

NON-COMPLIANCE OF THE EDEN REGION INTEGRATED FORESTRY OPERATIONS APPROVAL – THREATENED SPECIES LICENCE, CONDITION 5.11 ROCKY OUTCROPS

**Scott Daines
South East Forest Rescue**



Logged rocky outcrop Glenbog SF, Cpt 2315-7. October 2008.

JUNE 2013

Contents

Abbreviations.....	3
Executive summary.....	4
Introduction.....	6
Condition 5.11.....	6
1. Breach reports.....	8
1.1 Pre 2007 breaches.....	8
1.2 Nullica 713.....	9
1.3 Nullica 711.....	10
1.4 Glenbog 2314, 2315.....	10
1.5 Tantawangalo 2433.....	11
1.6 Mumbulla 2133.....	12
1.7 Mumbulla 2135.....	13
1.8 Tantawangalo 2434.....	13
1.9 Tantawangalo 2432.....	14
1.10 Glenbog 2363.....	14
1.11 Yambulla 450, 446, 444.....	15
1.12 Tantawangalo 2405, 2407, 2408.....	16
2. Discussion.....	18
2.1 Interpretation of condition 5.11.....	18
2.2 Unsustainable yield.....	18
2.3 Enforcement of condition 5.11.....	19
2.4 Contractor negligence.....	19
3. Conclusion.....	20
Recommendations.....	20
References.....	21
Appendix A – Table of rocky outcrop breaches 2008-2013.....	22

Abbreviations

DECCW	Department of Environment Climate Change and Water (now OEH)
EPA	Environment Protection Authority
EPL	Environment Protection Licence
ESFM	Ecologically Sustainable Forest Management
FCNSW	Forestry Corporation of New South Wales (previously Forests New South Wales)
FL	Fisheries Licence
FMZ	Forestry Management Zone
FRAMES	Forest Resource And Management Estimation System
HQL	High Quality Large sawlog
IFOA	Integrated Forestry Operations Approval
IHL 4	Inherent Hazard Level 4
NEFA	North East Forest Alliance
NHA	Net Harvest Area
NPWS	National Parks and Wildlife Service
RFA	Regional Forest Agreement
ROTAP	Rare Or Threatened Australian Plants
SEFR	South East Forest Rescue
SFO	Supervising Forestry Officer
TSL	Threatened Species Licence
WSA	Wood Supply Agreement

Executive summary

Forestry operations are governed by the Integrated Forestry Operations Approval (IFOA) for Eden region, NSW 1999 (NSW Government 1999). The IFOA contains three licences, the Environment Protection Licence (EPL), Threatened Species Licence (TSL) and the Fisheries Licence (FL).

SEFR has audited many forestry operations over the years and found breaches of licence conditions in all compartments. There are several conditions that are constantly being breached by FCNSW (Forestry Corporation of New South Wales) and their contractors. One of these conditions is 5.11 of the TSL regarding the protection of rocky outcrops.

Rocky outcrops contain likely habitat for threatened flora and fauna. The IFOA-TSL, list several threatened flora and fauna species that use rocky outcrops in the Eden region. Species include Brush-tailed Rock Wallaby (*Petrogale penicillata*), Spotted-tailed Quoll (*Dasyurus maculates*), Eastern Cave Bat (*Vespadelus troughtoni*) and for flora *Davallia pyxidata* and *Poa cheelii*. Rocky outcrops are also important areas of habitat for many species of reptiles (Michael *et al* 2010).

Observations from compartments logged prior to this prescription, reveal very few rocky outcrops that are intact. With over half of the state forest area logged already, less than half of the remaining rocky outcrops remain undisturbed by intensive logging. The protection of the remaining undisturbed outcrops in the region is of the utmost importance.

Over the past five years SEFR has submitted 15 breach reports relating to 16 compartments which have instances of non-compliance with condition 5.11. There are also several breach reports pre 2007 also with non-compliance of condition 5.11.

There seems to be a systemic failure by FCNSW to identify and protect those rocky outcrops that meet the requirements of condition 5.11 of the IFOA-TSL in the Eden region. SEFR asserts that the condition as written is easily interpreted and requires only a quantitative, not qualitative, assessment for compliance.

