply may be affected by forestry activities upstream, the EPA has adopted the criteria and indicators used in these environmental values as additional goals for protection.

AMENDMENT 5 1 March 2013 Condition 4.1 note added Note: The Australian water quality guideline was updated in 2000 - reference: Australian Water Quality Guidelines for Fresh and Marine Waters" (Australian and New Zealand Environment and Conservation Council, 2000). The historic reference to the 1992 guidelines document remains because it was relevant when formulating the licence.

#### 5. Pollution of waters

5.1. Except as may be expressly provided in any other condition of this licence, State Forests must comply with Section 120 of the *Protection of the Environment Operations Act 1997.* 

[Note: In this condition, the terms "pollution of waters" and "waters" have the same meaning as in the Protection of the Environment Operations Act 1997].

# **Operating Conditions**

#### 6. Application of Section

- 6.1 This section is divided into two parts, which contain conditions relating to the following:
  - Part 1: procedure for the planning, documentation, varying and authorising scheduled and non-scheduled forestry activities in accordance with this licence; and
  - Part 2: procedure for terminating the licence authority and operating conditions for scheduled and non-scheduled forestry activities under this licence.

Part 1: Planning, Documenting, Varying and Authorising Scheduled and Non Scheduled Forestry Activities

#### Division 1 – Planning Scheduled and Non-Scheduled Forestry Activities

### 7. Application of Division

7.1 This division applies to the scheduled or non-scheduled forestry activities referred to in the monthly advice.

# Application of division to authorise the carrying out of scheduled forestry activities

7.2 For scheduled forestry activities that are referred to in condition 1.1 of this licence, State Forests <u>must notify</u> the EPA that it proposes to commence forestry activities. This notification must be in accordance with this Part. Forestry activities must not commence until a monthly advice has been submitted to the EPA in accordance with this Division.

# Application of division to authorise the carrying out of non-scheduled forestry activities

7.3 For non-scheduled forestry activities that are not referred to in condition 1.1 of this licence, State Forests <u>may notify</u> the EPA that it proposes to commence forestry activities. Where State Forests notifies the EPA it must be in accordance with this Division.

AMENDMENT 5
1 March 2013
Condition 8
replaced

#### 8. Definition of monthly advice

8.1 For the purposes of this Part "monthly advice" means the written advice prepared, or required to be prepared, each month by FCNSW, on forestry operations, as referred to in clause 9A of the IFOA (including Part A, B and Part C of Schedule 1 of Appendix A of this IFOA.

AMENDMENT 5 1 March 2013 Conditions 9.2 and 9.3 omitted

#### 9. Preparation of a monthly advice

- 9.1 Prior to submitting a monthly advice, State Forests must ensure that:
  - (a) the scheduled or non-scheduled forestry activities that are the subject of the monthly advice have been planned in accordance with condition 11 of this licence; and
  - (b) this planning has been documented in accordance with condition 12 of this licence.

AMENDMENT 5 1 March 2013 Condition 10 replaced

#### 10. Monthly Advice

- 10.1 FCNSW must give the monthly advice to EPA in accordance with the requirements set out in clause 9A of the non-licence provisions of the IFOA and must undertake operations in compliance with the obligations in clause 9A of the non-licence provisions.
- 10.2 For the avoidance of doubt, full compliance with the obligations in clause 9A of the non-licence provisions of the IFOA is an essential condition of this licence.
- 10.3 FCNSW is only required to, and may only, submit one monthly advice in satisfaction of this condition and any other requirements to submit a monthly advice under any other clause in the IFOA. Any monthly advice received by EPA for any given month will be taken to be the monthly advice for the purpose of this condition and any other clause under the IFOA requiring the submission of a monthly advice.

# 11. Operational planning

- 11.1 Scheduled and non-scheduled forestry activities that are the subject of this Division must be planned in a site-specific manner, and site-specific conditions must be developed in accordance with the requirements of schedules 2, 3, 4 and 5 of this licence.
- 11.2 In planning scheduled and non-scheduled forestry activities, State Forests must:
  - (a) take into account the matters identified in Schedule 2; and
  - (b) apply the soil erosion and water pollution hazard assessment model and identify the inherent hazard level of the compartment in accordance with Schedule 3; and
  - (c) identify whether there is a mass movement hazard in the compartment or roading area in accordance with Schedule 3; and
  - (d) identify whether there are any dispersible soils in the compartment or roading area in accordance with Schedule 3; and
  - (e) identify the seasonal restrictions in accordance with Schedule 3; and
  - identify and adopt the suites of conditions contained within Schedule 4 which relate to each inherent hazard level, as well as those conditions in schedules 4 or 5 relating to or required to be developed for mass movement hazard, dispersible soils and seasonal restrictions; and
  - (g) identify site-specific conditions applying to the scheduled and non-scheduled forestry activities in accordance with schedules 2, 3, 4 and 5 of this licence.
- 11.3 State Forests must ensure that only appropriately trained and competent people undertake the requirements of schedules 2, 3, 4 and 5 of this licence.

#### 12. Documentation of operational planning

- 12.1 State Forests must prepare planning documentation which demonstrates that the planning referred to in condition 11 has occurred, and which contains the site-specific conditions that will apply to scheduled or non-scheduled forestry activities.
- 12.2 The planning documentation must be kept on file at the Regional Office and must be provided to an authorised EPA officer upon request.

#### Division 2 - Commencement of Scheduled and Non-Scheduled Forestry Activities

## 13. Application of division

13.1 This Division applies to scheduled and non-scheduled forestry activities which have been planned in accordance with Division 1 of Part 1 of this section and for which a monthly advice has been submitted to the EPA under that Division.

AMENDMENT 5 1 March 2013 Condition 14 replaced

### 14. Commencement of licence authority

- 14.1 Licence authority applies with respect to a scheduled or non-scheduled forestry activity if:
  - (a) the forestry activity is listed in the monthly advice and all sections are completed; and
  - (b) "the EPL commencement date" is completed in the monthly advice.
- 14.2 FCNSW must place a copy of the completed monthly advice on the operations register (as required by condition 33 of this licence) by the first working day of each month.
- 14.3 Licence authority for the activity is taken to have commenced on the commencement of the day whose date is inserted on the monthly advice for the activity.
- 14.4 Licence authority continues to apply to the activity unless it temporarily ceases under condition 19A or until it finally ceases under condition 20.

