

FORESTRY AND NATIONAL PARK ESTATE ACT 1998

AMENDMENT NO 2 TO INTEGRATED FORESTRY OPERATIONS APPROVAL FOR THE UPPER NORTH EAST REGION

The Integrated Forestry Operations Approval for the Upper North East Region is amended as set out in the following schedules to this instrument:

Schedule 1 - Amendments to the “non-licence” terms of the Integrated Forestry Operations Approval for the Upper North East Region;

Schedule 2 – Amendments to the terms of the licence under the *Protection of the Environment Operations Act 1997* set out in Appendix A of the Approval;

Schedule 3 – Amendments to the terms of the licence under the *Threatened Species Conservation Act 1995* set out in Appendix B of the Approval;

Schedule 4 – Amendments to the terms of the licence under Part 7A of the *Fisheries Management Act 1994* set out in Appendix C of the Approval.

This instrument commences on 3 May 2003.

Notes do not form part of this instrument. They are provided to assist understanding only.

Dated: April 2003.

Craig Knowles MP
Minister for Natural Resources

Michael Costa MP
Minister Assisting the Minister for Natural Resources (Forests)

Bob Debus MP
Minister for the Environment

Ian Macdonald MLC
Minister administering the Fisheries Management Act 1994

SCHEDULE 1 – AMENDMENTS TO THE “NON-LICENCE” TERMS OF THE INTEGRATED FORESTRY OPERATIONS APPROVAL FOR THE UPPER NORTH EAST REGION

[1] Clause 1 (4)

Insert after clause 1 (3):

- (4) On and from 3 May 2003, the letters “DUAP” and the words “The Department of Urban Affairs and Planning”, wherever occurring in this approval, are to be read as referring to the Resource and Conservation Division of the Department of which the Division forms a part.

Note: On the 2 April 2003 the Resource and Conservation Division of the Department of Planning (formerly DUAP) was transferred to a new Department of Sustainable Natural Resources. As the functions of the Department of Planning with respect to the approval were primarily carried out by the Resource and Conservation Division, the references to the Department in the approval need to be read as references to the Division, now part of the new Department.

[2] Note after heading to clause 10

Omit the note (inserted by Amendment No 1 to the Approval that commenced on 1 December 2001). Insert instead the following note:

Note: Clause 10 needs to be read with Part 2A and clause 10A (both of which commenced on 3 May 2003). Part 2A, while not allowing trees growing within high conservation value old growth forest or rare non-commercial forest types to be logged (for the purpose of producing timber products), does allow limited operations within these areas for the purpose of accessing timber growing near their boundaries. Part 2A and clause 10A also set out conditions under which trees accidentally felled into these areas, and rainforest and rainforest exclusion zones, respectively, may be removed.

[3] Clause 10 (4A)-(4D)

Insert after clause 10 (4):

Accidental felling

- (4A) Subclause (4) is not breached where a tree is accidentally felled into any area to which this clause applies.
- (4B) For the purposes of this clause, a tree is accidentally felled into an area only 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 a mechanical harvester) to fell the tree away from the area.

- (4C) Despite subclause (4B), 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.
- (4D) Despite subclauses (2)-(4), a tree that is accidentally felled into an area of land to which this clause applies may be removed:
- (a) in the case of an area that is, or is within, a rare non-commercial forest type or high conservation value old growth forest, in accordance with Part 2A; and
 - (b) in the case of an area that is, or is within, rainforest or a rainforest exclusion zone, in accordance with clause 10A.

[4] Clause 10 (7)

Omit “, and snagging may be carried out,”. Insert instead “and used”.

[5] Clause 10 (7) (a)

Omit “road or snagging”. Insert instead “construction”.

[6] Clause 10 (7) (b), (8) and (11)

Omit “or snagging” wherever occurring.

[7] Clause 10 (10)

Omit “, or snagging” and “or snagging,”.

[8] Clause 10 (13)

Omit the clause 10 (13).

[9] Clause 10 (14)

Omit the definition of “high conservation value old growth forest”. Insert instead in alphabetical order:

“directional felling” means the felling of a tree by cutting the tree at a particular angle so that it falls in a pre-determined direction;

“high conservation value old growth forest” means the following areas of land within the Upper North East Region:

- (a) land depicted in the Geographic Information System theme in ESRI grid format called “hcovog1_prctcd” in the sub-directory called “Protected HCVOG” on the CD-Rom having the volume label “991221_1516 (2 Dec 1999)” and held by the Resource and Conservation Division, and further described in the corresponding metadata on the CD-Rom,

- (b) “old growth” land depicted in the Geographic Information System theme in ESRI grid format called “ogtoprotect2” in the sub-directory called “Additional Protected OG” on the CD-Rom having the volume label “030423_1132 (23 April 2003)” and held by the Resource and Conservation Division, and as may be further described on corresponding metadata on the CD-Rom;

[10] Clause 10A

Insert after clause 10:

10A. Removal of accidentally felled trees from rainforest or rainforest exclusion zone

- (1) In this clause:
 - (a) any area that is, or is within, a rainforest or rainforest exclusion zone is referred to as a rainforest; and
 - (b) a reference to a tree that is accidentally felled is a reference to a tree that is accidentally felled within the meaning of clause 10.
- (2) A tree that is accidentally felled into a rainforest in the course of a harvesting operation may be removed, but only if SFNSW is of the opinion that the tree will produce at least one timber product that is not low quality timber or pulp grade timber. For the avoidance of doubt, a part of the tree (subject to subclause (3) (a)) may be removed even though the timber product which that part will produce, or is likely to produce, is low quality timber or pulp grade timber.
- (3) The following rules apply to the removal of the tree:
 - (a) the crown must be cut off from the trunk and left where it has fallen unless the whole of the tree is lifted out of the rainforest, or lifted and moved within the rainforest, using a mechanical harvester;
 - (b) in removing the tree (or any logs into which it is cut), any disturbance to the ground (including its vegetation) and soil must be minimised as far as practicable;
 - (c) where practicable, the tree (or any logs into which it is cut) must be removed from the rainforest without the tree or the logs contacting the ground. In any other case, contact with the ground must be minimised as far as practicable;
 - (d) the wheels or tracks of any machinery used to remove the tree (or any logs into which it is cut) must remain outside the rainforest.
- (4) Snigging may be carried out to remove the tree or any logs into which it is cut, but only if:
 - (a) applying the rules set out in subclause (3) (c), this is the only practicable method of removing the tree or logs; and

- (b) the wheels or tracks of any machinery involved in the snigging remain outside the rainforest (as required by subclause (3) (d)).
- (5) For the avoidance of doubt, chainsaws may be used in a rainforest to fell a tree whose base is in the net harvestable area and to cut an accidentally felled tree into logs.
- (6) Where an accidentally felled tree is removed from a rainforest, any ground (including its vegetation) or soil that is disturbed as result of the felling of the tree into the forest, or its removal (or the removal of logs into which it is cut) under this clause, must be rehabilitated.
- (7) Examples of the measures that may need to be taken to rehabilitate the disturbed ground (including its vegetation) or soil are as follows:
 - (a) reinstating the ground surface;
 - (b) cross draining furrows caused by fallen trees or the removal of trees or logs;
 - (c) covering denuded soil (other than with gravel or rock). For this purpose, material from the crown of a felled tree may be cut from the crown and moved;
 - (d) planting plants of the same species as the plants disturbed or destroyed by the fallen tree or its removal.
- (8) The harvesting arm of a mechanical or other harvester may be used for rehabilitating disturbed ground or soil for the purposes of this clause, if the tracks or wheels of the harvester remain outside the rainforest. Harvesting machinery may not otherwise be used for rehabilitating the disturbed ground or soil.
- (9) In this clause:

“harvesting machinery” means any mechanical or other harvester, rubber-tyred skidder or bulldozer.

“low quality timber” and “pulp grade timber” have the same meanings as in clause 5;

“mechanical harvester” means a tracked or wheeled machine equipped with a falling attachment containing a cutting device (for example, hydraulically driven disc or saw) for the purpose of felling trees;

“rainforest” and “rainforest exclusion zone” have the same meanings as in clause 10.

[11] Part 2A

Insert after clause 18:

PART 2A – Restricted logging operations near boundary of rare or old growth forest or management zones

18A. Application of part

- (1) This Part (being clauses 18A-18H) applies in relation to any area that is, or is within:
 - (a) a rare non-commercial forest type;
 - (b) high conservation value old growth forest;
 - (c) an area of State forest declared to be a special management zone under the *Forestry Act 1916*; or
 - (d) an area classified as Forest Management Zone 2 or 3A in accordance with the Forest Management Zoning System.

Such an area is referred to in this Part as a rare or old growth forest (being an area described in paragraph (a) or (b) of this subclause) or a management zone (being an area described in paragraph (c) or (d) of this subclause).

- (2) This Part applies despite any prohibitions or restrictions on logging operations affecting rare or old growth forest in clause 10 and despite any prohibitions or restrictions on logging operations affecting management zones in clause 19.
- (3) This Part does not affect, or limit in any way, the operation of any exceptions to the prohibitions or restrictions in clause 10 or clause 19 respectively. The Part does not affect the operation of clause 39 with respect to road construction in management zones.
- (4) For the purposes of this Part:

“directional felling” means the felling of a tree by cutting the tree at a particular angle so that it falls in a pre-determined direction;

“harvesting machinery” and “harvesting machine” mean any mechanical or other harvester, rubber-tyred skidder or bulldozer;

“high conservation value old growth forest” and “rare non-commercial forest type” have the same meanings as in clause 10;

“low quality timber” and “pulp grade timber” have the same meanings as in clause 5;

“mechanical harvester” means a 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;

“walkover” has the same meaning as in the terms of the licence under the *Threatened Species Conservation Act 1995* set out in this approval.

- (5) A reference in this Part to a tree that is accidentally felled is a reference to a tree that is accidentally felled within the meaning of clause 10 or clause 19.

18B. Felling and removal of trees into and from rare or old growth forest or management zone

- (1) A tree whose base is in a net harvestable area may be felled into, and removed from, a rare or old growth forest or management zone in a harvesting operation for the purpose of producing timber if:
- (a) it is not practicable to fell the tree so that it falls outside the forest or zone; and
 - (b) SFNSW is of the opinion, when selecting the tree for felling, that it will produce at least one timber product that is not low quality timber or pulp grade timber; and
 - (c) the tree is felled in such a way so as to avoid as far as practicable damage to trees growing in the forest or zone.

However, no harvesting machinery may enter, or be used within, a rare or old growth forest or management zone for the purpose of felling a tree into that forest or zone under this subclause.

- (2) In any one harvesting operation:
- (a) no more than six trees may be felled (under subclause (1)) across any 200 metre length of the boundary between the rare or old growth forest, or management zone, and the net harvestable area in which the harvesting operation is being carried out, whatever two hundred metre length of the boundary is considered; and
 - (b) the number of trees that may be removed (under subclause (1)) must not exceed the number calculated by applying the principle set out in paragraph (a).

Removal of accidentally felled trees

- (3) A tree that is accidentally felled into a rare or old growth forest or management zone in the course of a harvesting operation may be removed from the forest or zone, but only if SFNSW is of the opinion that the tree will produce at least one timber product that is not low quality timber or pulp grade timber. The accidentally felled tree may be removed from the forest or zone even if the total number of trees removed in the harvesting operation concerned will, as a result, exceed the number calculated by applying the principle set out in subclause (2) (a)).

18C. Special rules apply to method of removal of trees felled into rare or old growth forest or management zone

- (1) A tree that is felled into a rare or old growth forest or management zone under clause 18B, or accidentally, may be removed only in accordance with the following rules:

- (a) the crown must be cut off from the trunk and left where it has fallen unless the whole of the tree is lifted out of the forest or zone, or lifted and moved within the forest or zone, using a mechanical harvester;
 - (b) in removing the tree (or any logs into which it is cut), any disturbance to the ground and soil must be minimised as far as practicable;
 - (c) where practicable, the tree (or any logs into which it is cut) may only be removed from the rare or old growth forest or management zone without the tree or the logs contacting the ground. In any other case, contact with the ground must be minimised as far as practicable;
 - (d) the wheels or tracks of any machinery used to remove the tree or any logs into which it is cut must remain outside the forest.
- (2) For the avoidance of doubt, a part of the tree (subject to subclause (1) (a)) felled into a rare or old growth forest or management zone under clause 18B, or accidentally, may be removed, even though the timber product which that part of the tree will produce, or is likely to produce, is low quality timber or pulp grade timber.

Note: This subclause, and clause 18B (1) (b), do not affect the operation of clauses 21 and 22 of this approval. These clauses require harvesting operations to have as their principal purpose the production of high quality large sawlogs, large veneer logs or poles and require SFNSW to sell logs only in accordance with their categorisation.

Snigging etc permissible for limited purpose

- (3) Where a tree is felled into a rare or old growth forest or management zone, under clause 18B, or accidentally, snigging may be carried out for the purpose of removing the tree or any logs into which it is cut, but only if:
- (a) applying the rules set out in subclause (1) (c), this is the only practicable method of removing the tree or logs; and
 - (b) the wheels or tracks of any machinery involved in the snigging remain outside the forest or zone (as required by subclause (1) (d)).
- (4) Despite subclause (1) (d) and subclause (3) (b), where a harvesting machine has entered a rare or old growth forest or management zone in accordance with clause 18E (for the purpose of felling trees away from the forest or zone), it may also be used to remove a tree (or any logs into which it is cut) felled, under clause 18B, or accidentally, into the forest or zone.

Note: This subclause does not affect the operation of the rules in subclauses (1)(a)-(c) and (3) (a).

Chainsaws permissible

- (5) For the avoidance of doubt, chainsaws may be used in a rare or old growth forest or management zone to fell a tree whose base in the net harvestable area and to cut a tree into logs that may be removed from the forest or zone under clause 18B.

18D. Rehabilitation of ground or soil disturbed during removal of trees

- (1) Where a tree is removed from a rare or old growth forest or management zone under this Part, any ground (including its vegetation) or soil within a rare or old growth forest or management zone that is disturbed as a result of the fallen tree or its removal (or the removal of the logs into which it is cut) must be rehabilitated.
- (2) Examples of the measures that SFNSW may need to take to rehabilitate the disturbed ground (including its vegetation) or soil are as follows:
 - (a) reinstating the ground surface;
 - (b) cross draining furrows caused by fallen trees or the removal of trees or logs;
 - (c) covering denuded soil (other than with gravel or rock). For this purpose, material from the crown of a felled tree may be cut from the crown and moved;
 - (d) planting plants of the same species as the plants disturbed or destroyed in the logging operation.
- (3) Rehabilitation for the purposes of this clause is to be done without using harvesting machinery, except as follows:
 - (a) the harvesting arm of a mechanical or other harvester may be used for rehabilitating the disturbed ground or soil, where the tracks or wheels of the harvester remain outside the rare or old growth forest or management zone;
 - (b) if a harvesting machine has already entered the forest or zone in accordance with clause 18E (to fell trees away from the forest or zone), it may be also be used for rehabilitating the disturbed ground or soil.