In correspondence with the EPA (Environment Protection Authority), SEFR has been made aware that the field guide produced by FCNSW in 2008/09, to help SFO's to identify rocky outcrops, is in fact a flawed document. Of major concern to SEFR is why these flaws were not picked up by the EPA when the guide was first published. This is one reason why there has been no increase in compliance by FCNSW with condition 5.11. The recent guidance note produced by the EPA does not seem to be of any benefit to FCNSW to help better identify outcrops.

Over the past two years the EPA has issued eight warning letters to FCNSW and one official caution, in relation to breaches of condition 5.11 of the TSL. It is obvious that greater regulation and enforcement is required to address this situation. The time for warning letters has passed and future action must be in the form of prosecution of both FCNSW and their contractors.

This report, while focusing on condition 5.11 of the TSL, is a microcosm of the failure of the IFOA as a whole, to protect threatened species and their habitat from the damage caused by forestry operations. The IFOA only mitigates the damage, it does not stop the damage caused by forestry operations. Any non-compliance will therefore cause greater harm to the environment.

The entire regulation and enforcement regime of forestry operations must be completely overhauled and improved immediately. There has already been too much damage to the environment due to the lack of compliance with the IFOA.

Recommendations

- 1. That the EPA enforces the licence conditions of the IFOA by way of prosecuting FCNSW to the fullest extent possible. The time for ineffective warning letters has way passed.**
- 2. The government provides extra money and resources to the EPA to enable the EPA to properly regulate FCNSW.**
- 3. The IFOA be amended to enable stop work orders by the EPA when breaches are identified to enable compensatory habitat in the logging compartment to be identified and protected.**
- 4. The Forestry Act be amended to reinstate third party rights to prosecute FCNSW.**

Introduction

On ground forestry operations are governed by the Integrated Forestry Operations Approval (IFOA) for Eden region, NSW 1999 (NSW Government 1999). The IFOA contains three licences, the Environment Protection Licence (EPL), Threatened Species Licence (TSL) and the Fisheries Licence (FL). These licences set the minimum prescriptions that must be applied during logging operations to mitigate the impacts on soil and water, terrestrial threatened species and their habitats, and aquatic species and their habitats.

Over many years South East Forest Rescue (SEFR) has conducted audits of forestry operations in the Eden region for compliance with the IFOA. On completion of the audits, breach reports are sent to the Environment Protection Authority (EPA), who has the duty to regulate and enforce the prescriptions of the IFOA. EPA then investigates, taking many months to finalise their response which is invariably just a warning letter.

In every compartment audited breaches of prescriptions contained in the IFOA have been found. Analysis of SEFR's breach reports submitted to the EPA shows that several prescriptions are regularly breached in most compartments that are audited. Of great concern is the systemic failure by FCNSW to adhere to these prescriptions and the lack of enforcement of non-compliance with the IFOA by the EPA, with the later causing a positive feedback loop for the former.

A report on the compliance of forestry operations in the Upper North East forests produced by the North East Forest Alliance (NEFA), (Pugh 2011), shows the issues that will be raised in this report are not just confined to the Eden region, but are of statewide significance.

This report will focus on the Eden region TSL and more specifically condition 5.11 relating to the protection of rocky outcrops. Over the past 5 years SEFR has submitted 15 breach reports relating to 16 compartments which have instances of non-compliance with condition 5.11. There are also several breach reports pre 2007 also with non-compliance of condition 5.11.

5.11. Rocky Outcrops and Cliffs

- a) Specified forestry activities are prohibited within areas of rocky outcrops and cliffs.*
- b) In addition, exclusion zones of at least 20 metres wide must be implemented around all rocky outcrops more than 0.1 hectare (approx. 30m x 30m), and all cliffs.*
- c) Exclusion zones of at least 40 metres wide must be implemented around all rocky outcrops more than 0.5 hectare.*

(Note: it is not intended to exclude SFNSW from all areas that have a scattered or stony or rocky ground cover. Only those areas where rocks and exposed boulders cover greater than 70% of at least a 0.1 hectare area. Those areas that fall within the definition of Rocky Outcrops and Cliffs are considered to contain likely habitat for threatened flora and fauna.)