AMENDMENT 5 1 March 2013 Condition 15 omitted

### 15. Condition omitted (Amendment 5)

- 16. Conditions applying to scheduled and non-scheduled forestry activities
- 16.1 Scheduled and non-scheduled forestry activities must comply with:
  - (a) the conditions set out in schedules 4 and 5 of this licence; and
  - (b) the site-specific conditions set out in the planning documentation referred to in condition 12 of this licence.

#### 17. Variation of site-specific conditions

AMENDMENT 5
1 March 2013
Condition 17.1
modified

- 17.1 If during a scheduled or non-scheduled forestry activity State Forests considers that any of the site-specific conditions set out in the planning documentation referred to in condition 12 should be varied, then a State Forests' officer not below the rank of Regional Manager or Planning Manager must approve the variation in writing prior to it being implemented.
- 17.2 In considering whether to approve the variation, the approving officer must ensure that:
  - (a) the variation will maintain or decrease the potential for water pollution; and
  - (b) the variation is consistent with schedules 4 and 5 of this licence; and
  - (c) the documentation required by condition 17.3 has been prepared and is kept on file at the State Forests' Regional Office.
- 17.3 State Forests must document the following information:
  - (a) the condition which is proposed to be varied; and
  - (b) the physical area within the compartment or roading area in relation to which the variation is proposed; and
  - (c) the reasons why the variation is being proposed; and

AMENDMENT 5 1 March 2013 Conditions 17.4 and 17.5 omitted

AMENDMENT 5 1 March 2013 Condition 18 deleted

- (d) an explanation as to how the variation is expected to maintain or decrease the potential for water pollution.
- 18. Condition omitted (Amendment 5)

#### 19. Duty to notify

19.1 If State Forests finds that the information provided in any monthly advice is incorrect, false, misleading or incomplete, State Forests must notify the EPA in writing as soon as practicable and, in any event, no later than seven days after State Forests becomes aware that the information is incorrect, false, misleading or incomplete.

#### AMENDMENT 3 17 May 2004 Condition 19A-B added Ref Appendix E

AMENDMENT 5
1 March 2013
Conditions 19A
and B replaced

### 19A. Licence authority temporarily ceased

- 19A.1 Licence authority temporarily ceases to apply with respect to a scheduled or non-scheduled forestry activity:
  - (a) if "EPL temporarily ceased (date)" is completed in the monthly advice; and
  - (b) on and from the date which is entered in the monthly advice.
- 19A.2 FCNSW must place a copy of the monthly advice on the operations register (as required by condition 33 of this licence) by the first working day of each month.
- 19A.3 Licence authority with respect to an activity temporarily ceases unless it is recommenced under condition 19B or until it finally ceases under condition 20.

#### 19B. Recommencement of licence authority

- 19B.1 If licence authority with respect to a scheduled or non-scheduled forestry activity has temporarily ceased (in accordance with condition 19A), FCNSW may recommence licence authority with respect to that activity by completing "EPL recommencement (date)" in the monthly advice.
- 19B.2 Licence authority with respect to a scheduled or non-scheduled forestry activity recommences on and from the date inserted under "EPL recommencement (date)" in the monthly advice. Licence authority continues to apply with respect to the activity unless it temporarily ceases again under condition 19A or until it finally ceases under condition 20.
- 19B.3 FCNSW must place a copy of the monthly advice on the operations register by the first working day of each month (as required by condition 33 of this licence).

## Part 2: Final cessation of licence authority

#### AMENDMENT 5 1 March 2013 Conditions 20 and 21 replaced

#### 20. When licence authority finally ceases to apply

- 20.1 Licence authority finally ceases to apply with respect to a scheduled or non-scheduled forestry activity:
  - (a) if "EPL Final Cessation (date)" is inserted in the monthly advice and
  - (b) on and from the date which is entered in the monthly advice.

20.2 FCNSW must place a copy of the monthly advice on the operations register by the first working day of each month (as required by condition 33 of this licence).

Note: Where licence authority for a scheduled or non-scheduled forestry activity has finally ceased under condition 20, it cannot be "recommenced" under condition 19B. If, after licence authority has finally ceased for forestry activities in a particular compartment, FCNSW subsequently proposes, for example, to carry out further forestry activities in the same compartment under licence authority, it must be listed as a new operation in the monthly advice.

# **Monitoring Conditions**

#### 21 Water quality monitoring

- 21.1 FCNSW must conduct water quality monitoring in accordance with a published, publicly available, and up-to-date water strategy for monitoring and evaluation of forest operations in both native and plantation forests.
- 21.2 The water quality monitoring specified in condition 21.1 of this licence must be consistent with the framework: 'Water Monitoring Strategy' prepared by FCNSW and approved by DECCW in 2009.
- 21.3 The water quality monitoring will comply with FCNSW certification under the Australian Forests Standard (the Australian Standard for Sustainable Forest Management AS 4708).
- 21.4 FCNSW must receive written approval from DECCW before implementing the water quality monitoring specified in condition 21.1 of this licence.
- 22. Condition Revoked (Amendment 2).

## **Reporting Conditions**

#### Part 1: Performance Monitoring and Auditing

#### 23. What documents and information must an Annual Return contain?

- 23.1 State Forests must complete and supply to the EPA an Annual Return in the approved form comprising:
  - (a) a Statement of Compliance;
  - (b) an Operational & Complaints Summary; and
  - (c) a Monitoring & Compliance Summary.

Note: Before the end of each reporting period, the EPA will provide State Forests with a copy of the form that must be completed and returned to the EPA.