18E. Use of harvesting machines in rare or old growth forest or management zone to fell trees away from the forest or zone

- (1) A harvesting machine may enter, and be used within, a rare or old growth forest or management zone in order to fell and remove any tree whose base is in the net harvestable area in the course of a harvesting operation for the purpose of producing timber.
- (2) However, a harvesting machine within the forest or zone may only fell a tree away from the forest or zone (that is, into the net harvestable area), and only if:
 - (a) the tree cannot be felled from outside the forest or zone, using the techniques of directional felling, so that it does not fall into the forest or zone; and
 - (b) SFNSW is of the opinion, when selecting the tree for felling, that it will produce at least one timber product that is not low quality timber or pulp grade timber.

- (3) For the avoidance of doubt, the whole of a tree felled under this clause may be removed, even though the timber product that any part of the tree will produce, or is likely to produce, is low quality timber or pulp grade timber.

Note: Subclauses (2) and (3) do not affect the operation of clauses 21 and 22 of this approval. These clauses require harvesting operations to have as their principal purpose the production of high quality sawlogs, large veneer logs or poles and require SFNSW to sell logs only in accordance with their categorisation.

18F. Conditions of operating harvesting machinery within rare or old growth forest or management zone

- (1) A harvesting machine may only be operated within a rare or old growth forest or management zone under this Part using walkover techniques and in such a way so as:
 - (a) to minimise skewing of its tracks (if any) to the greatest extent practicable; and
 - (b) to minimise disturbance to the ground (including its vegetation) and soil within the forest to the greatest extent practicable.
- (2) In particular, a harvesting machine may only be operated under this Part within a rare or old growth forest or management zone with any blades, rippers or other similar attachments positioned so that they do not disturb the ground surface.
- (3) The wheels or tracks of a harvesting machine that has entered a rare or old growth forest or management zone must remain wholly within 5 metres from the boundary of the forest or zone when being used under this Part.

18G. Rehabilitation of ground disturbed by harvesting machinery within rare or old growth forest or management zone

- (1) Any ground or soil within a rare or old growth forest or management zone that is disturbed by a harvesting machine as a result of its use under this Part is to be rehabilitated.
- (2) Examples of the measures that may need to be taken for the purposes of rehabilitation of ground (including vegetation) or soil disturbed by a harvesting machine are as follows:
 - (a) reinstating the ground surface;
 - (b) cross draining furrows caused by the machine;
 - (c) covering denuded soil (other than with gravel or rock). For this purpose, material from the crown of a tree felled into the rare or old growth forest or management zone may be cut from the crown and moved;
 - (d) planting plants of the same species as the plants disturbed or destroyed by the machine.

- (3) Rehabilitation for the purposes of this clause is to be done without using harvesting machinery, except as follows:
- (a) the harvesting arm of a mechanical or other harvester may be used for rehabilitating the disturbed ground or soil, where the tracks or wheels of the harvester remain outside the rare or old growth forest or management zone;
 - (b) if the harvesting machine that disturbed the ground or soil has not left the forest or zone since entering it under clause 18E, the machine may also be used for rehabilitating that ground or soil.

18H. Additional restrictions on use of harvesting machinery for rehabilitation or tree removal

- (1) Nothing in this Part authorises a harvesting machine to enter a rare or old growth forest or management zone solely for any, or all, of the purposes of:
- (a) removing a tree felled into the forest or zone, as referred to in clause 18C (4); and
 - (b) rehabilitating disturbed ground or soil, as referred to in clause 18D (3); and
 - (c) rehabilitating disturbed ground or soil, as referred to in clause 18G (3).
- (2) The wheels or tracks of a harvesting machine may be moved within a rare or old growth forest or management zone for a purpose authorised by clause 18E (that is, to fell a tree away from the forest or zone and remove the tree). They may not be repositioned or moved (to any significant extent) within a rare or old growth forest or management zone solely for any, or all, of the purposes of:
- (a) removing a tree felled into the forest or zone, as referred to in clause 18C (4); and
 - (b) rehabilitating disturbed ground or soil, as referred to in clause 18D (3); and
 - (c) rehabilitating disturbed ground or soil as referred to in clause 18G (3).

Note: Essentially, a harvesting machine is only to be used within a rare or old growth forest or management zone for purposes other than felling a tree outside the forest or zone, such as for rehabilitation purposes, where the machine can be used without moving it from the position it was in when felling the tree or as it enters the forest or zone for the purpose of felling the tree or as it leaves the forest or zone.

[12] Note to clause 19 (2)

Insert at the end of clause 19 (2):

Note: Clause 19 needs to be read with Part 2A (which commenced on 3 May 2003). Part 2A, while not allowing trees within the areas to which clause 19 applies to be logged, does allow limited operations within these areas for the purpose of accessing timber growing near their boundaries.

[13] Clause 19 (2A)-(2D)

Insert after clause 19 (2):

Accidental felling of trees

- (2A) Subclause (2) is not breached where a tree is accidentally felled into any area of land to which this clause applies.
- (2B) For the purposes of this clause, a tree is accidentally felled into an area of land only 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 a mechanical harvester) to fell the tree away from the area.

A reference to directional felling in this subclause is a reference to felling a tree by cutting the tree at a particular angle so that it falls in a pre-determined direction.

- (2C) Despite subclause (2B), 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.
- (2D) Despite subclause (2), a tree that is accidentally felled into an area of land to which this clause applies may be removed from the area in accordance with Part 2A.

Note: See clause 18B (3) in Part 2A which allows trees which are accidentally felled into an area of land to which clause 19 applies to be removed, despite the prohibitions in clause 19.

[14] Clause 23 (4A)

Insert after clause 23 (4):

- (4A) The written notice under subclause (4) is to include a statement to the effect that the compartment or other area in which the proposed harvesting operation will be carried out is likely to contain an unmapped drainage line (being a drainage line that does not appear on any 1: 25 000 topographic map supplied by the Land Information Centre) if:
- (a) SFNSW is of this opinion, having regard to the topography of the relevant land; and
 - (b) SFNSW proposes to carry out the harvesting operation other than under the authority conferred by the terms of the licence under the *Protection of the Environment Operations Act 1997* set out in this approval.

If possible, the statement is to indicate where the unmapped drainage line may be located within the compartment or other area.

[15] Clause 44 (2) and (3)

Omit clause 44 (2). Insert instead:

(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 a high conservation value old growth forest and an exclusion zone around a record of a particular threatened species) 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.

Note: The intended effect of subclause (2) is illustrated by the following example. Part 2A of this approval, and condition 5.3 of the terms of the licence under the Threatened Species Conservation Act 1995, allow trees to be felled into high conservation value old growth forest in certain limited circumstances. However, subclause (2) is intended to make it clear that where such a forest is also an exclusion zone around a record of a threatened species such as the pouched frog, wombat or golden-tipped bat, then no trees may be felled into the forest in the course of a harvesting operation (as this is prohibited by conditions relating specifically to such exclusion zones).

SCHEDULE 2 – AMENDMENTS TO THE TERMS OF LICENCE UNDER THE PROTECTION OF THE ENVIRONMENT OPERATIONS ACT 1997 SET OUT IN APPENDIX A OF THE APPROVAL

[1] Condition 22 (Research into the alternative management of filter strips)

Omit the condition.

[2] Dictionary

Omit the definition of “machinery” from the dictionary.

Insert instead the following definitions into the dictionary in alphabetical order:

“crown” means the upper branches of a tree;

“machinery” means rubber-tyred skidders, bulldozers and mechanical or other harvesters.

“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;

“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;

“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;

“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.

“timber logs” means timber products identified in clause 5(2) of part 1 of the Integrated Forestry Operations Approval other than pulp grade timber and low quality timber.

“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)

[3] Schedule 1 Part B Operational Map Requirements

Omit B2. Insert instead:

- B2. filter strip, protection zone and operational zone widths for all identified watercourses and drainage lines within the compartment or roading area in inherent hazard level 1 or 2;

B2A filter strip and operational zone widths for all identified watercourses and drainage lines within the compartment or roading area in inherent hazard level 3;

[4] Schedule 2 Part A

Omit the words “filter strips and buffer strips” from the final paragraph in Part A. Insert instead the words “filter strips, protection zones, operational zones and buffer strips”.

[5] Schedule 3 Module 1, 1.4 - Step 4: Determination of net harvestable area

After the words “filter strips” insert the words “protection zones and operational zones”.

[6] Schedule 4 (D. Protection of Drainage Features) Condition 6

Omit condition 6 of schedule 4. Insert instead:

6 Filter strips, protection zones and operational zones must be retained along all drainage lines, prescribed streams and watercourses as required in Table 1 and Table 1a. They must have a minimum width determined in accordance with Table 1 and Table 1a.

Table 1: Minimum filter strip, protection zone and operational zone widths for mapped and unmapped drainage lines, prescribed streams and watercourses in native forests in Inherent Hazard Level 1 and 2 (metres - measured along the ground surface).

Stream Order	Filter Strip	Protection Zone	Operational Zone
Unmapped	5	5	10
1st Order	5	5	10
2nd Order	5	15	10
3rd Order	5	25	10
4th Order or greater	5	45	10

Table 1a: Minimum filter strip and operational zone widths for mapped and unmapped drainage lines, prescribed streams and watercourses in native forests in Inherent Hazard Level 3 (metres - measured along the ground surface).

Stream Order	Filter Strip	Operational Zone
Unmapped	10	10
1st Order	10	10
2nd Order	20	10
3rd Order	30	10
4th Order or greater	50	10

[7] Schedule 4 (D. Protection of Drainage Features) Condition 7

Omit condition 7 of schedule 4. Insert instead:

- 7 The determination of stream order for the purposes of Table 1 and Table 1a must be carried out in accordance with Part B of Schedule 2 of this licence.

[8] Schedule 4 (D. Protection of Drainage Features) Condition 14A and 14B

Insert the following conditions after condition 14 of schedule 4:

- 14A The width of a protection zone must be measured from the edge of the filter strip.
- 14B The width of an operational zone must be measured from the edge of -
- a. the protection zone in compartments classified as inherent hazard level 1 or 2;
 - b. the filter strip in compartments classified as inherent hazard level 3.

[9] Schedule 4 (D. Protection of Drainage Features) Condition 19-19C

OPERATIONS WITHIN NATIVE FOREST FILTER STRIPS

Omit condition 19 of schedule 4. Insert instead:

19. Where a tree is accidentally felled into a filter strip:
- a. the timber log section of that tree may be removed from the filter strip;
 - b. the crown of the tree must be cut off from the trunk and left where it has fallen unless the whole of the tree is lifted out of the filter strip, or lifted and moved within the filter strip, using a mechanical harvester.

Note : i) For the purposes of this condition (19) a tree will be considered as being accidentally felled if: techniques of directional felling were used in an attempt to fell the tree away from the filter strip; or an attempt was made using some other method (such as using a mechanical harvester) to fell the tree away from the filter strip.

- 19A Where a log is removed from a filter strip, the log furrow produced by this extraction must be infilled with soil, drained onto a stable surface capable of handling concentrated water flow and at least 70% ground cover must be achieved within 5 days of the creation of the furrow.

- 19B Seventy percent ground cover must be achieved on all disturbed soil surfaces in a filter strip within five days of the creation of the disturbance. This level of ground cover must not be achieved by the addition or spreading of gravel or rock.

Note the following techniques, or a combination of them are examples of how 70% ground cover may be achieved:

- a. retain at least 70% existing ground cover;
- b. retain or respread slash and logging debris over at least 70% of the disturbed soil surface; or

- c. provide artificial ground cover in order to achieve 70% ground cover within the disturbed area using geotextile or erosion control mats)

19C State Forests must document the location of and date on which the tree was accidentally felled into the filter strip and the date and type of remedial work completed to comply with 19A and 19B.

[10] Schedule 4 (D. Protection of Drainage Features) Condition 20A-20T

Insert after condition 20 of schedule 4:

OPERATIONS WITHIN PROTECTION ZONES FOR NATIVE FORESTS

20A Trees may be felled into a protection zone.

20B Where a tree is felled into a protection zone by a mechanical harvester, the tree and crown may be lifted from the protection zone, or lifted and moved within the protection zone, by the mechanical harvester.

20C Trees in a protection zone must not be felled, except for the purpose of constructing a road, extraction track or snig track crossing.

20D Machinery may operate in the outer five metres of a protection zone for the purpose of cutting and removing timber logs located in an operational zone and to reinstate ground cover or remove timber log that has fallen into the protection zone or filter strip.

Note: For the purposes of this condition (20D) machinery entry into the protection zone must be measured from the boundary of the protection zone with the operational zone for Inherent Hazard Level 1 and 2

20E Machinery must not operate in a protection zone when the soil is saturated.

20F Machinery may enter the protection zone for the purpose of constructing and using a road, extraction track or snig track crossing.

20G Snig tracks must not be constructed in a protection zone.

20H Machinery operating within a protection zone for the purposes of cutting and removing timber logs must:

- a. use walkover techniques;
- b. minimise the skewing of machinery tracks to the greatest extent practicable; and
- c. operate with any blades, rippers or any other attachments in a position that does not disturb the ground surface.

20I Log furrows produced by log extraction from a protection zone must be infilled with soil, drained onto a stable surface capable of handling concentrated water flow and at least 70% ground cover must be achieved within 5 days of the creation of the furrow.

- 20J Seventy percent ground cover must be achieved on all disturbed soil surfaces in a protection zone within five days of the creation of the disturbance. This level of ground cover must not be achieved by the addition or spreading of gravel or rock.
(the following techniques, or a combination of them are examples of how 70% ground cover may be achieved:
- a. retain at least 70% existing ground cover;
 - b. retain or respread slash and logging debris over at least 70% of the disturbed soil surface; or
 - c. provide artificial ground cover in order to achieve 70% ground cover within the disturbed area using geotextile or erosion control mats)

OPERATIONS WITHIN OPERATIONAL ZONES FOR NATIVE FORESTS

- 20K Trees may be felled into a operational zone.
- 20L Where a tree is felled into a operational zone, then the crown may be removed from the operational zone.
- 20M Trees located in an operational zone are permitted to be felled.
- 20N Where a tree is felled from within an operational zone then the crown may be removed.
- 20O Machinery is permitted to operate in an operational zone.
- 20P Machinery must not operate in an operational zone when the soil is saturated.
- 20Q Machinery operating within operational zones must:
- a. use walkover techniques; and
 - b. minimise the skewing of machinery tracks to the greatest extent practicable.
- 20R Snig tracks must not be constructed in a operational zone.
- 20S A snig track may be constructed in an operational zone where the construction of a snig track immediately adjacent to the operational zone would result in a sidecut. State Forests must document the location of where snig tracks have been constructed in an operational zone.
- 20T Log furrows produced by log extraction from the operational zone must be infilled with soil drained onto a stable surface capable of handling concentrated water flow and at least 70% ground cover must be achieved within 5 days of the creation of the furrow.
- 20U Seventy percent ground cover must be achieved on all disturbed soil surfaces in an operational zone within five days of the creation of the disturbance. This level of ground cover must not be achieved by the addition or spreading of gravel or rock.
(the following techniques, or a combination of them are examples of how 70% ground cover may be achieved:

- a. retain at least 70% existing ground cover;
- b. retain or respread slash and logging debris over at least 70% of the disturbed soil surface; or
- c. provide artificial ground cover in order to achieve 70% ground cover within the disturbed area using geotextile or erosion control mats)

[11] Schedule 4 (E. Borrow Pits and Gravel Pits) Condition 25

Omit condition 25 of schedule 4. Insert instead:

- 25 Borrow pits and gravel pits must be located outside filter strips, protection zones and operational zones.