Rocky outcrops are present throughout the Eden region and are predominantly, but not exclusively, of Devonian granite origin. Several forms of outcrops are found in the region, those being nubbins, castle koppie and scattered tors (Micheal *et al* 2010). The escarpment forests of Glenbog, Tantawangalo, Cathcart, Coolangubra and Nalbaugh have a high proportion of outcrops contained within them (S.Daines *pers. obs*).

As stated in the note above, rocky outcrops contain likely habitat for threatened flora and fauna. *Schedule 2: Threatened, ROTAP or regionally rare flora potential habitat descriptions* and *Schedule 4: Threatened fauna potential habitat descriptions*, of the IFOA-TSL (NSW Government 1999), list

several threatened flora and fauna species that use rocky outcrops in the Eden region. These are for fauna the Brush-tailed Rock Wallaby (*Petrogale penicillata*), Spotted-tailed Quoll (*Dasyurus maculates*) and the Eastern Cave Bat (*Vespadelus troughtoni*) and for flora *Davallia pyxidata* and *Poa cheelii*. Rocky outcrops are also important areas of habitat for many species of reptiles (Michael *et al* 2010). Large rocky outcrops would also be likely to provide refugia for many fauna species during wildfire events.

This prescription is relatively new, being introduced in the late 1990's. Observations from compartments logged prior to this prescription, reveal very few rocky outcrops that are intact. With over half of the state forest area logged already, less than half of the remaining rocky outcrops remain undisturbed by intensive logging. The protection of the remaining undisturbed outcrops in the region is of utmost importance.

1. Breach Reports

The following sections are summaries of breach reports sent to the EPA by SEFR from 2003 until the present date that relate to condition 5.11.

1.1 Pre 2007 Reports

2003 Yambulla 434-1

An audit of this compartment revealed a massive outcrop that also had a cliff line that had no exclusion marked and had been logged. This outcrop and cliff was so visible from Imlay Rd that someone had painted their name on it. The harvest plan map shows areas of rocky terrain in the Net Harvest Area (NHA), and identifies the area where the outcrop was located as rocky terrain.



Outcrop and cliff with stumps in exclusion zone.

28/6/04 Glenbog 2375-1

This audit found the presence of two rocky outcrops that were not marked with an exclusion zone. The exclusion zones of both outcrops had been logged, and one had logging disturbance on the outcrop itself and had suffered a post logging burn through the exclusion and outcrop. A third probable outcrop was found but due to time constraints was not accurately measured. This outcrop was also logged and burnt.



Clockwise from top left: Outcrop logged and burnt, outcrop exclusion logged, possible outcrop also logged and burnt.

The harvest plan map for this compartment shows that approximately half of the NHA has rocky terrain. This should have alerted the Supervising Forestry Officer (SFO) to the probable occurrence of rocky outcrops.

EPA response

At the time of these breach reports the TSL was regulated by the National Parks and Wildlife Service (NPWS), with one officer for the whole area south of Sydney to the Victorian border. The Yambulla outcrop was audited by the officer and confirmed verbally to SEFR as being an outcrop and cliff line. Unfortunately before finalising the outcomes of these two breach reports, and several other breaches, the investigating officer left NPWS and no one continued the investigation. After many attempts to get these breach reports followed up SEFR was told it was now past the statute limit to enable enforcement.

1.2 Nullica 713-1, 3

SEFR conducted an audit of this compartment on the 7/4/08 and found a possible rocky outcrop at coordinates 0741555, 5904157 (AGD 66) that had no exclusion marked and had been logged. It was

difficult to determine the size of the outcrop due to the large amount of logging debris covering the outcrop and adjoining area.

A breach report was sent to the EPA on the 21/4/08 and as a result, an investigation was conducted one month later, confirming a breach of condition 5.11. A warning letter was issued to FCNSW in relation to this, and other breaches found in the compartment.