- 23.2 The report specified in condition 23.1(b) of this licence must:
  - (a) contain summaries of all entries made in the complaints registers, compliance registers and operations registers required by conditions 31, 32 and 33 of this licence; and
  - (b) contain summaries of improvements to or developments in best management practice carried out under this licence; and
  - (c) examine and discuss the efficacy of the conditions of this licence in protecting water quality; and

- (d) respond to any information provided to State Forests by the EPA as a result of auditing activities, including details of the improvements to systems and practices that State Forests has made to ensure that any identified licence breaches are not repeated.
- 23.3 The report specified in condition 23.1(c) of this licence must contain a summary of:

#### Monitoring conditions

- (a) whether all monitoring required by this licence has been carried out; and
- (b) if all the monitoring has not been carried out, what monitoring has not been carried out and the reasons why the monitoring has not been carried out; and
- (c) whether all the monitoring data required to be reported to the EPA by this licence have been reported to the EPA; and
- (d) whether all the monitoring data were reported within the time specified by this licence; and
- (e) if all the monitoring data have not been reported to the EPA, or have not been reported within the time specified, the reasons why the monitoring data were not so reported; and
- (f) whether all the monitoring data reported to the EPA were derived from monitoring carried out in accordance with this licence; and
- (g) if any of the monitoring data reported to the EPA were not derived from monitoring carried out in accordance with this licence, what monitoring data were not so derived and the reasons why the monitoring data were not so derived.

#### Compliance conditions

- (h) whether every condition of this licence has been complied with; and
- (i) if one or more conditions have not been complied with, in relation to each such condition:
  - (i) the nature of the non-compliance; and
  - (ii) the reasons for the non-compliance; and
  - (iii) any action taken to prevent, control or mitigate the noncompliance; and
  - (iv) any action that has been or will be taken to prevent a recurrence of the non-compliance.
- 23.4 In providing details of non-compliances of conditions, State Forests must provide the information on a regional basis, as well as summarised for each division. The information must be provided in a standardised format for each State Forests' region.

#### AMENDMENT 3 17 May 2004 Condition 24.1 modified Ref Appendix E

## 24. Period covered by an Annual Return

24.1 An Annual Return must be prepared in respect of each reporting period, except as provided below.

Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.

24.2. Where this licence is revoked, State Forests must prepare an annual return in respect of the period commencing on the first day of the reporting period and ending on the date from which notice revoking the licence operates.

AMENDMENT 3 17 May 2004 Condition 25.1 replaced Ref Appendix E

#### 25. Deadline for an Annual Return

25.1 The Annual Return for a reporting period must by forwarded to the EPA by registered post and electronically (in a format approved by the EPA) not later than 60 days after the end of the reporting period.

#### 26. State Forests must retain a copy of an Annual Return

26.1 State Forests must retain a copy of the annual return supplied to the EPA for a period of at least 4 years after the annual return was due to be supplied to the EPA.

# 27. Certifying of Statement of Compliance and Signing of Monitoring and Complaints Summary

27.1 Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by an employee of State Forests, not below the rank of Divisional Manager.

### 28. Water quality monitoring reports

- 28.1 Data collected as a result of water quality monitoring required by this licence must be submitted to the EPA in a standardised format approved by the EPA, including summaries of the data as required by the EPA.
- 28.2 Within three months of the cessation of the 1998/99 water quality monitoring program as specified in condition 21.2, State Forests must provide a written report to the EPA containing an interpretation of all the data.
- 28.3 Where State Forests has undertaken forestry activities in the representative areas in which water quality monitoring occurred as specified in conditions 44 to 45.5 inclusive of the 1998/99 licence, State Forests must submit a compliance audit report as required under conditions 46.1 to 46.5 of the 1998/99 licence.
- 28.4 The compliance audit report specified in condition 28.3 of this licence must be submitted to the EPA within 30 days of the audit being carried out. The report must be presented in a standardised format, agreed to by the EPA in writing, and must report all non-compliance with the licence conditions.
- 28.5 State Forests must provide written reports to the EPA regarding the water quality monitoring program as specified in the document outlined in condition 21.4 of this licence.
- 28.6 The EPA may direct State Forests to provide written reports on any matter relating to the water quality monitoring programs specified in this licence.

#### 29. Water pollution hazard assessment model monitoring reports

- 29.1 State Forests must report in writing to the Manager of the Forestry Unit of the EPA on the program for monitoring and reviewing the soil erosion and water pollution hazard assessment model.
- 29.2 This reporting must be carried out in accordance with the documentation and methodology approved by the EPA in accordance with condition 47 of the 1998/1999 licence.

### 30. Telephone complaints line

- 30.1 State Forests must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises, unless otherwise specified in the licence.
- 30.2 State Forests must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.

#### 31. Complaints register

- 31.1 Each State Forests' Regional Office must keep a register of all complaints received by State Forests alleging water pollution which may have been caused by scheduled and non-scheduled forestry activities within that region, or alleging licence breaches which may have occurred during scheduled and non-scheduled forestry activities within that region.
- 31.2 The register must include details of the:
  - (a) date and time of the complaint; and
  - (b) method by which the complaint was lodged (telephone, letter, etc.); and
  - (c) name, address, and telephone number of the complainant and/or a further contact person or, if no such details were provided, a note to that effect; and
  - (d) name of the person receiving the complaint; and
  - (e) precise location of the alleged pollution incident and/or licence breach; and
  - (f) waters said to be polluted or potentially polluted; and
  - (g) substance causing pollution or potential pollution and the amount in which it was present (if known); and
  - (h) action taken by State Forests in relation to the complaint, including any follow-up contact with the complainant.
- 31.3 The record of a complaint must be kept for at least 4 years after the complaint was made.
- 31.4 The record and complaints register must be produced to any authorised officer of the EPA who asks to see them.