[12] Schedule 4 (F. Log Dumps) Condition 27-32

Omit conditions 27 – 32 of schedule 4. Insert instead:

LOCATION

- 27 Log dumps must be located outside filter strips, protection zones and buffer strips.
- 28 For land classified as inherent hazard level 2, log dumps must be located at least 10 metres from the outer boundary of a protection zone, unless the construction of the log dump at least 10 metres from the outer boundary of the protection zone would result in additional excavation compared to a log dump located closer to the protection zone.
- 29 For land classified as inherent hazard level 3, log dumps must be located at least 20 metres from the outer boundary of a protection zone, unless the construction of the log dump at least 20 metres from the outer boundary of the protection zone would result in additional excavation compared to a log dump located closer to the protection zone.

DEBRIS MANAGEMENT

- 30 Debris from log dumps must be located outside filter strips, protection zones and buffer strips.
- 31 For land classified as inherent hazard level 2, debris from log dumps must be located at least 5 metres from the outer boundary of a protection zone.
- 32 For land classified as inherent hazard level 3, debris from log dumps must be located at least 15 metres from the outer boundary of a protection zone.

[13] Schedule 4 (G. Burning) Conditions 34 and 35

Omit conditions 34 and 35 of schedule 4. Insert instead:

- 34 Post-harvest burning must be carried out in a manner that avoids burning filter strips and protection zones to the greatest extent practicable. Deliberate or negligent burning of filter strips and protection zones must not occur.
- 35 Where a post-harvest burn has intruded into a filter strip or protection zone, State Forests must put in place soil erosion and sediment control measures within 5 days to prevent water pollution.

[14] Schedule 4 (H. Snig tracks and extraction tracks) condition 39

Omit condition 39 of schedule 4. Insert Instead:

- 39 Spoil from snig track or extraction tracks construction, upgrading or maintenance must not be placed in filter strips, protection zones or buffer strips.

[15] Schedule 4 (H. Snig tracks and extraction tracks) condition 55

Omit condition 55 of schedule 4. Insert instead:

- 55 The construction, upgrading and maintenance of drainage feature crossings must restrict disturbance of vegetation and groundcover in the filter strips, protection zones, or buffer strips to a maximum length of 3 metres upstream and downstream of the crossing. Where clearing beyond 3 metres is necessary during construction, upgrading and maintenance of drainage feature crossings, State Forests may approve additional clearing, and must document the approval and the reasons why it was necessary. This documentation must be kept on file at the Regional Office.

[16] Schedule 4 (I. Storage and handling of hazardous substances and waste) Condition 84

Omit condition 84 of schedule 4. Insert instead:

- 84 Mobile fuel tanks must not be located within, or within 10 metres of the boundary of a filter strip or protection zone.

[17] Schedule 5 Roads

Omit condition 6 of schedule 5. Insert instead:

- 6 Substantial tree debris resulting from road construction, upgrading or maintenance operations must be placed outside the boundary of filter strip or protection zones.

[18] Schedule 5 (H. Road batters) Condition 33

Omit condition 33 of schedule 5. Insert instead:

- 33 Where during road construction, the toe of a fill batter intrudes into a filter strip or protection zone site-specific mitigating techniques must be employed to prevent water pollution to the greatest extent practicable.

[19] Schedule 5 (J. Drainage feature crossings) Condition 47

Omit condition 47 of schedule 5. Insert instead:

- 47 The construction and maintenance of drainage feature crossings must restrict disturbance of vegetation and groundcover in the filter strip, protection zone, operational zones and buffer strips to a maximum length of 3 metres upstream and downstream of the crossing. Where clearing beyond 3 metres is necessary during construction and maintenance of drainage feature crossings, State Forests may approve additional clearing and document the approval and the reasons why it is necessary.

[20] Schedule 5 (J. Drainage feature crossings) Condition 51

Omit condition 51 of schedule 5. Insert instead:

- 51 Spoil from road construction, upgrading and maintenance operations must not be placed in filter strip, protection zones or buffer strips.

[21] Schedule 6 (Information that must be recorded during scheduled or non-scheduled forestry activities) Condition 3e

Insert at the end of condition 3:

3. e) the location and date on which a tree is accidentally felled into a filter strip and the date and type of remedial work completed to comply with condition 19A and 19B of schedule 4 in accordance with condition 19C of schedule 4.

SCHEDULE 3 – AMENDMENTS TO THE TERMS OF LICENCE UNDER THE THREATENED SPECIES CONSERVATION ACT 1995 SET OUT IN APPENDIX B OF THE APPROVAL

[1] Definitions and Abbreviations

Omit the definitions of “Buffer zone”, “Harvesting machinery”, “High Conservation Value Old Growth Forest”, “Net logging area” and “Potential habitat”. Insert instead the following definitions in alphabetical order:

“Brush-tailed Phascogale habitat Category 1” means the following Research Note 17 Forest Types:
37, 39, 56, 61, 62, 64, 70, 71, 72, 74, 76, 81, 82, 83, 84, 85, 92, 93.

“Brush-tailed Phascogale habitat Category 2” means the following Research Note 17 Forest Types:
30, 31, 38, 40, 41, 97, 117, 119, 126, 130.

“Buffer zone” means a protective area where specified forestry activities may only be conducted if in accordance with the relevant condition.

“Crown” means the upper branches of a tree.

“Directional felling” means the felling of a tree by cutting the tree at a particular angle so that it falls in a pre-determined direction.

“Harvesting machinery” means rubber-tyred skidders, bulldozers and mechanical and other harvesters.

“High Conservation Value Old Growth Forest” means the following areas of land within the Upper North East Region:

- i. land depicted in the Geographic Information System theme in ESRI grid format called “hcovog1_prctcd” in the sub-directory called “Protected HCVOG” on the CD-Rom having the volume label “991221_1516 (2 Dec 1999)” and held by Resource and Conservation Division, and further described in the corresponding metadata on the CD-Rom; and
- ii, “old growth” land depicted in the Geographic Information System theme in ESRI grid format called “ogtoprotect2” in the sub-directory called “Additional Protected OG” on the CD-Rom having the volume label “030423_1132 (23 April 2003)” and held by Resource and Conservation Division, and as may be further described on corresponding metadata on the CD-Rom.

“Mechanical harvester” means a ground-based, tracked or wheeled machine equipped with an attachment containing a cutting device (for example a hydraulically driven disc or saw) for the purpose of felling trees. A mechanical harvester is operated from within a protective cabin and may have the ability to move trees after falling.

“Net logging area” means, unless otherwise specified, the gross area of a compartment less Preferred Management Priority or subsequent Forest Management Zones and Special Management Zones where timber harvesting is prohibited, protection zones, Ridge and Headwater Habitat exclusion zones, Rainforest, Rainforest exclusion zones, High Conservation Value Old Growth Forest and Rare Non-commercial Forest Types.

“Potential habitat” where it relates to fauna means:

- i) “macrohabitat” and “microhabitat” within the species “distribution”, all defined in the document “Habitat of Threatened Species in north-east NSW” as agreed to by NPWS and SFNSW; OR
- ii) in the absence of an agreed “Habitat of Threatened Species in north-east NSW” in (i) above, modelled habitat, OR “macrohabitat” and “microhabitat” within the species “distribution”, as defined in Schedule 4 of this licence.

“Protection zone” means a protection zone (hard) and protection zone (soft). (Note: a protection zone is not equivalent to a buffer zone, which is defined separately in this document).

“Protection zone (hard)” means a protective area set aside on each of side of a stream where specified forestry activities, unless excepted, are prohibited.

“Protection zone (soft)” means a protective area adjoining a protection zone (hard) within which modified harvesting practices specified in the licence are permitted whilst minimising impacts to riparian habitat.

“Timber logs” means timber products identified in clause 5 (2) of part 1 of the IFOA other than pulp grade timber or low quality timber.

“Snigging” means the practice of dragging or hauling a log from the location of its felling to a log dump.

“Walk-over” means timber extraction or snigging where disturbance to the existing natural groundcover is minimised and where no snig track construction or blading off is performed.

[2] Condition 2.3

Insert after condition 2.2:

2.3 Accidental felling of trees

- a) For the purposes of this licence, a tree is accidentally felled into an area such as an exclusion zone only if it is apparent that:
 - i. techniques of directional felling were used in an attempt to fell the tree away from the area; or

- ii. an attempt was made using some other method (such as a mechanical harvester) to fell the tree away from the area.
- b) However, a tree is not accidentally felled into the 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] Condition 3a) Planning Documentation

Omit condition 3 a). Insert instead:

- a) SFNSW must prepare planning documentation that demonstrates that operational planning has taken account of the requirements of the conditions of this licence. This must include showing all exclusion zones, buffer zones and protection zones on the relevant harvesting plan operational map, except where the scale of the map does not allow small area features to be adequately represented; in which case the location of the zone should be adequately indicated. The harvesting plan operational map legend must, to the greatest extent practicable, indicate to which feature or species the exclusion or buffer zones relates.

[4] Condition 4.1a) Reporting and Information Requirements

Omit condition 4.1 a). Insert instead:

- a) Harvesting Plans or Operational Plans, approved by the relevant SFNSW Regional Manager, Pre-logging and Pre-roading Survey Reports, registers and maps showing exclusion zones and protection zones, as requested by NPWS within ten working days of the request. These can be provided as hard copy or electronically.

[5] Condition 5.1a) Operational Requirements

Omit condition 5.1 a). Insert instead:

- a) For all exclusion zones implemented under the conditions of this licence the following must apply (except where otherwise indicated in this licence):
 - i. All specified forestry activities are prohibited in exclusion zones. In the case of exclusion zones surrounding wetlands, except for SEPP 14 wetlands, harvesting of tea tree oil is permitted as per conditions 5.9 Wetlands and condition 5.19 Tea Tree Protection of this licence.
 - ii. Trees must not be felled into exclusion zones (except where expressly permitted by another condition of this licence). If a tree accidentally falls into an exclusion zone, then no part of that tree can be removed, except as referred to in condition 5.1 (a2).
 - iii. Harvesting machinery is prohibited from operating in exclusion zones, except for:
 - 1. road re-opening and routine road maintenance;
 - 2. the construction and operation of roads and snig tracks in accordance with conditions 5.1 (b), 5.3 (i), 5.4 (e), 5.5 (i) and 5.7 (r to u); and

3. the traversing of exclusion zones on existing roads; and
 4. in the case of exclusion zones identified in conditions 5.8, 5.11, 5.13, 5.14, 6.1 – 6.10, 6.12 – 6.18, 6.20 – 6.25 and 7.0 (b) accessing trees in the net logging area using harvesting machinery where:
 - i. the technique of directional felling could not be used to fall a tree that is outside the exclusion zone (and within the net logging area) away from the zone; and
 - ii. the tree contains a timber log; and
 - iii. the only practicable method of felling that tree is to enter the exclusion zone with harvesting machinery and fell the tree; and
 - iv. the tree is felled away from the exclusion zone; and
 - v. the wheels or tracks of the machinery remain wholly within 5 metres of the boundary of the exclusion zone with the net logging area; and
 - vi. the use of the harvesting machinery only involves the use of walkover techniques and minimises to the greatest extent practicable skewing of machine tracks; and
 - vii. the harvesting machinery operates with any blades, rippers or similar attachments positioned so that they do not disturb the ground, vegetation or soil.
- a1) Condition 5.1 (a) is not breached where a tree is accidentally felled into an exclusion zone.
 - a2) An accidentally felled tree may be removed from the exclusion zone despite condition 5.1 (a), but only if this is expressly permitted by another condition of this licence applying to the exclusion zone.
 - a3) Harvesting machinery that has entered an exclusion zone for the purpose of accessing trees in the net logging area (under condition 5.1 (a) (iii)) may also be used to remove any tree that has been felled into the exclusion zone in accordance with another condition of this licence (such as condition 6.13 (Hastings river mouse), condition 6.15 (Spotted-tailed Quoll) and condition 6.16 (Squirrel Glider)) or that is otherwise permitted to be removed (such as an accidentally felled tree) from the zone.
 - a4) However, the wheels or tracks of the harvesting machinery may not (to any significant extent) be repositioned or moved solely for the purpose of removing the tree. In other words, they may be repositioned or moved only if this is necessary for a purpose related to accessing trees in the net logging area. For the avoidance of doubt, the restrictions on the operation of the harvesting machinery set out in condition 5.1 (a) (iii) (such as the wheels or the tracks remaining within 5 metres of the boundary of the exclusion zone) apply to the operation of the machinery when removing the tree.

[6] Condition 5.1 b) Operational Requirements

Omit the condition 5.1 (b). Insert instead:

- b) The construction, reopening and operation of tracks used for the purposes of snagging and roads in exclusion zones implemented under the following conditions 5.13 Bird Nest and Roost Site Protection, 5.14 Bat Roost Protection, 6.1 Pouched Frog, 6.2 Green and Golden Bell Frog, 6.3 Giant Barred Frog, Fleay's Frog, Stuttering Frog, 6.4 Philoria spp, 6.5 White-crowned Snake, 6.6 Pale-headed Snake, 6.7 Albert's Lyrebird, 6.8 Marbled Frogmouth, 6.9 Powerful Owl, Masked Owl, Barking Owl, 6.10 Rufous Scrub-bird, 6.12 Brush-tailed Phascogale, 6.13 Hastings River Mouse, 6.14 Koala, 6.15 Spotted-tailed Quoll, 6.16 Squirrel Glider, 6.17 Yellow-bellied Glider, 6.18 Wombat, 6.20 Golden-tipped Bat, 6.21 Large-footed Myotis, 6.22 Threatened Flora, 6.23 Threatened Flora, 6.24 Threatened Flora, 6.25 Threatened Flora, 6.26 Threatened Flora and 6.28 Threatened Flora that are contained within areas of High Conservation Value Old Growth Forest referred to in Condition 5.3, Rainforest and exclusion zones around warm temperate Rainforest referred to in condition 5.4, Rare Non Commercial Forest Types referred to in condition 5.5 or protection zones referred to condition 5.7 is only permitted with the prior written approval of the NPWS. Matters that SFNSW must address in order to seek NPWS approval are detailed in Schedule 6 of this licence.

[7] Condition 5.2.2 c) vi Koala Mark-up Searches

Omit condition 5.2.2c)vi.