1.3 Nullica 711-2

During an audit of this compartment on the 17/8/08, SEFR found an unmarked rocky outcrop at coordinates 0742697, 5902537. Both the exclusion zone and the outcrop had been logged. All the outcrops found in previous breaches have been composed of granite. This outcrop was a different type of rock, possibly basalt, and comprised of small rocks tightly packed from ridge to gully covering approximately 50m by 50m, containing heath vegetation with emergent eucalypts.

While the rocks were small and did not protrude above ground level, the near 100% coverage, and the area it covered, made the outcrop highly visible. Once again we were amazed the SFO failed to identify and mark the outcrop. The change in vegetation was also highly visible and could be classed as heath, which should also be excluded from logging.

Following the investigation by the EPA, which confirmed the breach of 5.11, a warning letter was sent to FCNSW for this, and other issues of non-compliance of the TSL.

1.4 Glenbog 2314-1, 2315-7

An audit of these compartments was conducted in late October 2008. SEFR identified one outcrop in 2314-1 (RO 1) and three outcrops in 2315-7 (RO 2-4).

RO 1	0716762	5951572
RO 2	0717357	5951520
RO 3	0717275	5951287
RO 4	0717277	5951288

All these outcrops had no exclusion zones, and the exclusion zones and outcrops had been logged. The EPA did not visit the compartment and requested that FCNSW audit the compartment themselves. The outcome of the audit by FCNSW was that there was only one rocky outcrop breach (RO 2) in the area. In light of the level of occurrence of these breaches and the poor interpretation of the licence condition, SEFR disputes the finding of only one confirmed breach.

On completion of the EPA's investigation a warning letter was sent to FCNSW in regard to 5.11 and other breaches of the TSL in this compartment. FCNSW also undertook to develop a field guide, to assist SFO's and contractors, to identify and protect rocky outcrops in the field.

SEFR was concerned at the time that, after 10 years of this easily interpreted condition being in force, that FCNSW found it necessary to produce this field guide for SFO's and contractors.



RO 1



RO 1



RO 2



RO 4

1.5 Tantawangalo 2433-2, 4

SEFR conducted an audit of this compartment over two days on the 24/4/10 and 25/4/10 and found the following breaches of 5.11.

RO 1	0722305	5922145
RO 2	0722381	5922128
RO 3	0722522	5922269
RO 4	0722152	5923187
RO 5	0722145	5923029

Outcrops 1-4 were unmarked and had been logged. Machinery had been driven onto all of these outcrops. Outcrop 5 was located in an area of FMZ 3a exclusion zone and was part of an outcrop greater than 0.5ha which requires a 40m exclusion zone around it. This exclusion zone protruded into the NHA and had been logged.

With the size of these outcrops it is incredible that they were not identified by the SFO during marking up of the compartment, especially considering FCNSW producing a field guide. Outcrops 1 and 3 are approximately 0.26ha each, more than double the area requiring protection.

The EPA conducted an investigation into these breaches but unfortunately only looked at RO's 1-3. It is unclear why they did not investigate RO's 4 and 5 at the time, and have subsequently said they will return to investigate these breaches. The EPA did confirm that RO 1 and 3 were breaches and issued FCNSW with a warning letter. SEFR disputes the EPA's finding that RO 2 is not large enough to meet the condition.



RO 1



RO 2



RO 3



RO 4

1.6 Mumbulla 2133

On the 2/5/10, SEFR conducted an audit of this compartment and found an unmarked rocky outcrop at 0758594, 5946411 which has had its exclusion zone partly logged. It is probable that the outcrop is greater than 0.5ha which requires a 40m exclusion, and therefore a larger area has been logged.

The outcrop is adjacent and part of a large area of mapped Inherent Hazard Level 4 (IHL 4), comprising a steep rocky escarpment with cliffs along the contour lines. While the area joining the two is only a few metres wide, it has greater than 70% rock.

Another audit on 8/5/10 also found an unmarked outcrop at 0759023, 5946020, which had its exclusion logged and part of the outcrop logged.