#### 32. Compliance register

- 32.1 Each State Forests' Regional Office must keep a register of every incident of noncompliance with the conditions of this licence.
- 32.2 The register must include details of:
  - (a) the date, time and duration of the non-compliance; and
  - (b) the date upon which State Forests became aware of the non-compliance; and
  - (c) the exact location of the non-compliance, either marked on the operational map or in the form of Australian Map Grid co-ordinates; and
  - (d) the name of the person who caused the non-compliance; and
  - (e) the nature of the non-compliance; and
  - (f) the reasons for the non-compliance; and
  - (g) whether the non-compliance resulted in any environmental harm; and
  - (h) any remedial action taken by State Forests or any other person in relation to the non-compliance and the dates upon which it was taken; and
  - (i) any disciplinary action taken by State Forests against any of its contractors, employees, licensees or agents and the dates upon which it was taken; and

- (j) any measure taken or proposed to be taken to prevent or mitigate the recurrence of such a non-compliance.
- 32.3 The register must be filled in within 14 days of State Forests becoming aware of the non-compliance.
- 32.4 In this condition, "environmental harm" includes any direct or indirect alteration to the environment and, without limiting the generality of the foregoing, includes any act or omission that results in the pollution of any water, within the meaning of the *Protection of the Environment Operations Act 1997*.

## 33. Operations register

AMENDMENT 5 1 March 2013 Condition 33 replaced

- 33.1 Each FCNSW Regional Office must keep a register of all scheduled and nonscheduled forestry activities undertaken within the region.
- 33.2 The register must include copies of the monthly advice, not including maps (Note: harvest plan operational maps and location maps of operations are available under condition 37 of the EPL).

Note: The register that is referred to in condition 33.2 is the same register that was required to be kept by each Regional Office before condition 33.2 was substituted by amendments to the operating conditions of the licence made in 2004. Accordingly, the documents that were included on the register before those amendments commenced are to continue to be kept on the register.

AMENDMENT 5 1 March 2013 Condition 34 replaced

#### 34. Notification of environmental harm

- 34.1 If a pollution incident occurs so that material harm to the environment is caused or threatened, FCNSW (or its employees) must, for the purpose of fulfilling a duty to notify under Part 5.7 of the Act, notify each relevant authority immediately after the person becomes aware of the incident.
- 34.2 FCNSW must provide written notification of the pollution incident to each relevant authority within 7 days of the date in which immediate notification has been given.

#### Part 2: Provision of and Access to Information

#### 35. Written Reports

- 35.1 Where an authorised officer of the EPA suspects on reasonable grounds that where this licence applies to premises, an event has occurred at the premises and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.
- 35.2 State Forests must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.
- 35.3 The request may require a report which includes any or all of the following information:
  - (a) the cause, time and duration of the event;
  - (b) the type, volume and concentration of every pollutant discharged as a result of the event;
  - (c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; and

- (d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
- (e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
- (f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event;
- (g) any other relevant matters.
- 35.4 The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by State Forests. State Forests must provide such further details to the EPA within the time specified in the request.

#### 36. Records

- 36.1 All records, documentation and registers required by this licence must be kept for at least four years after the action or event took place, in respect of which the record has been created, or for four years after the last entry in the registers specified under Part 1 of this section.
- 36.2 All records, documentation and registers must be kept in a legible form and must be produced in a legible form to any authorised officer of the EPA officer upon request.
- 36.3 Copies of records, documentation and registers requested in writing by the EPA must be forwarded to the nominated EPA office within the time specified in the request.

#### 37. Public inspection of documents

- 37.1 Copies of the following documents must be made available for inspection by any person at each State Forests' Regional Office responsible for land to which this licence applies:
  - (a) this licence; and
  - (b) the 1999/2000 licence; and
  - (c) the 1998/99 licence; and
  - (d) the Code of Logging Practice; and
  - the "Conditions For Use With Harvesting Plans, Based on SEMGL (1993)", July 1993, compiled by State Forests; and
  - (f) all planning documentation relating to forestry activities, and copies of the summary of operation of each licensed operation which is the responsibility of the Regional Office; and
  - (g) the latest annual return submitted to the EPA; and
  - (h) the operations register.
- 37.2 Copies of all planning documentation for scheduled and non-scheduled forestry activities which are the responsibility of the Regional Office must be made available to any person for photocopying at a reasonable cost.

#### 37A. Electronic transfer of data

AMENDMENT 3 17 May 2004 Condition 37A added Ref Appendix E

Note:

This condition applies to electronic transfer of documents to the EPA. The term "electronic transfer" is defined in the dictionary for this licence as "a data transfer between State Forests' Harvest Tracking System (HTS) system server and the EPA's Forestry Notification and Audit Tracking System (FNATS) system server".

- 37A.1 Where this licence permits a document to be forwarded to the Manager of the Forestry Unit of the Department of Environment and Conservation by electronic transfer, the following requirements apply to the electronic transfer:
  - the file must be in XML format or such other format as may be approved in writing by the EPA;
  - (b) the file must contain the same data fields as those shown on the relevant form set out in Schedule 1 to this licence:
  - (c) the file must be sent over a secure protocol as agreed to in writing by the EPA and State Forests.
- 37A.2 Where a document that is required to be signed by an officer of State Forests is forwarded to the Manager of the Forestry Unit of the Department of Environment and Conservation by electronic transfer, then another method (as agreed to in writing by the EPA and State Forests) is to be used to identify the officer and his or her approval of the contents of the document when it is forwarded.

### **General Conditions**

- 38. Scheduled and non-scheduled forestry activities must be carried out competently
- 38.1 Scheduled and non-scheduled forestry activities to which this licence applies must be carried out in a competent manner.
- 39. Licences under Forestry Act 1916
- 39.1 All licences issued under the *Forestry Act 1916* or the *Forestry Regulation 1999*, which authorises the holder to carry out operations covered by this licence, must require the holder to comply with condition 16 of Part 1 of Operating Conditions of this licence, in the same way that State Forests must comply with that condition.
- 39.2 State Forests must monitor compliance with the conditions of this licence and be able to demonstrate that the monitoring has occurred.

#### 40. Understanding of State Forests' employees and contractors

40.1 State Forests must ensure that all employees, contractors, sub-contractors, agents or State Forests' licensees engaged in any aspect of scheduled and non-scheduled forestry activities authorised by this licence understand the general and site-specific conditions applying to the activity prior to their involvement in the activity.