[8] Condition 5.3 High Conservation Value Old Growth Forest

Omit Condition 5.3 (other than the heading). Insert instead:

- a) Specified forestry activities, except tree felling in accordance with condition 5.3 (b), road and snag track construction in accordance with condition 5.3 (i), and road re-opening, are prohibited within all areas of High Conservation Value Old Growth Forest.
- b) The felling of trees across the boundary of High Conservation Value Old Growth Forest is prohibited except where no more than six (6) trees containing a timber log are felled across the boundary in any 200 metre length of the boundary of the High Conservation Value Old Growth Forest, whatever 200 metre length of boundary is considered.
- c) Condition 5.3 (b) is not breached where a tree is accidentally felled into High Conservation Value Old Growth Forest.
- d) A tree that is accidentally felled into High Conservation Value Old Growth Forest may be removed from the forest but only if the tree contains a timber log. The tree may be removed even if the total number of trees removed in the harvesting operation concerned will, as a result, exceed the number calculated by applying the principle set out in condition 5.3 (b).
- e) A tree that is felled into High Conservation Value Old Growth Forest under condition 5.3 (b), or felled accidentally, may be removed only in accordance

with the following rules:

- i. the crown must be cut off from the trunk and left where it has fallen, except where the whole of the tree is lifted out of the forest, or lifted and moved within the forest, using a mechanical harvester; and
 - ii. in removing the tree (or any logs into which it is cut), any disturbance to the ground and soil must be minimised as far as practicable.
- f) Harvesting machinery is prohibited within areas of High Conservation Value Old Growth Forest, except for:
- i. the purpose of routine road maintenance, road and snig track construction in accordance with condition 5.3 (i), and road re-opening; and
 - ii. accessing trees in the net logging area using harvesting machinery where:
 1. the technique of directional felling could not be used to fall a tree that is outside the High Conservation Value Old Growth Forest (and within the net logging area) and away from the Forest; and
 2. the tree contains a timber log; and
 3. the only practicable method of felling that tree is to enter the High Conservation Value Old Growth Forest with harvesting machinery and fell the tree; and
 4. the tree is felled away from the High Conservation Value Old Growth Forest; and
 5. the wheels or tracks of the machinery remain wholly within 5 metres of the boundary of the High Conservation Value Old Growth Forest with the net logging area; and
 6. the use of the harvesting machinery only involves the use of walkover techniques and minimises to the greatest extent practicable skewing of machine tracks; and
 7. the harvesting machinery operates with any blades, ripper or similar attachments positioned so that they do not disturb the ground, vegetation or soil.
- g) Harvesting machinery that has entered High Conservation Value Old Growth Forest for the purpose of accessing trees in the net logging area (under condition 5.3 (f)) may also be used to remove any tree that has been felled into the Forest under condition 5.3 (b) or accidentally.
- h) However, the wheels or tracks of the harvesting machinery may not (to any significant extent) be repositioned or moved solely for the purpose of removing the tree. In other words, they may be repositioned or moved only if this is also necessary for a purpose related to accessing trees in the net logging area. For the avoidance of doubt, the restrictions on the operation of the machinery set out in condition 5.3 (f) (ii) (such as the wheels or tracks remaining within 5 metres from the boundary) apply to the operation of the machinery when removing the tree.
- i) A road and snig track may be constructed, and used in any area that is, or is within, High Value Conservation Old Growth Forest, only where:

- i. there is no practicable alternative site available for the purposes of the construction; and
 - ii. there has been no record made of any threatened species on the site of the proposed construction; and
 - iii. prior to the construction, the SFNSW Regional Manager that is responsible for managing the land on which the construction is proposed to be carried out (or a more senior officer), has prepared a report addressing the matters in Schedule 6 of this licence and has authorised the construction in writing; and
 - iv. all practicable measures are taken to minimise any adverse impacts of the construction on the environment; and
 - v. such areas are not in exclusion zones relating to threatened species referred to in condition 5.1 (b) unless carried out in accordance with condition 5.1 (b).
- j) A copy of the written approval of the SFNSW Regional Manager which addresses the matters raised in Schedule 6 of this licence must be faxed to NPWS, as soon as possible after the approval has been issued.
- k) In the construction and the operation of snig tracks in High Conservation Value Old Growth Forest in accordance with condition 5.3 (i), hollow-bearing trees must not be used as bumper trees for moving logs.
- l) Where an exclusion zone referred to in condition 5.1 (b) as it relates to a threatened species is located either wholly or partially within an area of High Conservation Value Old Growth Forest, then SFNSW is only permitted to construct roads and snig tracks in accordance with condition 5.1 (b).
- m) The boundary on the ground of High Conservation Value Old Growth Forest must be identified using the line work as depicted:
- i. in the Geographic Information System theme in ESRI grid format called “hcovog1_prtctd” in the sub-directory called “Protected HCVOG” on the CD-Rom having the volume label “991221_1516 (2 Dec 1999)” and held by Resource and Conservation Division, and further described in the corresponding metadata on the CD-Rom; and
 - ii. in the Geographic Information System theme in ESRI grid format called “ogtoprotect2” in the sub-directory called “Additional Protected OG” on the CD-Rom having the volume label “030423_1132 (23 April 2003)” and held by Resource and Conservation Division, and as may be further described on corresponding metadata on the CD-Rom.

[9] Condition 5.4 c) Rainforest

Insert after condition 5.4 c) the following conditions:

- c1) Condition 5.4 (c) is not breached where a tree is accidentally felled into rainforest or an exclusion zone around warm temperate Rainforest.
- c2) Despite condition 5.4 (c), where a tree that is accidentally felled into a Rainforest and or an exclusion zone around warm temperate Rainforest in the course of a harvesting operation may be removed, but only if the tree contains a

timber log. For the avoidance of doubt, the whole of the tree (subject to condition 5.4 (c3) (i)) may be removed even though the timber product that any part of the tree will produce is not a timber log.

- c3) The following rules apply to the removal of the tree:
- i. the crown must be cut off from the trunk and left where it has fallen except where the whole of the tree is lifted out of, or lifted and moved within, the Rainforest or exclusion zone using a mechanical harvester;
 - ii. in removing the tree (or any logs into which it is cut), any disturbance to the ground and soil must be minimised as far as practicable.

[10] Condition 5.4 e) Rainforest

Omit condition 5.4 e). Insert instead:

- e) A road and snig track may be constructed, and used in any area that is, or is within, a Rainforest or an exclusion zone around warm temperate Rainforest, only where:
- i. there is no practicable alternative site available for the purposes of the construction; and
 - ii. there has been no record made of any threatened species on the site of the proposed construction; and
 - iii. prior to the construction, the SFNSW Regional Manager that is responsible for managing the land on which the construction is proposed to be carried out (or a more senior officer), has prepared a report addressing the matters in Schedule 6 of this licence and has authorised the construction in writing; and
 - iv. all practicable measures are taken to minimise any adverse impacts of the construction on the environment; and
 - v. such areas are not in exclusion zones relating to threatened species referred to in condition 5.1 (b) unless carried out in accordance with condition 5.1 (b).

[11] Condition 5.5 Rare Non-Commercial Forest Types

Omit Condition 5.5 (other than the heading). Insert instead:

- a) Specified forestry activities, except tree felling in accordance with condition 5.5 (b), road and snig track construction in accordance with condition 5.5 (i), road re-opening and harvesting of tea tree oil, are prohibited within all Rare Non-Commercial Forest Types.
- b) The felling of trees across the boundary of a Rare Non-Commercial Forest Type area is prohibited except where no more than six (6) trees containing timber logs are felled across the boundary in any 200 metre length of the boundary of the Rare Non-Commercial Forest Type area, whatever 200 metre length of boundary is considered.
- c) Condition 5.5 (b) is not breached where a tree is accidentally felled into a Rare Non-Commercial Forest Type area.

- d) A tree that is accidentally felled into a Rare Non-Commercial Forest Type area may be removed from the area, but only if the tree contains a timber log. The tree may be removed even if the total number of trees removed in the harvesting operation concerned will, as a result, exceed the number calculated by applying the principle set out in condition 5.5 (b).
- e) A tree that is felled into a Rare Non-Commercial Forest Type area under condition 5.5 (b), or felled accidentally, may be removed only in accordance with the following rules:
 - i. the crown must be cut off from the trunk and left where it has fallen, except where the whole of the tree is lifted out of, or lifted and moved within, the area using a mechanical harvester; and
 - ii. in removing the tree (or any logs into which it is cut), any disturbance to the ground and soil must be minimised as far as practicable.
- f) Harvesting machinery is prohibited within areas of a Rare Non-Commercial Forest Type area, except for:
 - i. the purpose of routine road maintenance, road and snig track construction in accordance with condition 5.5 (i), road re-opening; and
 - ii. accessing trees in the net logging area using harvesting machinery where:
 - 1. the technique of directional felling could not be used to fall a tree that is outside the Rare Non-Commercial Forest Type area (and within the net logging area) away from that area; and
 - 2. the tree contains a timber log; and
 - 3. the only practicable method of felling that tree is to enter the Rare Non-Commercial Forest Type area with harvesting machinery and fell the tree; and
 - 4. the tree is felled away from the Rare Non-Commercial Forest Type area; and
 - 5. the wheels or tracks of the machinery remain wholly within 5 metres of the boundary of the Rare Non-Commercial Forest Type area with the net logging area; and
 - 6. the use of the harvesting machinery only involves the use of walkover techniques and minimises to the greatest extent practicable skewing of machine tracks; and
 - 7. the harvesting machinery operates with any blades, rippers or similar attachments positioned so that they do not disturb the ground, vegetation or soil.
- g) Harvesting machinery that has entered Rare Non-Commercial Forest Type area for the purpose of accessing trees in the net logging area (under condition 5.5 (f)) may also be used to remove any tree that has been felled into the Forest under condition 5.5 (b) or accidentally.
- h) However, the wheels or tracks of the harvesting machinery may not (to any significant extent) be repositioned or moved solely for the purpose of removing the tree. In other words, they may be repositioned or moved only if this is also necessary for a purpose related to accessing trees in the net logging area. For

the avoidance of doubt, the restrictions on the operation of the machinery set out in condition 5.5 (f) (ii) (such as the wheels or tracks remaining within 5 metres from the boundary) apply to the operation of the machinery when removing the tree.

- i) A road and snig track may be constructed, and used in any area that is, or is within, Rare Non-Commercial Forest Types, only where:
 - i. there is no practicable alternative site available for the purposes of the construction;
 - ii. there has been no record made of any threatened species on the site of the proposed construction; and
 - iii. prior to the construction, the SFNSW Regional Manager that is responsible for managing the land on which the construction is proposed to be carried out (or a more senior officer), has prepared a report addressing the matters in Schedule 6 of this licence and has authorised the construction in writing; and
 - iv. all practicable measures are taken to minimise any adverse impacts of the construction on the environment; and
 - v. such areas are not in exclusion zones relating to threatened species referred to in condition 5.1 (b) unless carried out in accordance with condition 5.1 (b).
- j) A copy of the written approval of the SFNSW Regional Manager which addresses the matters raised in Schedule 6 of this licence must be faxed to NPWS, as soon as possible after the approval has been issued.
- k) In the construction and the operation of snig tracks in Rare Non-Commercial Forest Types in accordance with condition 5.5 (i), hollow-bearing trees must not be used as bumper trees for moving logs.
- l) Where an exclusion zone referred to in condition 5.1 (b) as it relates to a threatened species is located either wholly or partially within an area of Rare Non-Commercial Forest Type, then SFNSW is only permitted to construct roads and snig tracks in accordance with condition 5.1 (b).
- m) Harvesting of tea tree oil must comply with condition 5.19 Tea-tree Protection of this licence.

[12] Condition 5.7 Stream Exclusion Zones

Omit Condition 5.7 (including the heading). Insert instead:

5.7 Riparian Habitat Protection

- a) Protection zones (hard) must be retained along the entire length of all streams and must have the minimum widths either side of the stream in accordance with Table 1. The width of the protection zone (hard) must be measured from the top of the bank of the incised channel or, where there is no defined bank, from the edge of the channel. Where there is no incised channel, the protection zone (hard) must be measured from the centreline of the drainage feature.
- b) Protection zones (soft) must be retained along the entire length of all protection zones (hard) and must have a minimum width either side of the protection zone

(hard) in accordance with Table 1. The width of a protection zone (soft) must be measured from the edge of the protection zone (hard) furthest from the stream.

- c) The determination of stream order for the purposes of Table 1 must be carried out in accordance with Schedule 1 of this licence.

Table 1: Minimum protection zone (hard) and protection zone (soft) widths for streams (metres - measured along the ground surface).

Stream Order	Protection zone (hard)	Protection zone (soft)
1st Order	5	5
2nd Order	5	15
3rd Order	5	25
4th Order or greater	5	45

Operations within protection zones (hard)

- d) Specified forestry activities, except road and snig track construction in accordance with conditions 5.7 (r to u) and road re-opening, are prohibited within the protection zone (hard).
- e) Trees must not be felled into the protection zone (hard).
- f) Condition 5.7 (e) is not breached where a tree is accidentally felled into the protection zone (hard).
- f1) A tree that is accidentally felled into a protection zone (hard) may be removed from that zone if it contains a timber log. For the avoidance of doubt, the whole tree may be removed even though the timber product that any part of the tree will produce is not a timber log.
- f2) The following rules apply to the removal of the accidentally felled tree:
- i. the crown must be cut off from the trunk and left where it has fallen unless the whole of the tree is lifted out of, or lifted and moved within, the zone using a mechanical harvester;
 - ii. the wheels or tracks of any harvesting machinery used to remove the accidentally felled tree (or any logs into which it is cut) must remain outside the protection zone (hard). Where harvesting machinery has entered the adjoining protection zone (soft) to fell a tree within the net logging area it may also be used to remove the accidentally felled tree, but only if its wheels or tracks remain wholly within 5 metres of the boundary between the protection zone (soft) and the net logging area;
 - iii. the wheels or tracks of harvesting machinery that is within a protection zone (soft) may not be moved or repositioned solely for the purpose of removing the accidentally felled tree. (In other words, they may be moved or repositioned only if this is necessary for a purpose related to accessing trees in the net logging area.) The restrictions on the operation of the harvesting machinery set out in condition 5.7 (p) (such as the requirement to use walkover techniques) apply to the operation of the machinery to remove the accidentally felled tree or logs into which it has been cut.

- g) SFNSW must document the date on which the tree was accidentally felled into the protection zone (hard) and its location.
- h) Harvesting machinery including mechanical harvesters must not enter the protection zone (hard), except for the construction and use of a road crossing or snig track crossing in accordance with conditions 5.7 (r to u) below.
- i) Trees located within the protection zone (hard) must not be felled, except for the purpose of removing vegetation that is in the area of a proposed road crossing or snig track in accordance with section 5.7 (r to u) below.

