



North East Forest Alliance

State Forest Post-Logging Audit Guide

This is a guide that community members can use to help post-logging surveys / audits of NSW State Forests.

Breaches can be used to record the negligence of FCNSWs forestry operations and should be reported to the EPA with clear photos and GPS coordinates.

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CIFOA LOGGING PROTOCOLS

In 2018 the NSW Government adopted new logging rules to be applied throughout eastern NSW, these are called the [Coastal Integrated Forestry Operations Approval \(CIFOA\)](#)¹

Unfortunately in doing so they removed protections for most trees and most threatened species, significantly limiting the range of offences that we can audit, though we can still highlight poor practices when we find them and identify important sites we think should be protected. The CIFOA is in two parts: conditions and protocols (with definitions at the end of the protocols, part 39) - which can make it confusing.

To find out where they are logging near you the NSW [Forestry Portal](#)² - has a 12 month plan of Operations with colour coded mapped areas indicating the status of planned and active logging throughout coastal NSW. Once the logging plan is approved it will be available on this site (often just before logging commences) - you will need to create a username and password to have access to the plan. The Operational Plan will detail many of the rules that apply to the specific compartment.

If you find a breach of the logging rules you will need to photograph the breach, record its locality (this can be marking it on a map, or recording it with a GPS or using apps such as Avenza, Handy GPS and others) and report it to the EPA. If you are unsure (i.e. threatened plants, sap-feed trees, chewed forest oak cones, Koala scats), take a clear photo and report it anyway. Make sure you keep a record for yourself, and send a copy to NEFA. It is best to keep a written record where you record as many attributes of trees as feasible (i.e. grid reference, species, tree diameters, nature of breach, numbers of Koala scats).

If you find a breach or feature that you are certain you will report to FC and/or EPA, you can flag it in the field with biodegradable tape marked with date, site # (to match your raw data sheet).

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<https://www.epa.nsw.gov.au/your-environment/native-forestry/integrated-forestry-operations-approvals/coastal-ifo>

² <https://planportal.fcnsw.net/>

TREE RETENTION

The CIFOA Conditions (**64. Retained trees**) and Protocols (**Protocol 23: Tree retention**) require the retention of:

- All giant trees
- all dead trees (except where dangerous)
- Up to 8 hollow-bearing trees per ha
- all Glossy Black-Cockatoo feed trees (Forest oaks with numerous chewed fruit underneath)
- Yellow-bellied Glider and Sugar glider sap-feed trees (with chew marks on trunk showing tapping for sap, YBG can have distinctive V notches)
- five mature nectar trees per ha within two kilometres of a record of a Swift Parrot or Regent Honeyeater.
- 5-10 Koala browse trees per ha in medium-high modelled habitat.

Giant Trees

They have set a high bar as many forests don't have trees of this size. 'Giant trees' must be retained.

- In relation to Blackbutt or Alpine Ash trees, means any live tree of these **species** with a **diameter at stump height over bark** of 160 centimetres or greater.
- In relation to all other tree **species**, means a live tree with a **diameter at stump height over bark** of 140 centimetres or greater.

Must be measured at 'stump height' which is 30 centimetres above the ground (on the upslope of the tree, if the tree is on a slope) or, where the tree stump is less than 30 centimetres, the highest point of the tree stump.

To find the diameter: measure the circumference of the tree at stump height then divide the circumference by π , or 3.14 for an estimation.

Hollow-bearing Trees

Hollow-bearing trees are defined as: A tree that is alive and has:

1. visible hollows, holes or cavities that have likely formed because of decay, injury or other damage as the tree has aged; or

2. clearly inferred hollows as it is an older growth stage tree (in particular in a senescent tree) with one or more obvious deformities such as a burl, large protuberance or broken limb.

They used to have to be the largest trees in the stand, but no longer. They are marked with a H. If you think one has been felled, check the canopy branches for hollows (which can be hard amongst logging debris), and record any you find. The most common breaches relate to felling or damaging (see below) hollow-bearing trees.

Koala feed trees

See CIFOA (**Condition 65. Koala browse tree retention**)

Application of this prescription is based upon mapping showing where prescriptions 1 and 2 are applied - outside these areas, a record of a Koala can trigger prescription 2. The Operational Plan will usually identify which prescription applies in which parts of the logging area.