#### 41. Field supervision of scheduled and non-scheduled forestry activities

- 41.1 State Forests must ensure that a State Forests' employee is present at each compartment or roading area for the purpose of ensuring compliance with this licence, for the equivalent of at least one full working day per week per operation, while scheduled and non-scheduled forestry activities are occurring under this licence.
- 41.2 State Forests must ensure through this and any other supervision that may be necessary that all employees, contractors, sub-contractors, agents or licensees comply with the conditions of this licence.
- 41.3 State Forests must record the name of the State Forests' employee who was present at each operation, and the dates and times upon which they were present.

41.4 State Forests must also record the items listed in Division 3 of Schedule 6 of this licence.

#### 42. Relationship of this licence to other documents

Where there is a conflict between the conditions of this licence and the documents with which this licence requires compliance, the conditions of this licence prevail.

### 43. Responsible employees

- 43.1 State Forests must authorise at least two of its senior employees to:
  - (a) speak on behalf of State Forests; and
  - (b) provide any information or document required under this licence.
- 43.2. State Forests must authorise those persons, and inform the Manager of the Forestry Unit of the EPA, of the names and telephone numbers of those authorised persons by 30 April of each year.
- 43.3 State Forests must inform the Manager of the Forestry Unit of the EPA of any change in the information provided under condition 43.2 within 14 days of the change.
- 43.4 Any person authorised under this condition by State Forests must be readily contactable on the person's nominated telephone number during regular working hours.

#### 44. Continuation of soil and water training

- 44.1 State Forests must continue to develop the soil and water training program for operators, supervisors and planners, development of which commenced during the 1994/95 licence period and in accordance with the 1994/95 licences, to the point where Vocational Education and Training Accreditation Board (VETAB) accreditation has been obtained.
- 44.2 The operators' course, supervisors' course and planners' course must be provided on a regular basis and at least once a year by a training organisation approved in writing by the EPA.
- 44.3 State Forests must advise the EPA in writing of the date on which each course is finalised and is first formally offered by a training organisation.

#### 45. Soil assessor training

- 45.1 State Forests must ensure that persons verifying soil regolith and detecting dispersible soils in accordance with Schedule 3 are trained and competent to do so.
- 45.2 Soil assessors must have gained accreditation in writing from the EPA before carrying out any soil regolith or dispersibility assessments.

# **Dictionary**

- "aggregate" means a unit of soil structure consisting of primary soil particles held together by cohesive forces or by secondary soil materials such as iron oxides, silica or organic matter:
- "air-dry aggregate" means the state of dryness of a soil aggregate at equilibrium with the water content in the surrounding atmosphere. The actual water content will depend upon the relative humidity and temperature of the surrounding atmosphere;
- **"armour"** means to provide a protective surface that is resistant to erosion or displacement by machinery or vehicles;
- "Australian Map Grid" means the 13 digit map coordinates (6 digit Eastings and 7 digit Northings) provided on a 1:25 000 or 1:50 000 map sheet produced by Land Information Centre (formerly Central Mapping Authority);
- "batter" means an earth slope formed by the placing of fill material or by cutting into the natural hillside;
- "batter drain" means a constructed and stabilised drain to carry runoff down a batter without scouring or erosion;
- "batter stabilisation" means the provision of adequate vegetative, structural or mechanical measures to control erosion from batters. Measures may include the provision of catch drains, topsoiling, seeding, mulching, geofabrics, benching, use of batter drains or use of retaining walls or other engineering structures;
- "bench" means a strip of relatively flat earth or rock breaking the continuity of a slope;
- "best management practice" means practices that have been developed to prevent or minimise pollution and to protect the environment. They are often applied to non-point sources of pollution where there is need to define a range of practices that need to be applied to prevent degradation of the environment;
- "blading off" means the removal of surface soil from a snig track or road in wet conditions in order to expose a drier or firmer surface for use by machinery;
- "borrow pit" means an excavation which does not form part of the road, from which fill material is extracted for road construction, upgrading or maintenance;
- "bridge" means a structure designed to carry a road over a drainage feature by spanning it;
- "buffer strip" means a strip along each side of a drainage depression in which soil disturbance during forestry activities must be prevented to the greatest extent practicable;
- "catch drain" means a diversion drain excavated on the high side of the batter, embankment or road to intercept and divert surface runoff water before it reaches the batter, embankment or road;
- "causeway" means a natural or man made crossing which enables vehicles to ford a drainage feature. The pavement of a causeway may consist of gravel, rock, bitumen or concrete, or of a stable natural surface. The upper surface of a causeway must vary by no more than 100 mm from the invert level of the drainage feature, both upstream and downstream of the causeway;

AMENDMENT 5 1 March 2013 Definition of 'causeway' modified

### "Code of Logging Practice" means:

- a) in the case of plantations harvesting, "Forest Practices Code: Part 1: Timber Harvesting in State Forests Plantations", prepared by State Forests, July 1995;
- in the case of native forests, the "Forest Practices Code: Part 2: Timber harvesting in Native Forests, State Forests and Crown-timber Lands" prepared by State Forests, February 1999;
- c) in the case of plantation establishment, "Forest Practices Code: Part 3: Plantation Establishment and Maintenance" prepared by State Forests, July 1997; and
- d) in the case of roads and fire trail construction and maintenance, "Forest Practices Code: Part 4 Forest Roads and Fire Trails" prepared by State Forests, February 1999.
- "compartment" means an area of forest designated for forestry management purposes, principally for the cutting and removal of timber. A compartment is an area of forest identified by a compartment number and a State Forests name. Compartment boundaries are delineated on State Forests' Geographic Information System (GIS);
- "concentrated water flow" means the discharge of water from a structure across a surface in a manner other than a sheet of water, up to the peak discharge from a storm event of less than or equal to the required design specification for that structure. Concentrated water flow is evidenced by rivulets, rills, gullies or streams of water, or the eroded areas where rivulets, rills, gullies or streams of water have flowed;
- "constructed snig tracks" means snig tracks that have had some form of machinery preparation prior to use, ranging from removal of leaf litter to the benching in of tracks around steep groundslopes;
- "construction" means the act of building, erecting or installing;
- "crossbank" means a hump of earth constructed across an extraction track, snig track, log dump or road to baulk the flow of water so that it can be diverted;
- **"crossing structure"** means a structure designed to allow the crossing of a drainage feature. Crossing structures are bridges, causeways, and culverts;