Operations within protection zones (soft)

- j) Specified forestry activities, except road and snig track construction in accordance with conditions 5.7 (r to u) and road re-opening, are prohibited within the protection zone (soft).
- k) Trees may be felled into a protection zone (soft).
- l) Where a tree is felled into a protection zone (soft), then the crown must not be removed from the protection zone (soft) except where the whole of the tree is lifted out of, or lifted and moved within, the zone using a mechanical harvester.
- m) Harvesting machinery that has entered the protection zone (soft) for the purpose of felling a tree within the net logging area may also be used to remove a tree that has been felled into the protection zone (soft).
- n) However, the wheels or the tracks of the harvesting machinery may not (to any significant extent) be repositioned or moved solely for the purpose of removing the tree felled into the protection zone (soft). (In other words, they may be moved or repositioned only if this is also necessary for a purpose related to accessing trees in the net logging area under condition 5.7 (p).) The restrictions on the operation of the machinery set out in condition 5.7 (p) also apply to the operation of the machinery to remove the tree felled into the protection zone (soft).
- o) Trees located in a protection zone (soft) must not be felled, except for the purpose of removing vegetation that is in the area of a proposed road crossing or snig track in accordance with section 5.7 (r to u) below.
- p) Harvesting machinery is permitted to operate in a protection zone (soft) for the purposes of felling a tree within the net logging area that contains a timber log where:
 - i. the technique of directional felling could not be used to fell the tree so that it falls outside the protection zone (soft) and within the net logging area;
 - ii. the only practicable method of felling that tree so that it falls outside the protection zone (soft) is to enter the protection zone (soft) with harvesting machinery and fell the tree;
 - iii. the tree is felled away from the protection zone (soft);
 - iv. the wheels or tracks of harvesting machinery remain wholly within 5 metres of the boundary of the protection zone (soft) with the net logging area;

- v. the use of the harvesting machinery only involves the use of walkover techniques and minimises to the greatest extent practicable skewing of machine tracks; and
 - vi. the harvesting machinery operates with any blades, rippers or similar attachments positioned so that they do not disturb the ground, vegetation and soil.
- q) Harvesting machinery must not operate in a protection zone (soft) when the soil is saturated.

Road and snig track construction

- r) A road and snig track may be constructed, and used in any area that is, or is within, either a protection zone (hard) or protection zone (soft), but only where:
- i. there is no practicable alternative site available for the purposes of the construction; and
 - ii. there has been no record made of any threatened species on the site of the proposed construction; and
 - iii. prior to the construction, the SFNSW Regional Manager that is responsible for managing the land on which the construction is proposed to be carried out (or a more senior officer), has prepared a report addressing the matters in Schedule 6 of this licence and has authorised the construction in writing; and
 - iv. all practicable measures are taken to minimise any adverse impacts of the construction on the environment; and
 - v. such areas are not in exclusion zones relating to threatened species referred to in condition 5.1 (b) unless carried out in accordance with condition 5.1 (b).
- s) A copy of the written approval of the SFNSW Regional Manager which addresses the matters raised in Schedule 6 of this licence must be faxed to NPWS, as soon as possible after the approval has been issued.
- t) In the construction and the operation of roads and snig tracks in protection zones (hard) and protection zones (soft) in accordance with condition 5.7 (r), hollow-bearing trees must not be removed or used as bumper trees for moving logs.
- u) Where an exclusion zone referred to in condition 5.1 (b) as it relates to a threatened species is located either wholly or partially within a protection zone, then SFNSW is only permitted to construct roads and snig tracks in accordance with condition 5.1 (b).

[13] Condition 5.8 Ridge and Headwater Habitat exclusion zones

Omit Condition 5.8 (other than the heading). Insert instead:

- a) For every 500 hectares of areas within the Upper North East Region as identified in Clause 4 of this approval, SFNSW must implement:

- i. a minimum of two exclusion zones at least 40 metres wide which connect second order streams,
 - OR
 - ii. a minimum of one exclusion zone at least 80 metres wide which connects third order streams.
 - iii. stream order is to be determined in accordance with Schedule 1 of this licence for the purpose of this condition.
- b) Exclusion zones implemented under condition 5.8 (a) (i) and (ii) must, wherever possible, establish links between streams of different third order catchments.
 - c) The felling of trees across the boundary of a Ridge and Headwater Habitat exclusion zone is prohibited except where no more than six (6) trees containing timber logs are felled across the boundary in any 200 metre length of the boundary of the Ridge and Headwater Habitat exclusion zone, whatever 200 metre length of boundary is considered.
 - d) Condition 5.8 (c) is not breached where a tree is accidentally felled into a Ridge and Headwater Habitat exclusion zone.
 - e) A tree that is accidentally felled into a Ridge and Headwater Habitat exclusion zone may be removed from the zone, but only if the tree contains a timber log. The tree may be removed from the zone even if the total number of trees removed in the harvesting operation concerned will, as a result, exceed the number calculated by applying the principle set out in condition 5.8 (c).
 - f) A tree that is felled into a Ridge and Headwater Habitat exclusion zone under condition 5.8 (c), or felled accidentally as described in condition 5.8 (e), may be removed only in accordance with the following rules:
 - i. the crown must be cut off from the trunk and left where it has fallen, except where the whole of the tree is lifted out of, or lifted and moved within, the zone using a mechanical harvester; and
 - ii. in removing the tree (or any logs into which it is cut), any disturbance to the ground and soil must be minimised as far as practicable.
 - g) Where the Ridge and Headwater Habitat exclusion zones do not link different third order streams, a minimum length of 250 metres must be established for each exclusion zone in condition 5.8 (a) (i) (eg. total length 500 metres), or a 500 metres minimum length established for the exclusion zone in condition 5.8 (a) (ii).
 - h) Exclusion zones implemented under condition 5.8 (a) above should connect the relevant second or third order stream via the associated lower order stream(s). Areas of identified High Conservation Value Old Growth Forest, Rare Non-commercial Forest Types and Rainforest may be used as the basis of exclusion zones.
 - i) Ridge and Headwater Habitat exclusion zones must not, to the greatest extent practicable, cross existing roads.
 - j) Except as provided by conditions 5.1 and 5.8 (c) – (f), specified forestry activities other than road construction and road re-opening where there is no other practical means of access, are prohibited in these exclusion zones.

[14] Condition 5.9 i) Wetlands

Insert after condition 5.9 a):

- a1) Condition 5.9 (a) is not breached where a tree is accidentally felled into a wetland or exclusion zone established around a wetland under conditions 5.9 (c), (d) or (e).
- a2) Despite condition 5.9 (a), where a tree is accidentally felled into a wetland or exclusion zone established around a wetland under conditions 5.9 (c), (d) or (e), in the course of a harvesting operation, it may be removed, but only if the tree contains a timber log. For the avoidance of doubt, the whole of the tree (subject to condition 5.9 (a3)) may be removed even though the timber product that any part of the tree will produce is not a timber log.
- a3) The following rules apply to the removal of the tree:
 - i. the crown must be cut off from the trunk and left where it has fallen unless the whole of the tree is lifted out of, or lifted and moved within, the wetland or exclusion zone using a mechanical harvester;
 - ii. in removing the tree (or any logs into which it is cut), any disturbance to the ground and soil must be minimised as far as practicable.

[15] Condition 5.11 Rocky Outcrops and Cliffs

Insert after condition 5.11 b):

- c) The felling of trees across the boundary of exclusion zones around rocky outcrops and cliffs is prohibited except where no more than six (6) trees containing timber logs are felled across the boundary in any 200 metre length of the boundary of the exclusion zones, whatever 200 metre length of boundary is considered.
- d) Condition 5.11 (c) is not breached where a tree is accidentally felled into a Rocky Outcrops and Cliff exclusion zone.
- e) A tree that is accidentally felled into a Rocky Outcrops and Cliff exclusion zone may be removed from the zone, but only if the tree contains a timber log. The tree may be removed even if the total number of trees removed in the harvesting operation concerned will, as a result, exceed the number calculated by applying the principle set out in condition 5.11 (c).
- f) A tree that is felled into a Rocky Outcrops and Cliff exclusion zone under condition 5.11 (c), or accidentally, may be removed only in accordance with the following rules:
 - i. the crown must be cut off from the trunk and left where it has fallen, except where the whole of the tree is lifted out of, or lifted and moved within, the zone using a mechanical harvester; and
 - ii. in removing the tree (or any logs into which it is cut), any disturbance to the ground and soil must be minimised as far as practicable.

[16] Condition 5.13 Bird Nest and Roost Site Protection

Omit Condition 5.13 (other than the heading). Insert instead:

- a) The following exclusion zones must be applied around nest and roost sites:
- | | | |
|-------|-------------------------|-------------------|
| i. | Powerful Owl nest | 50 metres radius |
| ii. | Powerful Owl roost | 30 metres radius |
| iii. | Masked Owl nest | 50 metres radius |
| iv. | Masked Owl roost | 30 metres radius |
| v. | Sooty Owl nest | 50 metres radius |
| vi. | Sooty Owl roost | 30 metres radius |
| vii. | Barking Owl nest | 50 metres radius |
| viii. | Barking Owl roost | 30 metres radius |
| ix. | Bush Stone-Curlew nest | 100 metres radius |
| x. | Albert's Lyrebird nest | 100 metres radius |
| xi. | Turquoise Parrot nest | 30 metres radius |
| xii. | Osprey nest | 100 metres radius |
| xiii. | Square-tailed Kite nest | 100 metres radius |
| xiv. | Regent Honeyeater nest | 20 metres radius |
- b) Where nests and roosts of Powerful Owl, Masked Owl, Sooty Owl and Barking Owl are recorded after the development of a landscape approach for an area, and they occur outside areas retained as part of that landscape approach, the appropriate exclusion zone in condition 5.13 (a) above must be implemented around the roost or nest.
- c) An exclusion zone at least 50 metres radius must be implemented around all Glossy Black-Cockatoo nests. The felling of trees across the boundary of Glossy Black Cockatoo nest exclusion zones is prohibited except where no more than six (6) trees containing timber logs are felled across the boundary in any 200 metre length of the boundary of the Glossy Black-Cockatoo nest exclusion zones, whatever 200 metre length of boundary is considered.
- d) Condition 5.13 (c) is not breached where a tree is accidentally felled into a Glossy Black-Cockatoo nest exclusion zone.
- e) A tree that is accidentally felled into a Glossy Black-Cockatoo nest exclusion zone may be removed from the zone, but only if it contains a timber log. The tree may be removed even if the total number of trees removed in the harvesting operation concerned will, as a result, exceed the number calculated by applying the principle set out in condition 5.13 (c).
- f) A tree that is felled into a Glossy Black-Cockatoo nest exclusion zone under condition 5.13 (c), or accidentally, may be removed only in accordance with the following rules:

- i. the crown must be cut off from the trunk and left where it has fallen, except where the whole of the tree is lifted out of, or lifted and moved within, the zone using a mechanical harvester; and
 - ii. in removing the tree (or any logs into which it is cut), any disturbance to the ground and soil must be minimised as far as practicable.
- g) Nest exclusion zones for the following species must be implemented for the duration of this licence: Powerful Owl, Masked Owl, Sooty Owl, Barking Owl and Osprey.
 - h) Nest exclusion zones for the following species may be removed where surveys conducted during two consecutive breeding seasons establish to the satisfaction of the NPWS that the nest or nest site is not being used: Square-tailed Kite, Albert's Lyrebird, Regent Honeyeater, Glossy Black-Cockatoo, Bush Stone-Curlew and Turquoise Parrot.
 - i) Trees which contain raptor nests, other than those referred to in condition 5.13 (a) above, must be retained and marked for retention. During harvesting operations, the potential for damage to these trees must be minimised by utilising techniques of directional felling.
 - j) When ten Glossy Black-Cockatoo nests are recorded on SFNSW estate over a two year period separated by at least two kilometres within a 15 kilometres radius, SFNSW may apply to the NPWS for a review of this condition.

(Note: The NPWS will advise SFNSW of the recommendation, made by NPWS in relation to condition 5.13 (j) above, to the relevant Ministers, prior to consideration by the relevant Ministers.)

[17] Condition 5.17 c) ii Ground Habitat Protection

Omit condition 5.17 (c) ii . Insert instead:

- ii. Firewood must not be collected from High Conservation Value Old Growth Forest, Rainforest, Rare Non-Commercial Forest Types and protection zones.

[18] Condition 5.20 b) and c) Miscellaneous Forestry Operations

Omit condition 5.20 b) and c). Insert instead:

- b) When conducting and / or supervising miscellaneous forestry operations, SFNSW must implement conditions 5.1 Operational Requirements, 5.3 High Conservation Value Old Growth Forest, 5.4 Rainforest, 5.7 Riparian Habitat Protection, 5.8 Ridge and Headwater Habitat, 5.9 Wetlands, 5.10 Heath and Scrub, 5.11 Rocky Outcrops and Cliffs, 5.12 Threatened Frog General Protection Measures, 5.13 Bird Nest and Roost Site Protection and 5.14 Bat Roost Protection of this licence in areas where these operations are conducted.
- c) Miscellaneous forestry operations are prohibited in exclusions zones established under the requirements of conditions 5.4 Rainforest, 5.8 Ridge and Headwater Habitat, 5.9 Wetlands, 5.10 Heath and Scrub, 5.11 Rocky Outcrops and Cliffs, 5.13 Bird Nest and Roost Site Protection, 5.14 Bat Roost Protection, 6.9 Powerful Owl, Masked Owl, Barking Owl, 6.12 Brush-tailed Phascogale, 6.13 Hastings River Mouse and 6.16 Squirrel Glider, and in protection zones established under condition 5.7 Riparian Habitat Protection of this licence.

[19] Condition 5.21 Exclusion Zone Research Program

Omit clause 5.21.

[20] Condition 6.9 e) – j) Powerful Owl *Ninox strenua*, Masked Owl *Tyto novaehollandiae*, Barking Owl *Ninox connivens*

Insert after condition 6.9 d):

- e) The felling of trees across the boundary of an exclusion zone established under conditions 6.9.1 (b and h) and 6.9.2 (c) below is prohibited except where no more than six (6) trees containing timber logs are felled across the boundary in any 200 metre length of the boundary of the owl exclusion zones, whatever 200 metre length of boundary is considered.
- f) Condition 6.9 (e) is not breached where a tree is accidentally felled into an Owl exclusion zone.
- g) A tree that is accidentally felled into an Owl exclusion zone may be removed from the zone, but only if it contains a timber log. The tree may be removed even if the total number of trees removed in the harvesting operation concerned will, as a result, exceed the number calculated by applying the principle set out in condition 6.9 (e).
- h) A tree that is felled into an Owl exclusion zone under condition 6.9 (e), or accidentally, may be removed only in accordance with the following rules:
 - i. the crown must be cut off from the trunk and left where it has fallen, except where the whole of the tree is lifted out of, or lifted and moved within, the zone using a mechanical harvester;
 - ii. in removing the tree (or any logs into which it is cut), any disturbance to the ground and soil must be minimised as far as practicable.