The EPA investigated the first outcrop and declared that it was not a breach. SEFR disputed this result and undertook a second investigation on the 23/5/10 and resubmitted the breach report. It remains unclear as to the results of the EPA's investigation into these two breaches.

1.7 Mumbulla 2135

On the 8/5/10 an audit of this compartment was conducted, and an unmarked outcrop was found at 0756439, 5948237, which has had its exclusion and outcrop logged. The EPA investigated this and other breaches of the TSL and subsequently issued FCNSW with a warning letter regarding 5.11.

Given that this, and 2133, were highly contentious compartments, it shows the complete lack of understanding and compliance of the TSL by FCNSW staff. Logging in 2135 was stopped shortly after this due to the whole compartment, and part 2133, being a designated Aboriginal place, which required additional approvals if the area was to be logged, and which FCNSW failed to obtain.



2133 exclusion logged



2135 outcrop logged

1.8 Tantawangalo 2434-2

SEFR conducted two audits of this compartment on the 13/9/10 and 19/9/10 and found the following rocky outcrops;

RO 1	0723073	5922772
RO 2	0723184	5922681
RO 3	0723161	5922547
RO 4	0722891	5922458
RO 5	0722976	5922393

All of these outcrops and exclusion zones have been logged and suffered damage from machines driving over them. RO 2 and 3 are part of a large mapped outcrop greater than 0.5ha which requires a 40m exclusion zone around the outcrop. The SFO has marked the boundary of the mapped outcrop over the rocks of RO 2 and 3, and failed to identify that they are connected to the large mapped outcrop.

Again the failure of the SFO to identify these areas is of major concern and highlights the total lack of understanding of condition 5.11 by FCNSW staff during pre harvest surveys and operational markup. The identification and exclusion of these areas would only have resulted in the loss of a few hectares of NHA and only a few cubic metres of sawlogs.

The EPA has investigated these breaches and a warning letter for all five breaches was issued.



RO 1 outcrop and exclusion logged



RO 3 outcrop and exclusion logged

1.9 Tantawangalo 2432-2

SEFR conducted two audits of this compartment on the 13/9/10 and 19/9/10 and found the following rocky outcrops;

RO 1	0722699	5921921
RO 2	0722675	5921811
RO 3	0722981	5921695
RO 4	0723094	5921574

As with Tantawangalo 2434, RO 1 is a continuation of an outcrop greater than 0.5ha located in the adjacent FMZ 3a exclusion zone. The SFO has marked the FMZ 3a boundary, walking over rocks, and failed to identify that it was part of the large outcrop. Even giving the SFO the benefit of doubt over whether the outcrop is part of the larger one, the area of RO 1 in the NHA is still greater than 0.1ha. Both the outcrop and 40m exclusion have been logged.

Part of RO 2 is located in the adjoining compartment. The SFO has marked only the compartment boundary and failed to identify that the outcrop is greater than 0.1ha. Both the outcrop and exclusion zone have been logged. RO 3 has been logged and RO 4 has had what should have been a 20m exclusion logged.

The EPA has investigated these breaches and a warning letter for all four breaches was issued.

1.10 Glenbog 2363-1

An audit by SEFR on the 3/10/10 found an unmarked rocky outcrop at 0719535, 5941292 with no exclusion zone that has been logged. Several snig tracks have been pushed through this outcrop, moving a large amount of rock. It is probable that the outcrop would have been far greater than what we have mapped, which is still greater than 0.1ha.

The EPA has investigated this and other TSL breaches and confirmed a breach of 5.11 and issued another warning letter to FCNSW.



2363-1 rocky outcrop logged

1.11 Yambulla 450-1, 446-1, 444-3

On 3/11/10 SEFR conducted an audit of these two compartments and found the following breaches of condition 5.11;

RO 1	0723863	5880190
RO 2	0724064	5879683

RO 1 located in compartment 450-1 is unmarked and approximately 0.25ha in area. The 20m exclusion zone has been logged. RO 2, in compartment 446, is an unmarked outcrop greater than 0.1ha that has no exclusion and the outcrop itself has been logged.