"crown" means the upper branches of a tree;

- "crown timber land" means lands for which the Forestry Commission of New South Wales has responsibility under the *Forestry Act 1916*, including State Forests, Flora Reserves, Timber Reserves, unoccupied Crown Lands, lands held in specified Crown tenures and Purchase tenure which have timber rights reserved;
- "culvert" means one or more adjacent enclosed conduits for conveying a drainage feature underneath a road formation;
- "deposition" means the laying down of solid material which has been eroded and transported from a distant part of the land surface;
- "directional felling" means the felling of a tree in such a way that it falls in a predetermined direction. This is achieved by cutting the tree at a particular angle;
- "dispersibility" means the behaviour of a soil material, whereby soil aggregates break down and separate into their constituent particles in water, due to deflocculation;
- "dispersible soils" means soils which have been classified class 2, 3 or 4 as determined using the methodology specified in Module 3 of Schedule 3 of this licence;

AMENDMENT 2 28 April 2003 Definition added Ref Appendix E

- "dispersion" means the process whereby soil aggregates break down and separate into their constituent particles in water, due to deflocculation;
- "disturbed area" means an area which is susceptible to erosion because the vegetative soil cover has been removed or altered. The disturbance may be accompanied by the mixing or removal of some soil horizons;
- "drainage depression" means a level to gently inclined shallow, open depression with a smoothly concave cross-section, rising to moderately inclined hillslopes;
- "drainage feature" means a drainage depression, drainage line, major water storage, watercourse, swamp or wetland;
- "drainage line" means a channel down which surface water naturally concentrates and flows. Drainage lines exhibit one or a combination of the following features which distinguish them from drainage depressions:
- a) evidence of active erosion or deposition e.g., gravel, pebble, rock, sand bed, scour hole, nick points; or
- b) an incised channel of more than 30 centimetres depth with defined bed and banks.
- "drop-down structure" means a non-erodable channel or hydrologic structure that discharges water over a fill batter. Drop-down structures may be constructed of gabion baskets, rock mattresses, precast concrete segments, geotextiles or half round sections of plastic, corrugated or concrete pipes. An energy dissipater must be used in conjunction with a drop-down structure;
- "earthworks" means mechanical soil movement and disturbance. This may include the construction, upgrading and maintenance of log dumps, roads, drainage feature crossings, snig tracks and extraction tracks;
- "effective bank height" means the minimum height of a crossbank above the outlet;

AMENDMENT 3 17 May 2004 Definition added Ref Appendix E "electronic transfer" means a data transfer between State Forests' Harvest Tracking System (HTS) system server and the EPA's Forestry Notification and Audit Tracking System (FNATS) system server.

Note: See condition 37A for requirements relating to the electronic transfer of data.

- "energy dissipater" means a device in the base of a channel or running water that dissipates the energy of the flow. The dissipater reduces the velocity and depth by spreading the water flow over a larger area. Energy dissipaters may be constructed from rocks, logs, steel baffles and concrete blocks;
- "environmental goals" means the environmental goals referred to in condition 2 (Objects of this licence);
- "EPA" means the Environment Protection Authority:
- **"erosion"** means wearing away of the land by running water, rainfall, wind, ice or geomorphological agent, including but not limited to processes such as detachment, entrainment, suspension, transportation and mass movement, at a rate accelerated due to forestry activities;

AMENDMENT 3 17 May 2004 Definition added Ref Appendix E **"event ID"** means a unique identification number generated by State Forests' Harvest Tracking System (HTS) that exclusively represents a forestry activity.

Note: Each form set out in Part A of Schedule 1 requires an event ID to be provided for the relevant forestry activity. An event ID must also be provided in monthly advance notices, and monthly reports, of harvesting operations under the "non-licence" terms of the approval.

"excavator" means a tracked machine which moves earth by means of a bucket or other implement mounted on an hydraulically operated boom;

"existing roads" means roads which were in existence prior to the commencement of a forestry activity;

"extraction" means a route for transport of logs from the point of felling to the log dump or log landing;

"extraction track" means a track along which forwarding machinery travels;

"felling" means the process of cutting down standing trees;

"fill" means a previously excavated material that is used to raise the surface of an area to a specified level;

"filter strip" means a strip of vegetation or groundcover along each side of a watercourse or drainage line retained for the purposes of:

- retarding the lateral flow of runoff and facilitating its infiltration into the soil, thereby causing deposition and filtration of transported material, and reducing sediment movement into the stream; and
- b) retarding sediment movement into the stream by minimising ground disturbance which may reduce infiltration and concentrate water; and
- c) reducing the risk of erosion of the channel and bank.

"forestry licence" means any licence issued by State Forests under the *Forestry Act 1916* or the *Forestry Regulation 1999* which authorises the holder to carry out any forestry activities covered by this licence;

"forwarding" means the carrying of logs by vehicles from the point of felling to the log dump in such a manner that the logs are fully supported off the ground;

"full supply level" means the maximum level to which water is normally stored, not including any temporary surcharge due to flooding effects;

"geotextile" means a product used as a soil reinforcement agent and as a filter medium. It is made of synthetic or natural fibres manufactured in a woven or loose non-woven manner to form a blanket-like product;

"grade" means a unit of slope measured from a horizontal plane (measured in degrees);

"gravel" means a natural occurring mixture of coarse mineral particles larger than 2.0 mm and smaller than 75 mm in diameter. Gravel is placed on the surface of a road to increase the load bearing capacity of a natural surface;

"gravel pit" means a pit formed by extraction of gravel for the purposes of road construction, upgrading or maintenance;

"gross area" means the total area of land within a compartment or roading area, before exclusion areas are removed (in hectares);

"ground-based harvesting" means felling of trees where those trees will be extracted from the compartment using:

- (a) a dozer, skidder or forwarder; or
- (b) a winch attached to a dozer or skidder.