[21] Condition 6.12 Brush-tailed Phascogale

Omit Condition 6.12 (other than the heading). Insert instead:

6.12 Brush-tailed Phascogale

- a) Where there is a Brush-tailed Phascogale record in a compartment or within 500 metres outside the boundary of a compartment SFNSW must, for the purpose of protecting the Brush-tailed Phascogale and its habitat, apply either the Site Based Approach as set out in condition 6.12.1 or the Landscape Approach as set out in condition 6.12.2.
- b) SFNSW must notify NPWS in writing of the areas to which the Landscape Approach will be applied by 1 December 2003 or, if specified forestry activities are due to commence in an area prior to that date, the notification must occur prior to the commencement of activities. Notification must demonstrate compliance with condition 6.12.2, and include a map at an appropriate scale showing the relevant areas.
- c) SFNSW may change from the Site Based Approach to the Landscape Approach, in accordance with condition 6.12.2. However, SFNSW may not change from the Landscape Approach to the Site Based Approach. SFNSW must notify

NPWS of a change from the Site-based Approach to the Landscape Approach within ten working days of the change of approaches and prior to specified forestry activities commencing in the area.

- d) Where a change from the Site Based Approach to the Landscape Approach has occurred, SFNSW must continue to retain habitat previously retained in the Site Based Approach.

6.12.1 Brush-tailed Phascogale: Site Based Approach

(Note: The Site Based Approach attempts to ensure that sufficient suitable Brush-tailed Phascogale habitat is protected in the vicinity of a record of the species. Habitat protection aims to protect den sites and sufficient habitat in suitable condition to support the foraging behaviour of Brush-tailed Phascogale. The Site Based Approach is most appropriate for single records or scattered records or both.)

Where SFNSW has chosen to apply the Site Based Approach in accordance with condition 6.12(a), the following applies:

- a) A 500 metres radius planning area must be identified. This planning area must be centred on the record or records of Brush-tailed Phascogale. The radius of the planning area must be measured from the record. Where there is more than one record the radius of the planning area must be measured from a point located equidistant from the majority of the records.
- b) Within this planning area an exclusion zone, or exclusion zones, totalling 20 hectares must be implemented.
- c) Trees within the exclusion zone must not be used to meet tree retention requirements of condition 5.6.
- d) Specified forestry activities, with the exception of road re-opening and snig track re-opening and use, where there is no other practical means of access, are prohibited in these exclusion zones.
- e) Where there are records of Brush-tailed Phascogale dens, these must be contained within exclusion zones. Planning and placement of exclusion zones should maximise the inclusion of other types of Brush-tailed Phascogale records within exclusion zones.
- f) The exclusion zone must encompass Category 1 habitat available in the planning area. In the event that there is not sufficient area of Category 1 habitat to meet the requirements of condition 6.12.1 (b) above, Category 2 habitat must be utilised. In the event that there is not sufficient area of Category 1 and 2 habitat to meet the requirements of condition 6.12.1 (b) above, Category 3 habitat must be utilised. In the event that there is not sufficient area of Category 1, Category 2 and Category 3 habitat to meet the requirement of condition 6.12.1 (b) above, Category 4 habitat must be utilised.
- g) Habitat qualities are ranked as follows (from highest to lowest):
 - i. Category 1: Brush-tailed Phascogale habitat - Category 1;
 - ii. Category 2 Brush-tailed Phascogale habitat - Category 2;
 - iii. Category 3: Class 1 & Class 2 modelled Brush-tailed Phascogale habitat;
 - iv. Category 4: any other areas of suitable Brush-tailed Phascogale habitat.

- h) Category 1, 2 and 3 habitat occurring in statutory reserves within the 500 metres radius may be used to meet the exclusion zone requirements, where it is consistent with the requirements of condition 6.12.1 (e) and (f) above.
- i) Individual patch size of exclusion areas must exceed 7 ha.
- j) The shape of exclusion zones should minimise the boundary to area ratio. Where appropriate, exclusion zones should be circular in shape. Long and linear strips should be avoided where possible.

(Note: Circular or compact areas have the lowest boundary to area ratio, while linear or fragmented ones have the highest boundary to area ratio. Areas which generally conform to a circular or square shape have a low boundary to area ratio. As a guide, “low” could be considered to be an area where the longer axis of the area is less than twice as long as the shorter axis.)
- k) Where there are two or more Brush-tailed Phascogale records consecutively less than 500 metres apart but collectively spreading over an area greater than 500 metres in any direction then advice on the location of the planning area must be sought from the NPWS.
- l) If a record of Brush-tailed Phascogale is on private property within 200 metres of SFNSW estate, then a 500 metres radius planning area must be located on State Forest as close as possible to the record.
- m) The felling of trees across the boundary of a Brush-tailed Phascogale exclusion zone is prohibited except where no more than six (6) trees containing timber logs are felled across the boundary in any 200 metre length of the boundary of the zone, whatever 200 metre length of boundary is considered.
- n) Condition 6.12.1 (m) is not breached where a tree is accidentally felled into a Brush-tailed Phascogale exclusion zone.
- o) A tree that is accidentally felled into a Brush-tailed Phascogale exclusion zone may be removed from the zone, but only if it contains a timber log. The tree may be removed even if the total number of trees removed in the harvesting operation concerned will, as a result, exceed the number calculated by applying the principle set out in condition 6.12.1 (m).
- p) A tree that is felled into a Brush-tailed Phascogale exclusion zone under condition 6.12.1 (m), or accidentally, may be removed only in accordance with the following rules:
 - i. the crown must be cut off from the trunk and left where it has fallen, except where the whole of the tree is lifted out of, or lifted and moved within, the zone using a mechanical harvester; and
 - ii. in removing the tree (or any logs into which it is cut), any disturbance to the ground and soil must be minimised as far as practicable.

6.12.2 Brush-tailed Phascogale: Landscape Approach

(Note: The Landscape Approach attempts to ensure that preferred foraging and den trees are maintained within the planning area . The Landscape Approach is most suitable for large areas of suitable habitat, especially with numerous records of phascogales. Habitat features are to be retained across each hectare of production forest in the landscape).

Where SFNSW has chosen to apply the Landscape Approach in accordance with condition 6.12(a), the following applies:

- a) SFNSW must identify a planning area where the Landscape Approach is to be applied. The planning area may only contain SFNSW estate, and must be made up of adjacent, entire compartment units totalling at least 1000 ha.
- b) Within identified landscapes a minimum of eight rough-barked trees must be retained per two hectares of net logging area for foraging by Brush-tailed Phascogales. Retained trees must represent the range of rough-barked tree species that occur in the area. Trees retained to meet this condition must be in addition to those trees retained to meet the requirements of condition 5.6.
- c) Trees for retention must be selected from late mature, over-mature or senescent trees, where available.
- d) Trees for retention must be selected from trees greater than 70 cm dbhob. Where trees greater than 70cm dbhob are not present, then trees with the next largest dbhob must be retained.
- e) Retained trees must be marked for retention.
- f) Large, hollow-bearing stags which are potential den trees, should be retained where their retention is consistent with safe working practice.
- g) Where there is a conflict between condition 6.12.2(b) and 6.12.2(d), the requirement for the retention of trees greater than 70cm dbhob must prevail.

(Note: Preferred rough-barked trees for foraging include bloodwoods, ironbarks, mahoganies, boxes, tallowwood and stringybarks. Where these are not available turpentine, blackbutt and grey-gums are also suitable rough-barked foraging trees.)

[22] Condition 6.13 Hastings River Mouse *Pseudomys oralis*

Omit Condition 6.13 (other than the heading). Insert instead:

Where there is a record of the Hastings River Mouse in the compartment or within 800 metres outside the boundary of the compartment the following must apply:

- a) Within 800 metres of a record of Hastings River Mouse, specified forestry activities are prohibited from all areas assessed as Hastings River Mouse habitat of moderate or high suitability.
- b) An exclusion zone of at least 200 metres radius must be implemented around all records of Hastings River Mouse. This minimum exclusion zone must be applied where Hastings River Mouse habitat within 200 metres of the record is assessed as being unsuitable habitat.
- c) The felling of trees across the boundary of the Hastings River Mouse habitat (assessed under condition 6.13 (a) above) or an exclusion zones (established under condition 6.13 (b) above) is prohibited except where no more than six (6) trees containing timber logs are felled across the boundary in any 200 metre length of the boundary of the Hastings River Mouse habitat or exclusion zone, whatever 200 metre length of boundary is considered.

- d) Condition 6.13 (c) is not breached where a tree is accidentally felled into a Hastings River Mouse habitat or exclusion zone.
- e) A tree that is accidentally felled into a Hastings River Mouse habitat or exclusion zone may be removed from the habitat or zone, but only if it contains a timber log. The tree may be removed even if the total number of trees removed in the harvesting operation concerned will, as a result, exceed the number calculated by applying the principle set out in condition 6.13 (c).
- f) A tree that is felled into a Hastings River Mouse habitat or exclusion zone under condition 6.13 (c), or accidentally, may be removed only in accordance with the following rules:
 - i. the crown must be cut off from the trunk and left where it has fallen, except where the whole of the tree is lifted out of, or lifted and moved within, the habitat or zone using a mechanical harvester; and
 - ii. in removing the tree (or any logs into which it is cut), any disturbance to the ground and soil must be minimised as far as practicable.
- g) Suitability of Hastings River Mouse habitat must be assessed according to condition 8.8.9A of this licence.

[23] Condition 6.14 d) – i) Koala *Phascolarctos cinereus*

Insert after condition 6.14 (c):

- d) The felling of trees into a Koala high use area is prohibited. The felling of trees across the boundary of the exclusion zone established under condition 6.14 (c) (i) is prohibited except where no more than six (6) trees containing timber logs are felled across the boundary in any 200 metre length of the boundary of the exclusion zone, whatever 200 metre length of boundary is considered.
- e) Condition 6.14 (d) is not breached where a tree is accidentally felled into a Koala high use area or exclusion zone.
- f) A tree that is accidentally felled into an exclusion zone may be removed from the zone, but only if it contains a timber log. The tree may be removed even if the total number of trees removed in the harvesting operation concerned will, as a result, exceed the number calculated by applying the principle set out in condition 6.14 (d).
- g) A tree that is felled into an exclusion zone under condition 6.14 (c), or accidentally, may be removed only in accordance with the following rules:
 - i. the crown must be cut off from the trunk and left where it has fallen, except where the whole of the tree (including the crown) is lifted out of the zone using a mechanical harvester; and
 - ii. in removing the tree (or any logs into which it is cut), any disturbance to the ground and soil must be minimised as far as practicable.

[24] Condition 6.15 Spotted-tailed Quoll *Dasyurus maculatus*

Omit Condition 6.15 (other than the heading). Insert instead:

- a) An exclusion zone of at least 12 hectares must be implemented around Spotted-tailed Quoll maternal den sites. This exclusion zone must be linked to

protection zones implemented in condition 5.7.

- b) An exclusion zone of at least 3.5 hectares must be implemented around Spotted-tailed Quoll permanent den sites. This exclusion zone must be linked to protection zones implemented in condition 5.7.
- c) An exclusion zone of at least 12 hectares must be implemented around Spotted-tailed Quoll latrine sites.
- d) Planning and placement of exclusion zones referred to in condition 6.15 (a), (b) and (c) above must maximise the inclusion of Spotted-tailed Quoll records.
- e) The felling of trees across the boundary of an exclusion zone established under conditions 6.15 a), (b) or (c) above is prohibited except where no more than six (6) trees containing timber logs are felled across the boundary in any 200 metre length of the boundary of the Tiger Quoll exclusion zone, whatever 200 metre length of boundary is considered.
- f) Condition 6.15 (g) is not breached where a tree is accidentally felled into a Tiger Quoll exclusion zone.
- g) A tree that is accidentally felled into a Tiger Quoll exclusion zone may be removed from the zone, but only if it contains a timber log. The tree may be removed even if the total number of trees removed in the harvesting operation concerned will, as a result, exceed the number calculated by applying the principle set out in condition 6.15 (e).
- h) A tree that is felled into a Tiger Quoll exclusion zone under condition 6.15 (e), or accidentally, may be removed only in accordance with the following rules:
 - i. the crown must be cut off from the trunk and left where it has fallen, except where the whole of the tree is lifted out of, or lifted and moved within, the zone using a mechanical harvester; and
 - ii. in removing the tree (or any logs into which it is cut), any disturbance to the ground and soil must be minimised as far as practicable.
- i) Protection zones must not be counted towards exclusion zones referred to in condition 6.15 (a) and (b) above.

[25] Condition 6.16 Squirrel Glider *Petaurus norfolcensis*

Omit Condition 6.16 (other than the heading). Insert instead:

Where there is a Squirrel Glider record in a compartment or within 250 metres outside the compartment boundary (unless specified otherwise in this condition), the following must apply:

- a) A 250 metres radius planning area must be identified. This planning area must be centred on the record, or records, of the Squirrel Glider. The radius of the planning area must be measured from the record. Where there is more than one record the radius of the planning area must be measured from a point located equidistant from the majority of records, where possible.
- b) Within this planning area an exclusion zone, or exclusion zones, totalling eight hectares must be implemented.
- c) The felling of trees across the boundary of a Squirrel Glider exclusion zone

established under conditions 6.16 b) below is prohibited except where no more than six (6) trees containing timber logs are felled across the boundary in any 200 metre length of the boundary of the Squirrel Glider exclusion zones, whatever 200 metre length of boundary is considered.

- d) Condition 6.16 (c) is not breached where a tree is accidentally felled into a Squirrel Glider exclusion zone.
- e) A tree that is accidentally felled into a Squirrel Glider exclusion zone may be removed from the zone, but only if it contains a timber log. The tree may be removed even if the total number of trees removed in the harvesting operation concerned will, as a result, exceed the number calculated by applying the principle set out in condition 6.16 (c).
- f) A tree that is felled into a Squirrel Glider exclusion zone under condition 6.16 (c), or accidentally as described in condition 6.16 (e), may be removed only in accordance with the following rules:
 - i. the crown must be cut off from the trunk and left where it has fallen, except where the whole of the tree is lifted out of, or lifted and moved within, the zone using a mechanical harvester; and
 - ii. in removing the tree (or any logs into which it is cut), any disturbance to the ground and soil must be minimised as far as practicable.
- g) Where there are records of Squirrel Glider dens, these must be contained within exclusion zones. Planning and placement of exclusion zones should maximise the inclusion of other types of Squirrel Glider records within exclusion zones.
- h) The exclusion zone must encompass Category 1 habitat available in the planning area. In the event that there is not sufficient area of Category 1 habitat to meet the requirements of condition 6.16 (b) above, Category 2 habitat must be utilised. In the event that there is not sufficient area of Category 1 and 2 habitat to meet the requirements of condition 6.16 (b) above, Category 3 habitat must be utilised. In the event that there is not sufficient area of Category 1, Category 2 and Category 3 habitat to meet the requirement of condition 6.16 (b) above, Category 4 habitat must be utilised. In the event that there is not sufficient area of Category 1, Category 2, Category 3 and Category 4 habitat to meet the requirement of condition 6.16 (b) above, Category 5 habitat must be utilised.
- i) Habitat categories are ranked as follows (from highest to lowest):
 - i. Category 1: Class 1 modelled habitat;
 - i. Category 2: Class 2 modelled habitat;
 - ii. Category 3: High Conservation Value Old Growth Forest;
 - iii. Category 4: Class 3 modelled habitat;
 - iv. Category 5: any other areas of suitable habitat.
- j) Modelled habitat and High Conservation Value Old Growth Forest occurring in statutory reserves within the 250 metres radius may be used to meet the exclusion zone requirements, where it is consistent with the requirements of condition 6.16 (g) and (h) above.
- k) The shape of exclusion zones should minimise the boundary to area ratio.