At the time of the audit, compartment 446-4 was active with approximately one third of the area logged. In the unlogged area SEFR found an unmarked outcrop greater than 0.1ha at RO3 0724965, 5878951. There were some trees marked for retention within what should have been a 20m exclusion zone suggesting that the SFO had not identified the outcrop, and it was to be logged.

Two adjoining compartments were to be logged, and numerous outcrops were observed by SEFR in these compartments. The harvest plan for all of these compartments show several mapped outcrops and large areas of rocky terrain. The breach report submitted to the EPA highlighted the probability of future breaches and requested urgent action to prevent these possible future breaches.

SEFR conducted a second audit of 446-1 on 2/6/11. The focus of this audit was to see if there was any change in the identification of outcrops by FCNSW especially RO3 from the first breach report, 7 months previous. Unfortunately there was no improvement and in fact there was a failure to identify mapped outcrops correctly.



RO3 logged after DECCW notified.



Mapped 40m exclusion logged.

RO3 was found to be incorrectly marked with the edge of the exclusion located at the edge of the outcrop, not 20m from the edge, and so the exclusion zone had been logged. Another outcrop nearby was also incorrectly marked with the exclusion at the edge of the outcrop resulting in more exclusion zone logging.

Of greatest concern during this audit was when we inspected the large mapped (40m exclusion zone) outcrop in 446-1. Again there was a failure by the SFO to correctly identify the edge of the outcrop, and therefore the correct 40m exclusion zone. Along a large length, the exclusion zone was only marked 16-20m from the edge of the outcrop. This outcrop is easily identified and shows the incompetence of FCNSW staff to correctly identify outcrops. A breach report was sent to the EPA.

SEFR undertook a third audit in January 2012, this time in adjoining compartment 444. Again we found breaches of 5.11 of the IFOA. Outcrops and exclusion zones had been logged. A machine was almost parked on an outcrop. Like the previous audits a breach report was sent to the EPA.

The EPA has taken over 700 days for the 2/6/11 breaches, and over 450 days for the January 2012 breaches to finalise their investigation and respond to SEFR. EPA only conducted one field visit in April 2011, resulting in only one of SEFR's four outcrops in compartment 444 being inspected. The three outcrop breaches in the second report (2/6/11) were regarded as part of the one mapped outcrop. If that is the case it means that the mapped outcrop should be three times the size than that mapped. This brings into question the adequacy of FCNSW's pre harvest surveys and increases the severity of this breach. EPA also found one outcrop breach that SEFR had not found.

The EPA agreed with SEFR that outcrops and or exclusion zones had been logged. The outcome of this investigation was an official caution for five outcrop breaches was sent to FCNSW.

1.12 Tantawangalo 2405-2, 2407-1, 2408-1

In mid 2010 SEFR visited all the compartments in Tantawangalo and Glenbog that were on the Plan of Operations for that year looking for rocky outcrops. Compartment 2407 was inspected and it was noted that this compartment and 2405 had undergone a thinning operation in 2006/7, in which FCNSW had failed to identify outcrops and had logged them.

When we received the harvest plan for 2405, 2407 and 2408 we again visited the compartments and found two more outcrops close to dump O in compartment 2405 that had been thinned in 2006/7. This confirmed our concerns that the planned logging operation would again impact on the outcrops. To this effect when it was noticed that logging had started, while in phone conversation with the acting manager of forestry in EPA, this concern was brought up and a subsequent email followed with GPS coordinates for an outcrop in 2407 and an accurate description of the two outcrops in 2405.

On the 20/11/12 SEFR went to these compartments and found that the two outcrops in 2405 near dump O had no exclusion and had been logged. The outcrop in 2407 was just starting to be impacted with a part of the 20m exclusion logged.

There was also a second crew, a thinning's crew working in compartment 2408-1, and another breach of logging an outcrop and 20m exclusion zone was found, along with the usual substandard marking of habitat and recruitment trees by FCNSW. On the 26/11/12 a formal breach report was sent to the EPA.

In January 2013 SEFR conducted a second audit of compartment 2405 and found two more outcrops that had been logged. Again another breach report was sent to the EPA regarding these breaches and we are awaiting their investigation into all these matters.