The retention requirements are:

- (a) a minimum of 10 Koala browse trees per hectare of net harvest area where Koala browse prescription 1 applies;
- (b) a minimum of five Koala browse trees per hectare of net harvest area where Koala browse prescription 2 applies and in any (or remaining part of a) compartment where a contemporary koala record exists but is not otherwise attributed Koala browse prescription 1 or 2;

A Koala browse tree is defined as:

- (a) greater than 20 centimetres DBH (diameter at breast height - ie 1.3m above ground) or 22 centimetres at DSHOB (diameter stump height over bark);
- (b) live and healthy; and
- (c) of the following tree species:
 - (i) primary browse trees –
Tallowwood (*E. microcorys*); Swamp Mahogany (*E. robusta*); or Red Gums (*E. tereticornis*, *glauca*, *seeana* + hybrids);

or

(ii) secondary browse trees –

Grey Gums (*E. biturbinata*, *propinqua*, *punctata*, *canaliculata*); Grey Box (*E. moluccana*, *largeana*); Peppermints (*E. radiata*, *acaciaformis*); Sydney Blue Gum (*E. saligna*); Ribbon Gum (*E. nobilis*, *viminalis*); Messmate (*E. obliqua*); Snow Gum (*E. pauciflora*); Mountain Gum (*E. dalrympleana*); or New England Blackbutt (*E. andrewsii*, *campanulata*).

Tallowwood (*E. microcorys*), Swamp Mahogany (*E. robusta*) and Red Gums (*E. tereticornis*, *glaucina*, *seeana* and hybrids) must be prioritised for retention when applying the Koala browse prescription 1 or Koala browse prescription 2 and must make up at least 50 per cent of the retained Koala browse trees where these are available.

These are usually marked with a single horizontal line. They are commonly damaged (see below) in logging operations. If you see any marked browse trees damaged, or one below the minimum size, report it as a breach.

Aside from a requirement to wait for a Koala to leave its tree before cutting it down, there are no longer any requirements for trees actually used by Koalas. Never-the-less it is worthwhile looking for Koala scats (which are distinctive faecal pellets), recording them and any sightings, and reporting them. If you find them before logging, report them to your local forester and ask them to be protected. There are numerous groups who collect Koala sightings, so do a search on the net for whom you think is most appropriate in your area.

Tree damage

The CIFOA Protocol 23.3 Protection of retained trees, requires that Retained trees must not be damaged during a forestry operation, including that each retained tree does not have harvesting debris accumulated within five metres of its base (though debris can be flattened so that it is less than a metre high).

This is a frequent breach, trees marked for retention often have their trunks bashed or roots severed by machines, or get their tops or branches knocked off by trees dropped onto them, and in some operations debris is often left around trees. Even a small scar may indicate more extensive internal damage.

It used to be that they had to protect 5m around retained trees, though this has been removed, and now the only consequence is that they can pick another tree to replace a damaged one. Never-the-less this is a significant problem that needs to be reported. It is sadly common to see trees 200-500 years old that have had machines roll over their roots or bash their trunks, and trees retained for Koalas recklessly bashed.

LOGGING EXCLUSIONS

The CIFOA requires logging to be excluded from Ecologically Significant Areas (ESAs) including mapped oldgrowth, mapped rainforest, mapped Threatened Ecological Communities (and some that haven't been mapped), mapped "ridge and headwater habitat" (corridors), as well as exclusion zones around streams, rock outcrops, cliffs, wetlands, caves, mine shafts, and a limited number of threatened plants and animals.

In addition to this they are required to identify and retain "Wildlife Habitat Clumps" and "Tree Retention Clumps" (see [Section 3](#))

These are generally shown on the Operational Plan, though often they miss features such as rock outcrops, wetlands caves/mines, and threatened species. If you come across unmapped ESAs you will need to check the CIFOA to see how they are defined (and whether a threatened species is included) and what size buffer is required. Proactive audits can be effective in protecting such areas, and logging of such areas is a breach.

CIFOA Protocol 28 Rocky Outcrops and Cliffs identifies criteria for identification, and the required buffers for wetlands are specified in the IFOA Condition 99. Wetlands.