Where appropriate, exclusion zones should be circular in shape. Long and linear strips should be avoided where possible.

(Note: Circular or compact areas have the lowest boundary to area ratio, while linear or fragmented ones have the highest. Areas which generally conform to a circular or square shape have a low boundary to area ratio. As a guide, “low” could be considered to be an area where the longer axis of the area is less than twice as long as the shorter axis.)

- l) Where there are two or more Squirrel Glider records consecutively less than 250 metres apart but collectively spreading over an area greater than 250 metres in any direction then advice on the location of the planning area must be sought from the NPWS.
- m) If a Squirrel Glider record is on private property within 100 metres of SFNSW estate, then the equivalent of a 250 metres radius planning area must be located on public land as close as possible to the record.
- n) When ten of these sites are recorded on SFNSW estate over a two year period separated by at least two kilometres within a 15 kilometres radius, SFNSW may apply to NPWS for a review of this condition.

(Note: The NPWS will advise SFNSW of the recommendation, made by NPWS in relation to condition 6.16 (n) above, to the relevant Ministers, prior to consideration by the relevant Ministers.)

[26] Condition 6.17 Yellow-bellied Glider *Petaurus australis*

Omit Condition 6.17, other than the heading. Insert instead:

- a) A 50 metres radius exclusion zone must be implemented around Yellow-bellied Glider dens.
- b) The felling of trees across the boundary of an exclusion zone established under conditions 6.17 a) above is prohibited except where no more than six (6) trees containing timber logs are felled across the boundary in any 200 metre length of the boundary of the Yellow-bellied Glider exclusion zone, whatever 200 metre length of boundary is considered.
- c) Condition 6.17 (b) is not breached where a tree is accidentally felled into a Yellow-bellied Glider exclusion zone.
- d) A tree that is accidentally felled into a Yellow-bellied Glider exclusion zone may be removed from the zone, but only if it contains a timber log. The tree may be removed even if the total number of trees removed in the harvesting operation concerned will, as a result, exceed the number calculated by applying the principle set out in condition 6.17 (b).
- e) A tree that is felled into a Yellow-bellied Glider exclusion zone under condition 6.17 (b), or accidentally, may be removed only in accordance with the following rules:
 - i. the crown must be cut off from the trunk and left where it has fallen, except where the whole of the tree is lifted out of, or lifted and moved within, the zone using a mechanical harvester; and
 - ii. in removing the tree (or any logs into which it is cut), any disturbance to the ground and soil must be minimised as far as practicable.

- f) All Yellow-bellied Glider sap feed trees must be retained. All Yellow-bellied Glider Sap feed trees must be marked for retention.
- g) Where there is a record of a Yellow-bellied Glider in a compartment or within 100 metres outside the boundary of the compartment, the following must apply:
 - i. Within a 100 metres radius of each retained Yellow-bellied Glider sap feed tree, observation or den site record, 15 feed trees must be retained. Yellow-bellied Glider sap feed trees must not be counted towards these 15 feed trees. Retained feed trees must have good crown development and should have minimal butt damage and should not be suppressed. Mature and late mature trees must be retained as feed trees where these are available.
 - ii. Within a 200 metres radius of a Yellow-bellied Glider call detection site record, 15 feed trees must be retained. Retained feed trees must have good crown development and should have minimal butt damage and should not be suppressed. Mature and late mature trees must be retained as feed trees where these are available.
 - iii. The feed trees retained in condition 6.17 (g) (i) and (ii) must be of the same species as the identified sap feed tree or identified den tree, or should be trees that shed their bark in long strips, eg. species from Blue, Flooded, Grey, Red and White Gum groups.
 - iv. The feed trees retained in condition 6.17 (g) (i) and (ii) must be marked for retention.

[27] Condition 6.20 a) Golden-tipped Bat *Kerivoula papuensis*

Omit condition 6.20 a). Insert instead:

- a) Exclusion zones at least 30 metres wide must be implemented on both sides of all first order streams and second order streams within a 200 metres radius of the record.

[28] Condition 7 b) vi General survey requirements

Omit condition 7 (b) vi. Insert instead:

- vi. **Albert's Lyrebird:** An exclusion zone at least 20 metres wide must be implemented on both sides of all first order streams in the compartment. An exclusion zone at least 30 metres wide must be implemented on both sides of all second order streams in the compartment.

[29] Condition 7 b) viii

Omit condition 7 (b) viii. Insert instead:

- viii. **Marbled Frogmouth:** exclusion zones at least 20 metres wide must be implemented on both sides of all first order streams in the compartment. Exclusion zones at least 30 metres wide must be implemented on both sides of all second order streams in the compartment.

[30] Condition 7 b) xv

Omit condition 7 (b) xv. Insert instead:

- xv. *Myotis adversus*: exclusion zones at least 30 metres wide must be implemented on all dams and permanent water bodies in the compartment. Permanent water bodies include lakes, lagoons, or any other permanent collection of still water that is not impounded by an artificial structure. The exclusion zone must be measured from the top of the high bank of the permanent water body. Exclusion zones at least 30 metres wide must be implemented on all permanent streams within the compartment. The width of these exclusion zones applying to streams must be measured from the top of the bank of the incised channel or, where there is no defined bank, from the edge of the channel.

[31] Condition 7 b) xvi

Omit condition 7 (b) xvi. Insert instead:

- xvi. *Kerivoula papuensis*: exclusion zones at least 30 metres wide must be implemented on both sides of all first order streams and second order streams within the compartment. The width of these exclusion zones must be measured from the top of the bank of the incised channel or, where there is no defined bank, from the edge of the channel.

[32] Condition 7 e)

Insert after condition 7 (d):

- e) The same provisions of the relevant species specific condition contained in condition 6 apply to the exclusion zones implemented under condition 7 (b).

[33] Condition 8.4 b) Survey documentation and reporting

Omit condition 8.4 b). Insert instead:

- b) The Survey Report must be received by NPWS Northern Directorate (or Central Directorate where appropriate) within ten days of NPWS requesting the report.

[34] Condition 8.8.3 A f) Riparian frog survey

Omit condition 8.8.3 A.f) and note. Insert instead:

- f) Survey season: 1 August to 31 March.

(Note: Preferred survey seasons - Litoria piperata: summer. Mixophyes fleayi and M. balbus: September to March. Mixophyes iteratus: October to February. Philoria kundagungan: December to March. Other Philoria species: spring to early summer (best in spring), no later than December. Assa darlingtoni: summer.)

[35] Condition 8.8.3 B Non-riparian frog search

Omit condition 8.8.3B.g) and note. Insert instead:

- g) Survey Season: 1 August to 31 March.

*(Note: Preferred survey seasons - *Phyloria kundagungan*: December to March. Other *Phyloria spp.*: spring to early summer (best in spring), no later than December. *Asa darlingtoni*: summer.)*

[36] Condition 8.8.10A Subterranean roost surveys

Omit condition 8.8.10A.f) and note. Insert instead:

f) Survey season: 1 August to 31 March.

(Note: - Preferred survey season - October to late March.)

[37] Condition 8.8.10B Golden-tipped Bat *Kerivoula papuensis* and Large-footed Myotis *Myotis adversus*

Omit condition 8.8.10B.f) and note. Insert instead:

f) Survey Season: 1 August to 31 March.

(Note: Preferred survey season: Spring and Summer.)

[38] SCHEDULE 6 Matters to be addressed in assessment of proposals for new roading through Rainforest, Rare Non-commercial Forest Types and protection zones.

Omit schedule 6. Insert instead:

SCHEDULE 6: Matters to be addressed in assessment of proposals for new roading through High Conservation Value Old Growth Forest, Rainforest, Rare Non-commercial Forest Types and protection zones.

When applying to construct new roads or snig tracks through High Conservation Value Old Growth Forest, Rainforest, Rare Non-Commercial Forest Types and protection zones, SFNSW must provide NPWS with a report addressing the following:

- (a) All options that were considered, the cost of all options, the reasons why the selected route was chosen and why the other routes were not considered feasible;
- (b) The specific reasons why the road or snig track must be established;
- (c) The mitigative and ameliorative measures to be applied; and
- (d) Results of the field assessment which must be undertaken and must include:
 - i. A description of the proposed road or snig track, including dimensions of area to be affected (road footprint, run-offs etc), method of construction including any cutting and filling that may be involved, and construction of any stream crossings.
 - ii. An assessment and description of any threatened flora that will or is likely to be directly or indirectly affected by construction, or occurs within 50 metres of the construction area.
 - iii. An assessment and description of any threatened fauna that
 1. will be or is likely to be directly or indirectly affected by construction,

OR

2. occurs within 100 metres of the construction area.
- iv. An assessment and description of the likelihood of the road to create a barrier to movement of threatened fauna, or is otherwise likely to increase the threats to threatened fauna.
- v. An assessment of any habitat features that will or are likely to be directly or indirectly affected by the construction, including but not confined to: wetlands or other waterbodies; and threatened species habitat.
- vi. An assessment and description of the area affected including, but not confined to:
 1. the type of High Conservation Value Old Growth Forest or Rainforest or Rare Non-Commercial Forest Types or protection zone (according to RN17);
 2. a brief description of the floristics and structure of the High Conservation Value Old Growth Forest or Rainforest or Rare Non-Commercial Forest Types or protection zone;
 3. a description of the total area of the High Conservation Value Old Growth Forest or Rainforest or Rare Non-Commercial Forest Types or protection zone to be directly and indirectly affected;
 4. the likelihood of the road to fragment the High Conservation Value Old Growth Forest or Rainforest or Rare Non-Commercial Forest Types or protection zone patch; and
 5. whether the rainforest is SEPP 26 littoral rainforest.
- vii. An assessment of the likelihood of the construction increasing the presence or abundance of weeds or feral animals.
- viii. An assessment of past disturbance in the proposed construction area.

**SCHEDULE 4 – AMENDMENTS TO APPENDIX C OF APPROVAL
SETTING OUT TERMS OF LICENCE UNDER PART 7A OF THE
FISHERIES MANAGEMENT ACT 1994**

[1] Condition 1 (Definitions and Abbreviations)

Omit the definitions of “Buffer zone”, “Exclusion zone” and “Machinery”.
Insert instead the following definitions (in appropriate alphabetical order):

Buffer zone: means a buffer zone established under condition 7.1.

Directional felling: means the felling of a tree by cutting the tree at a particular angle so that it falls in a pre-determined direction.

Exclusion zone: means an exclusion zone established under condition 7.1, 7.2 or 7.3.

Harvesting Machinery and Harvesting machine: mean any mechanical or other harvester, rubber-tyred skidder or bulldozer.

Mechanical harvester: means a 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.

Special operational zone: means a special operational zone established under condition 7.1.

Wetland: means any of the following areas:

- a vegetated depression with a permanent, seasonal or intermittent water table at or slightly above the floor of the depression (typically having a vegetation type that indicates a wetter micro-environment than that of the surrounding land);
- any land to which SEPP 14 applies (referred to in this licence as a wetland);
- an area that is any of the following forest types described in SFNSW Research Note 17: swamp mahogany (FT 30), paperback (FT 31), swamp oak (FT 32), mangrove (FT 33), swamp (FT 231), water surface (FT 235).

[2] Condition 2.2

Omit “8.2, 8.3, 8.4 and 8.6”. Insert instead “7.9, 8.2, 8.3 and 8.4”.

[3] Condition 6.2 b)

Omit “condition 8”. Insert instead “conditions 7 and 8”.

[4] Condition 6.3

Omit the condition.

[5] Condition 7 (Definitions of Class 1 aquatic habitat and Class 2 aquatic habitat)

Omit “a watercourse” from the definitions of Class 1 aquatic habitat and Class 2 aquatic habitat. Insert instead “that part of a watercourse”.

[6] Condition 7 (Additional paragraphs)

Insert after the definition of Class 2 aquatic habitat the following paragraphs:

For the purposes of condition 7, any reference to a width is a reference to a width as measured along the ground surface.

The boundary of any exclusion zone or buffer zone is to be marked in the field before a specified forestry activity is commenced where the activity will come within 50 metres of that boundary.

[7] Condition 7.1-condition 7.9

Omit conditions 7.1 – 7.5. Insert instead:

7.1 Riparian Exclusion Zones, Buffer Zones and Special Operational Zones

- a) This condition (being condition 7.1) applies to any part of a watercourse comprising class 1 aquatic habitat or class 2 aquatic habitat (referred to in this condition as “a watercourse”).
- b) Where a watercourse is in a compartment that has been classified as inherent hazard level 1 or 2:
 - i. an exclusion zone must be established along either side of the watercourse for its entire length; and
 - ii. a buffer zone must be established along the entire length of each such exclusion zone; and
 - iii. a special operational zone must be established along the entire length of each such buffer zone.
- c) Each exclusion zone, buffer zone and special operational zone established for the purposes of condition 7.1 b) is to have at least the width shown in Table 1 to this condition. The width of each zone is to be measured as follows:
 - i. the width of an exclusion zone is to be measured from the top of the bank of the incised channel or, where there is no defined bank, from the edge of the channel; and

- ii. the width of a buffer zone is to be measured from its boundary with the adjoining exclusion zone; and
 - iii. the width of a special operational zone is to be measured from its boundary with the adjoining buffer zone.
- d) Where a watercourse is in a compartment classified as inherent hazard level 3:
- i. an exclusion zone must be established along either side of the watercourse for its entire length; and
 - ii. a special operational zone must be established along the entire length of each such exclusion zone.
- e) Each exclusion zone and special operational zone established for the purposes of condition 7.1 d) is to have at least the width shown in Table 2 to this condition. The width of each zone is to be measured as follows:
- i. the width of an exclusion zone is to be measured from the top of the bank of the incised channel or, where there is no defined bank, from the edge of the channel; and
 - ii. the width of a special operational zone is to be measured from its boundary with the adjoining exclusion zone.
- f) In this condition, a reference to a compartment classified as inherent hazard level 1, 2 or 3 is a reference to a compartment so classified in accordance with the terms of the licence under the *Protection of the Environment Operations Act 1997* set out in this approval, and includes a reference to a compartment that would be so classified if the authority conferred by those terms was operative.

Table 1: Minimum widths of exclusion zone, buffer zone and special operational zone for watercourses in native forests in IHL 1 and 2 (metres – measured along the ground surface).