"groundcover" means material which covers the ground surface and has the effect of reducing erosion. Groundcover may include existing vegetation, leaf litter, tree debris, gravel, rock, straw, mulch, geotextiles, erosion control mats, jute mesh and coconut mesh;

"groundslope" means the angle of inclination of the ground surface from the horizontal expressed in degrees;

"gully" means an open incised channel with a depth of >0.3 metres and characterised by moderately to very gently inclined floor and steep walls. For the purpose of this licence, a gully is a type of drainage line;

"gully stuffer" means a type of crossing for a road or snig track or extraction track across a drainage feature. It is formed by filling the drainage feature with trees, debris, spoil, soil, rock or other material to the level of the road or track;

"harvesting" means the cutting and removal of forest products;

"haulage operations" means the removal and transport of timber products from, the point of loading within the compartment or roading area by machinery or truck along a road;

"infall drainage" means a drainage method for a section of road located in steep side slope terrain where the whole surface is in-sloped against the natural surface side-slope;

"inherent soil erosion and water pollution hazard" means the potential for soil erosion and water pollution to occur in an area as a result of forestry activities, and takes into account rainfall erosivity, soil erodibility (and dispersibility), slope, mass movement, existing erosion, groundcover and intensity of forestry activities. Inherent soil erosion and water pollution hazard is determined in accordance with Schedule 3;

"log dam" has the same meaning as "gully stuffer";

**"log dump"** means areas where forest products are assembled for processing and sorting of logs prior to loading onto a truck;

"logging debris" means tree debris resulting from a forestry activity;

"log landing" has the same meaning as "log dump";

"Lower North East Region" means the State forests and other Crown-timber lands (excluding plantations) within the Lower North East Region shown on Map 1 to the New South Wales Lower North East Region Forest Agreement granted on 5 March 1999;

AMENDMENT 2
28 April 2003
Definition
replaced
Ref Appendix E

"machinery" means rubber- tyred skidders, bulldozers and mechanical or other harvesters;

"major water storage" means a dam constructed for public irrigation or the supply of town water:

"mass movement" means the downslope movement greater than 10 cubic metres of soil regolith, where gravity is the primary force and where no transporting medium such as wind, flowing water, or ice are involved. The key factors which affect mass movement are slope angle, material strength, vegetal cover and site drainage. This may include, but is not limited to earth slumps, translational slides and earth flows;

AMENDMENT 2 28 April 2003 Definition added Ref Appendix E "mechanical harvester" means a ground-based, tracked or wheeled machine equipped with a falling attachment containing a cutting device (for example a hydraulically driven disc or saw) for the purpose of felling trees;

"mitre drain" means a drain used to conduct runoff water from the shoulders of a road to a disposal area away from the road alignment. Often it is the extension of a table drain away from the road surface;

AMENDMENT 5 1 March 2013 Definition of 'monthly advice' added "monthly advice" means the written advice prepared, or required to be prepared, each month by FCNSW, on forestry operations, as referred to in clause 9A of the IFOA (including Condition 4.1 (c) of Appendix B of this IFOA);

"mulch" means a natural or artificial layer of plant residue or other material covering the land surface that conserves moisture, holds soil in place, aids in establishing plant cover and minimises temperature fluctuations;

"natural surface road" means a road that is unsealed or not gravelled;

"net harvestable area" means the portion of a compartment available for forestry activities. The net harvestable area does not include any exclusion areas within the compartment;

**"1998/99 licence"** means the licence dated 11 April 1998 issued by the EPA to State Forests in respect of logging operations;

"1998/99 licence period" means the period of the licence from 11 April 1998 to 10 April 1999;

"1999/2000 licence" means the licence dated 11 April 1999 issued by the EPA to State Forests in respect of forestry activities;

"1999/2000 licence period" means the period of the licence from 11 April 1999;

"old roads" means roads which were in existence prior to the commencement of a forestry activity;

AMENDMENT 2
28 April 2003
Definition added
Ref Appendix E

"operational zone" means a strip of vegetation or ground cover adjacent to a protection zone in compartments classified as inherent hazard level 1 or 2 and adjacent to a filter strip in compartments classified as inherent hazard level 3, within which specific modified harvesting practices are permitted and which is retained for the purpose of additional water quality protection:

"outfall drainage" means drainage which occurs when the surface of a road, snig track or extraction track has cross slope causing water to flow across and off the surface. This flow of water is away from and not into the hillside;

"outlet" means the point at which water discharges from a:

- a) river, creek or other flowline; or
- b) lake; or
- c) tidal basin or drainage depression; or
- d) pipe, channel, dam, or other hydrologic structure.

"peak flow" means the maximum flow which occurs during a flood of a specified average recurrence interval. (Refer to Part C of Schedule 2 of this licence);

"permanent extraction track crossing" means a crossing or crossing structure that is retained at the completion of harvesting;

"permanent snig track crossing" means a crossing or crossing structure that is retained at the completion of harvesting;

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

"post-harvest burning" means burning associated with the cutting and removal of timber which is carried out within 18 months of the timber being cut and removed;

AMENDMENT 2 28 April 2003 Definition added Ref Appendix E "protection zone" means a strip of vegetation or ground cover adjacent to a filter strip in compartments classified as inherent hazard level 1 or 2 within which specific modified harvesting practices are permitted and which is retained for the purpose of protecting water quality;

"pulplog" means logs suitable for the manufacture of reconstituted products including paper and panel board;

"rainfall erosivity" means a measure of the ability of rainfall to cause erosion;

"rehabilitate" means to return an area of land or a road or track surface to a stable condition. This may involve reshaping the land, spreading topsoil, constructing banks, revegetating or employing a combination of these;

"relief pipe" means a pipe used to direct water from a table drain and under the road;

**"reporting period"** means the period of 12 months after the issue of the licence, and each subsequent period of 12 months;