Buffers for streams are identified in the CIFOA Conditions p.42 Table 6a: ESA categories and minimum riparian exclusion zone and ground protection zone widths, based how much catchment the drainage line has above it.. Check setbacks of logging from creeks – Operational harvest plans show required distances. according to how much catchment the drainage line has above it. How to measure riparian exclusions is detailed in CIFOA Protocol 16.3 Measurement of riparian exclusion zones. Basically the width is measured along the ground from the "bankful" level, being "where, under high flow conditions, the water level would be even with the top of the banks".

On Operational Plans the net (allowable) logging area is shown in yellow, with identified ESAs excluded from logging. The boundaries of exclusion areas are often marked in the field with either a series of horizontal pink lines, or increasingly with pink flagging tape. Any logging (i.e. stumps, tracks) across those boundaries is a breach, though in some cases they can drop a limited number of trees across them. Sometimes they fail to mark boundaries, and are increasingly relying on their GPSs to identify them without marking them. Treat any intrusion into an ESA, or what you think should be one, as a breach and report it to the EPA (and media if you want).

The only fauna with site specific prescriptions in north-east NSW are Rufous Scrub-bird, Albert's Lyrebird, Marbled Frogmouth, Philoria species and Assa darlingtoni (Southern meta-population), Hastings River Mouse, Spotted-tailed Quoll, Bare-nosed Wombat, and Koala (see Conditions p30 Division 4 – Species-specific conditions for fauna). Most dens and nests of threatened fauna require buffers (as specified in the CIFOA Conditions, p.33 Table 4: Protection of nest, roost or den), so record any you come across. If you find any intrusions it is a breach.

If someone has enough expertise to identify threatened flora it is worth checking which species are likely to occur in an area, check the CIFOA Protocols: Part 3: Flora species (p21) and endangered populations protected by the application of a species-specific

condition, to see if any apply, and record and report any you find. If you find one that doesn't have the required buffer it is a breach.

WILDLIFE HABITAT AND TREE RETENTION CLUMPS

In coastal forests the CIFOA requires the Forestry Corporation to identify 5% of the potential logging area (across a group of compartments - Local Landscape Area - up to 1,500ha) to be protected from logging in perpetuity as Wildlife Habitat Clumps. These are required to be identified in the Harvesting Plan ahead of logging.

It also requires the Forestry Corporation to identify 5-8% of the loggable area of each compartment to be protected from logging in perpetuity as Tree Retention Clumps. These can be identified as they go, so are not identified in Harvesting Plans (unless selected in previous logging).

So the CIFOA is basically allowing the Forestry Corporation free reign to choose 10-13% of the forest to protect in perpetuity. These are meant to be important wildlife areas, though often are chosen because they have little timber. While technically we have no say in this, at this early stage in the process there is an opportunity to change these if we can prove that areas with high wildlife values are missing.

If you find patches of Koala feed trees, habitat of sedentary threatened species, den and nests of threatened species or any patch of forest you can make a special case for it is worth a go, particularly if you can also show the patches they chose had low wildlife values.

Note that Protocol 34 allows these to be varied with the approval of the EPA.

EROSION

Logging operations often result in erosion and pollution of streams. The CIFOA is hard to interpret as to the new requirements. So basically if after logging you see any significant erosion or stream pollution treat it as a breach, photograph it and record its location, and report it.

In streams look for muddied waters and accumulated sediment in the stream or at an entry point, that you think can be attributed to the logging.

Snig tracks and roads are a major source, look for eroded channels down tracks and sediment accumulation at points. Measure the depth of eroded channels. Its good to measure the distance down a track that water is allowed to flow unimpeded (ie without diversion off the track), and, if you can, the slope of the track

TREE MARKINGS

Learn the tree markings and their meaning: basically a dot means the tree is to be logged and a horizontal ring or rings around the tree means it's not to be logged for one reason or another. Three horizontal lines – which can be on small trees – mark the boundary of an excluded area that logging should not go beyond.

Some common markings FCNSW use to mark trees with spray paint:

MEANING	MARKING
Retained Trees and Boundaries	
Retained Trees	One stripe or ring
Boundary not to be crossed by machines	Two stripes or ring
Boundary not to be crossed	Three stripes or ring
Drainage feature not to be crossed	Three stripes or ring
Retained Tree for Wildlife Habitat	H
Trees to be removed	
Individual tree	1 Dot or 3 Dots
Directional felling mark	Arrows
Additional Info on Trees	
Compartment Boundary	O
Slope Angle	25
Approved Dump Site	D
Road/Track Alignment	I
Approved Crossing	
Cancelled Mark	X