Stream Order	Exclusion Zone	Buffer Zone	Special Operational Zone
Drainage line	5	5	10
1 st Order	5	5	10
2 nd Order	5	15	10
3 rd Order	5	25	10
4 th Order or greater	5	45	10

Table 2: Minimum widths of exclusion zone and special operational zone for watercourses in native forests in IHL 3 (metres – measured along the ground surface).

Stream Order	Exclusion Zone	Special Operational Zone
Drainage Line	10	10
1 st Order	10	10
2 nd Order	20	10
3 rd Order	30	10
4 th Order or greater	50	10

7.2 Wetland Exclusion Zones

- a) This condition (being condition 7.2) applies to any wetland comprising either class 1 aquatic habitat or class 2 aquatic habitat.
- b) An exclusion zone must be established around a wetland to which this condition applies. The exclusion zone (wherever measured) must have at least the width, from the edge of the wetland, set out below:
 - i. where the wetland has a surface area of at least 2mx2m but not more than 0.5 hectares (approximately 150x150m), 10 metres;
 - ii. where the wetland has a surface area of at least 0.5 hectares but not more than 2 hectares (approximately 150mx150m), 20 metres;
 - iii. where the wetland has a surface area of more than 2 hectares or is a wetland to which SEPP 14 applies, 40 metres.
- c) Where a wetland with a surface area of less than 0.5 hectares is in a compartment in which a harvesting operation is proposed to be carried out, SFNSW must, before commencing that operation, record the wetland on any harvesting plan and mark it in the field so that it can be protected.

7.3 Exclusion Zones around other water bodies

An exclusion zone of at least 10 metres in width (wherever measured) is to be established around any pond or dam comprising class 1 aquatic habitat or class 2 aquatic habitat, not being a pond or dam that is a watercourse or wetland to which condition 7.1 or condition 7.2 applies respectively. The width of the exclusion zone is to be measured from the edge of the pond or dam.

7.4 Operations within Exclusion Zones

- a) This condition (being condition 7.4) applies to any exclusion zone established under condition 7.1, 7.2 or 7.3.
- b) No specified forestry activities are to be carried out in an exclusion zone.

- c) Harvesting machinery is not to enter, or be used within, an exclusion zone.
- d) No earthworks are to be carried out in an exclusion zone.
- e) No tree is to be felled into an exclusion zone. If any tree is felled into an exclusion zone then no part of the tree may be removed from that zone.

Note: Exceptions to the prohibitions in paragraphs b)-e) are contained in paragraphs i), l), m) and n).

Accidentally felled trees

- f) Condition 7.4 e) is not breached where a tree is accidentally felled into an exclusion zone.
- g) For the purposes of this condition, a tree is accidentally felled into an exclusion zone only if it is apparent that:
 - (c) techniques of directional felling were used in an attempt to fell the tree away from the zone; or
 - (d) an attempt was made using some other method (such as a mechanical harvester) to fell the tree away from the zone.
- h) Despite condition 7.4 g) , a tree is not accidentally felled into a zone 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 zone.
- i) Despite condition 7.4 b)-e), a tree that is accidentally felled into the exclusion zone may be removed from the zone if it will produce (in the opinion of SFNSW) a timber product referred to in clause 5 (2) of this approval, other than pulp grade timber or low quality timber. For the avoidance of doubt, the whole of the tree (subject to condition 7.4 j)) may be removed even though the timber product that any part of the tree will produce is pulp grade timber or low quality timber.

Removal of accidentally felled trees

- j) A tree that is felled into an exclusion zone accidentally (other than in connection with the re-opening, maintenance or construction of a road permitted under this condition) may be removed only in accordance with the following rules:
 - i) the crown must be cut off from the trunk and left where it has fallen unless the whole of the tree is lifted out of, or lifted and moved within, the exclusion zone using a mechanical harvester;
 - ii) harvesting machinery may only be used to remove the tree (or logs into which the tree is cut) if its wheels or tracks remain outside the exclusion zone.
- k) In addition, where a buffer zone adjoins the exclusion zone, then a harvesting machine may only be used within the buffer zone to remove an accidentally felled tree from the exclusion zone if the machine has already

entered the buffer zone under condition 7.5 h) (to fell trees away from the buffer zone) and the wheels and tracks of the machine remain wholly within 5 metres of the boundary between that zone and special operational zone or other harvestable area.

Road use etc. may take place in zone

- l) Despite condition 7.4 b)-e), use of a road, road re-opening and road maintenance may take place in an exclusion zone other than an exclusion zone established under condition 7.2 or condition 7.3.

- m) Despite condition 7.4 b)-e), a road may be constructed, and extraction of logs from trees felled outside the exclusion zone may be carried out, in an exclusion zone (other than an exclusion zone established under condition 7.2 or condition 7.3) where it is not reasonably practicable to use another site or route for the purposes of the road or extraction.

Logs from trees felled to construct road etc. may be removed from zone

- n) Despite condition 7.4 b)-e), extraction of logs from trees felled into or within the zone in the course of road construction, road re-opening or road maintenance under this condition or other condition of this licence may take place in an exclusion zone.

Reinstatement of ground disturbed by felling of trees into zone

- o) Any ground (including vegetation) that is disturbed as a result of accidentally felling trees into the zone, and removal of those trees, is to be reinstated.

- p) A harvesting machine may be used for reinstatement of disturbed ground under this condition but only if;
 - i. in the case of a mechanical or other harvester, its wheels or tracks remain outside the exclusion zone, with only the arm of the harvester protruding into the zone; and
 - ii. where there is a buffer zone adjoining the exclusion zone, the machine has already entered the buffer zone under condition 7.5 h) (to fell trees away from the buffer zone) and the wheels or tracks of the machine remain wholly within 5 metres of the boundary between the buffer zone and the adjoining special operational zone.

Operation of machinery and extraction within zone

- q) Condition 7.8 applies to the operation of machinery within an exclusion zone and condition 7.9 applies to extraction within an exclusion zone.

7.5 Operations within buffer zones

- a) This condition (being condition 7.5) applies to any buffer zone established under condition 7.1.
- b) No specified forestry activities may be carried out in a buffer zone.
- c) Harvesting machinery is not to enter, or be used within, a buffer zone.
- d) No earthworks are to be carried out in a buffer zone.

Note: Exceptions to the prohibitions in paragraphs b)-d) are contained in paragraphs e), g), h), k) and l).

Felling of trees into buffer zone

- e) Despite condition 7.5 b), a tree whose base is outside the buffer zone may be felled into the zone and removed from the zone in a harvesting operation for the purpose of timber production. For the avoidance of doubt, no harvesting machinery may enter or be used within the zone for the purpose of felling the tree into the zone.
- f) A tree that is felled into a buffer zone under condition 7.5 e) may be removed only in accordance with the following rules:
 - i. the crown must be cut off from the trunk and left where it has fallen unless the whole of the tree is lifted out of, or lifted and moved within, the buffer zone using a mechanical harvester; and
 - ii. harvesting machinery may only be used to remove the tree if its wheels or tracks remain outside the buffer zone, except as provided by condition 7.5 g).
- g) If a harvesting machine has entered a buffer zone under condition 7.5 h) (that is, to fell a tree away from the zone), then it may also be used to remove a tree that has been felled into the zone under condition 7.5 e).

Use of harvesting machine to fell trees away from buffer zone

- h) Despite conditions 7.5 b)-d), a harvesting machine may (in the course of a harvesting operation for the purpose of timber production) enter, and be used within, a buffer zone for the purpose of felling and removing a tree whose base is outside the buffer zone, but only if the tree cannot be felled from outside the zone, using the techniques of directional felling, so that it does not fall into the zone.
- i) A harvesting machine may be used under condition 7.5 h) only to fell the tree away from the zone (that is, into the adjoining special operational zone or other harvestable area).
- j) A harvesting machine may only be used under condition 7.5 g) or h) if its wheels and tracks remain wholly within 5 metres from the boundary

between the buffer zone and the adjoining special operational zone or other harvestable area .

Use of roads etc. in buffer zone

- k) Despite condition 7.5 b)-d), use of a road, road re-opening, road maintenance and extraction of logs from trees felled within, or into, a buffer zone (for the purposes of road re-opening, road maintenance or road construction) may take place in the buffer zone.
- l) Despite condition 7.5 b)-d), a road may be constructed, and extraction of logs from trees felled outside the buffer zone may be carried out, in a buffer zone where it is not reasonably practicable to use any other site or route for the purposes of the road or extraction.

Reinstatement of ground disturbed by felling trees into zone or use of harvesting machinery

- m) Any ground (including vegetation) within a buffer zone that is disturbed is to be reinstated where the disturbance has been caused:
 - i. by felling a tree into the zone, or removing a tree from the zone, under condition 7.5 e); or
 - ii. by a harvesting machine under condition 7.4 p) or condition 7.5 g) or h).
- n) A harvesting machine may be used for reinstatement of the ground under condition 7.5 m) but only if:
 - i. in the case of a mechanical or other harvester, its wheels or tracks remain outside the buffer zone (that is, in the adjoining special operational zone or other harvestable area); or
 - ii. the machine has already entered the buffer zone in accordance with condition 7.5 h) (that is, to fell trees away from the zone) and its wheels or tracks remain wholly within 5 metres from the boundary between the buffer zone and the adjoining special operational zone.

Operation of machinery within buffer zone

- o) Condition 7.8 applies to the operation of machinery within a buffer zone and condition 7.9 applies to extraction within a buffer zone.

7.6 Restrictions apply to use of harvesting machinery in exclusion and buffer zones for reinstatement of ground and removal of trees

- a) For the avoidance of doubt, a harvesting machine may not enter a buffer zone solely for any, or all, of the following purposes:
 - i. removing an accidentally felled tree from an exclusion zone, as referred to in condition 7.4 j);
 - ii. reinstating disturbed ground in an exclusion zone, as referred to in condition 7.4 p);

- iii. removal of a tree felled into a buffer zone, as referred to in condition 7.5 g);
 - iv. reinstating disturbed ground in a buffer zone, as referred to in condition 7.5 n).
- b) The wheels or tracks of a harvesting machine may not be repositioned or moved (to any significant extent) within a buffer zone solely for any, or all, of the following purposes:
- i. removal of an accidentally felled tree from an exclusion zone, as referred to in condition 7.4 j);
 - ii. reinstating disturbed ground in an exclusion zone, as referred to in condition 7.4 p);
 - iii. removal of a tree felled into a buffer zone, as referred to in condition 7.5 g);
 - iv. reinstating disturbed ground in a buffer zone, as referred to in condition 7.5 n).

7.7 Operations within special operational zones

- a) This condition (being condition 7.7) applies to any special operational zone established under condition 7.1.
- b) Forestry operations (as described in clause 5 of this approval) may only be carried out in a special operational zone subject to the restrictions set out in this condition.
- c) A road may be constructed, and extraction of logs from trees felled outside the special operational zone, may be carried out in a special operational zone only where it is not reasonably practicable to use another site or route for the purposes of the road or extraction.
- d) Condition 7.8 applies to the operation of machinery within a special operational zone and condition 7.9 applies to extraction within a special operational zone.

7.8 Operation of machinery in exclusion zones, buffer zones and special operational zones

- a) Harvesting machinery and any other tracked or wheeled machinery that may enter an exclusion zone, buffer zone or special operational zone (such as for the purpose of road construction or road maintenance) may not operate in any part of such a zone where the soil is saturated.
- b) Harvesting machinery and any other tracked or wheeled machinery that may enter and be used within an exclusion zone, buffer zone or special operational zone may only be operated using walkover techniques and:
 - i. in such a way so as to minimise skewing of its tracks (if any) to the greatest extent practicable; and

- ii. with any blades, rippers or other similar attachments positioned so that they do not disturb the ground surface, except when the machinery is being used to carry out earthworks for the purpose of road construction, road maintenance or road re-opening or extraction.

7.9 Extraction

- a) Any extraction within an exclusion zone, buffer zone or special operational zone must be carried out using the following methods (to the greatest extent reasonably practicable):

- i. forwarding using walk-over techniques;
- ii. forwarding using a temporary extraction track;
- iii. snigging using walk-over techniques;
- iv. snigging using a temporary extraction track;
- v. forwarding using a permanent extraction track;
- vi. snigging using a permanent extraction track.

A method specified in any of the subparagraphs ii-vi may only be used if it is not practicable to use a method in any preceding paragraph.

- b) Any extraction within an exclusion zone, buffer zone or special operational zone must, to the greatest extent reasonably practicable, be carried out in such a way so as to avoid disturbance to the ground (including vegetation) and, in case of extraction within an exclusion zone, so as to avoid disturbance to the bed and banks of the watercourse adjoining the exclusion zone.
- c) Without affecting the operation of provisions of condition 7.4 and 7.5 relating to reinstatement of ground, any ground (including vegetation) disturbed as a result of the construction of a temporary extraction track within an exclusion zone, buffer zone or special operational zone, or extraction within such a zone, must be reinstated. Harvesting machinery may be used to reinstate the ground. However, harvesting machinery is not authorised to enter a zone, or move within the zone, solely for the purpose of reinstating the ground.
- d) Temporary extraction track crossings across a watercourse adjoining an exclusion zone must:
 - i. cross at, or as close as reasonably practicable to, right angles to the watercourse unless another approach reduces ground and soil disturbance or clearing of vegetation; and
 - ii. not be used when there is runoff from the surface of the crossing; and
 - iii. not be constructed or used so as to prevent the free flow of water in the watercourse; and
 - iv. not be used if water is flowing over the track crossing;

- e) The bed and banks of a temporary extraction track crossing across a watercourse adjoining an exclusion zone must be immediately reinstated at the completion of their use. Without limiting the measures SFNSW may need to take to reinstate the ground, SFNSW must ensure that such of the following measures as may be required are taken:
 - i. the re-shaping of the bed and banks of the watercourse so that the watercourse has approximately the same profile as it had before the crossing was constructed;
 - ii. re-establishment of ground cover;
 - iii. removal of any material from the bed of the watercourse that entered the watercourse as a result of the construction of the crossing or its use.
- f) The location of all walk-over points and temporary extraction track crossings across a watercourse adjoining an exclusion zone must be approved by SFNSW and marked in the field before any machinery enters the exclusion zone.
- g) Temporary extraction tracks within an exclusion zone, buffer zone or special operational zone must not be bladed off.

[8] Condition 7.10

Renumber condition 7.6 (Miscellaneous Forestry Activities) as condition 7.10.

[9] Condition 7.10 (as renumbered)

Omit “Conditions 8.4, 8.5 and 8.6”. Insert instead “conditions 7.8, 7.9 and 8.4”.

[10] Condition 8.1 a)

Omit “Condition 8.2, 8.4, 8.5 and 8.6”. Insert instead “conditions 7.8, 7.9, 8.2 and 8.4”.

[11] Condition 8.2 b)

Omit “Condition 8.3, 8.4, 8.5 and 8.6”. Insert instead “conditions 7.8, 7.9, 8.3 and 8.4”.

[12] Conditions 8.5 and 8.6

Omit the conditions.