**"revegetate"** means to establish an effective vegetative groundcover by either natural regeneration or sowing with a seed and fertiliser mixture;

"rill" means a form of erosion that is characterised by small channels up to 0.3 metres deep which have cut into the surface of a slope;

**"road"** means any route used for the vehicular access to, and the transport of logs from, the point of loading within the compartment or roading area;

**"road drainage"** means a structure designed to direct water along, across or underneath a road, and includes catch drains, mitre drains, relief pipes, rollover banks, spoon drains, and table drains:

"road prism" means that part of the road from the inflexion point at the toe of the fill batter to the inflexion point at the top edge of the cut batter. Where there is no cut or fill batter as part of the road, then the road prism is to be taken from the outside edge of the table drain on either side of the road:

**"roading area"** means land which is disturbed by the construction of access roads necessary to enable or assist the cutting and removal of timber;

"rollover crossbank" means a crossbank constructed with a smooth cross-section and gentle batters, and which is well compacted to allow permanent vehicular trafficability:

"rollover drain" has the same meaning as "rollover crossbank";

"runoff" means that portion of the precipitation falling on a catchment area that flows from the catchment past a specified point;

- "saprolite" means part of the weathered soil regolith profile. It is characterised by the preservation of structures that are present in the unweathered rock material;
- "saturated soil" means the physical condition of a soil in which no more moisture can be absorbed or accepted. Saturated soils are subjected to compaction, rutting or displacement by machinery and vehicles;
- "sawlog" means logs suitable for processing through a sawmill into solid timber products;
- "sedimentation" means the process of sediment deposition;
- "sediment control measures" means a measure or practice that is used to mitigate, reduce or prevent the amount of sediment in runoff waters;
- "sediment trap" means a structure designed to mitigate, reduce or prevent the amount of soil that is being transported by runoff;
- **"SEMGL"** means the "Standard Erosion Mitigation Guidelines for Logging in New South Wales" prepared by the Department of Conservation and Land Management, 5 March 1993 version:

AMENDMENT 2 28 April 2003 Definition added Ref Appendix E

- "sidecut" means the removal of soil and subsoil along the side of a slope to enable the construction of a road, snig track or extraction track;
- "silt fence" means a fabric or mesh placed in the path of runoff which acts as a filter to reduce and detain sediment from runoff waters;
- "slaking" means the partial breakdown of soil aggregates in water due to the swelling of clay and the expulsion of air from pore spaces;
- "slash" means tree debris resulting from a forestry activity;
- "snigging" means the pulling of logs, either wholly on the ground or partly supported from the point of felling to the log dump. Wheeled or tracked vehicles are used for this purpose;
- "snig track" means a track along which snigging equipment travels;
- "soil erodibility" means the susceptibility of a soil to erosion due to rainfall and the surface runoff of water:
- "soil regolith" means the mantle of the earth and soil, including rocks and sediments altered or formed by land surface processes;
- "soil stabilisation" means the provision of vegetative, structural or mechanical measures to prevent or control erosion by providing an energy-absorbent or energy resistant barrier on the soil surface:
- "spoil" means excess soil, rock or other material excavated during forestry activities;
- **"spoon drain"** means a drain with a semi-circular cross-section and which has no associated ridge of soil. Its capacity is solely defined by the excavated channel dimensions;
- **"stable"** means the physical condition of a parcel of land or flowline which experiences no appreciable soil erosion, or sedimentation, and is protected from erosive agents. "Stable" also means a soil conservation or hydraulic structure which is functioning effectively and is not adversely affected by erosive agents;

"stable outlet" means an outlet which is protected from erosion, up to peak discharge of water flow from a storm event of less than or equal to the design specification of the structure;

"State Forests" means the Forestry Commission of New South Wales;

"State Forests' licensee" means the holder of any licence issued by State Forests under the Forestry Act 1916 and the Forestry Regulation 1999 which authorises the holder to carry out any forestry activity covered by this licence;

"substantial debris" means logging debris greater than 100 millimetres in diameter and three metres in length;

"swamp" has the same meaning as "wetland";

"table drain" means the side drain of a road adjacent to the shoulders of the road;

"temporary extraction track crossing" means a crossing or crossing structure that is removed at the completion of harvesting;

"temporary snig track crossing" means a crossing or crossing structure that is removed at the completion of harvesting;

"timber" means sawlog, pulplog, pole, pile or girders;

**"toe"** means the bottom intersection line of two slope planes, that is the toe of a fill is the line formed by the intersection of a fill batter with the natural ground surface;

"topsoiling" means the application of topsoil to exposed or eroded areas, including batters and earthworks, to encourage the rapid growth of vegetation over them, for the purpose of soil stabilisation against erosion;

"track drainage structure" means any structure designed to direct water across an extraction track or snig track surface. These may include crossbanks, hay bales or sand bags;

"trackscavator" means a self-propelled, tracked tractor, commonly fitted with log forks, used for snigging and loading logs;

"tree" means a perennial plant with a self-supporting woody main stem or trunk which usually develops woody branches, and includes a sapling, shrub or scrub;

"upgrading" means the act of improving or replacing;

AMENDMENT 2 28 April 2003 Definition added Ref Appendix E

"unmapped drainage line" means a drainage line which does not appear on a 1:25 000 topographic map (as supplied by the Land Information Centre);

"walk-over" means timber extraction or snigging without removing or unduly disturbing the existing natural groundcover; that is, where no snig track construction or blading off is required or performed;

"watercourse" means a channel, having a distinct bed and banks, down which surface water flows on a permanent or semi-permanent basis;

"wetland" means a vegetated depression with a permanent, seasonal or intermittent water table at or slightly above the floor of the depression. The vegetation type in a wetland typically indicates a wetter micro-environment than the surrounding country;

"windrow" means an accumulation or mound of soil material on the edge of a road or snig track formed by the spillage from the edge of a blade or other similar machine during earthmoving operations;

"windthrow" means trees blown over by wind. Windthrow occurs naturally in native forests, but often follows harvesting operations which open up the forest, allowing more wind to penetrate.