We hope that the outcome for this takes less than the nearly two years, for finalization of Yambulla 446. Of serious concern is that this is the second area that the EPA has been pre warned of probable breaches of 5.11 and yet this has failed to protect these outcrops. This failure by the EPA and the fact that third party rights to take FCNSW to court are denied leaves little options for the protection of rocky outcrops.

2. Discussion

This section will discuss some of the main causes of non-compliance by FCNSW with condition 5.11 of the Eden region IFOA-TSL.

2.1 Interpretation of condition 5.11

As shown in section 1 of this report, there seems to be a systemic failure by FCNSW to identify and protect those rocky outcrops that meet the requirements of condition 5.11 of the IFOA-TSL in the Eden region. FCNSW claim a difference in interpretation of the condition, between themselves and the EPA, as one reason for these breaches. It seems the statement, “*Only those areas where rocks and exposed boulders cover greater than 70% of at least a 0.1 hectare area.*”, in the note for the condition, is one reason for the difference in interpretation. SEFR asserts that the condition as written is easily interpreted and requires only a quantitative, not qualitative, assessment for compliance.

Since the Glenbog 2314-1, 2315-7 breach report (section 1.4), which resulted in FCNSW producing a field guide to enable better identification of rocky outcrops, SEFR has observed no improvement in compliance with condition 5.11. Considering the amount of breaches found in 2010 the situation seems even more dire.

In correspondence with the EPA in 2010, SEFR had been made aware that the field guide produced by FCNSW is in fact a flawed document. Of major concern to SEFR is why these flaws were not picked up by the EPA when the guide was first published over two years previous. This is one reason why there has been no increase in compliance by FCNSW with condition 5.11.

The current guidance note produced by the EPA in consultation with FCNSW is also a flawed document. It provides absolutely no help to the SFO to better identify outcrops. We would have thought that this document would have numerous photographs of outcrops to help the SFO's identify these.

2.2 Unsustainable yield

The High Quality Large (HQL) sawlog annual sustainable yield volume of 23,000m³ predicted by the Forest Resource And Management Evaluation System (FRAMES) (State Forests of NSW & Bureau of Resource Sciences, 1998) is totally unsustainable (Daines 2010). This was confirmed in 2010, when the then FCNSW Regional Manager Mr. Ian Barnes, stated that there was only a few years of multi-aged forest left in the region, instead of the six years that FRAMES estimated at this time period of the Regional Forest Agreement (RFA).

The multi-aged forests were to be the main source of HQL sawlogs from 1999 to 2016. The adoption of an increased HQL volume per annum with a decrease in the NHA than what was used in the FRAMES calculation of sustainable yield, along with FCNSW cutting above the committed RFA volumes for nearly 10 years (Daines 2010), has caused the timber supply problems faced by FCNSW.

The loss of NHA, and therefore sawlog volume, is also a major reason for the lack of compliance by FCNSW with this condition. In the Eden region FCNSW are now struggling to maintain HQL sawlog volumes that have to be met under Wood Supply Agreements (WSA) with their customers.

The few compartments that have a high number of outcrops, e.g. Tantawangalo 2433 (section 1.5) and Tantawangalo 2434 (section 1.8), would only amount to the loss of a few hectares of NHA and only a few cubic metres of HQL. The logging of these rocky outcrops that should be excluded is a desperate attempt by FCNSW to maintain supply at the expense of the threatened species that inhabit them. This cannot be classed as Ecologically Sustainable Forest Management (ESFM).

2.3 Enforcement of condition 5.11

As stated already, the time it takes the EPA to investigate and finalise breaches, most take six months with some taking nearly a year, means many breaches of the same conditions continue to be made during this time. This is then exacerbated by the fact that there have been only two prosecutions and only a limited number of fines for proven breaches over the last 10 years.

The only enforcement action by the EPA for all the breaches in section 1 of this report so far has been the issuing of warning letters to FCNSW. It is no surprise that these breaches continue to occur if that is the level of enforcement that is used by the EPA. Until there are fines and prosecutions for FCNSW there is no incentive for them to change what occurs in the field.

SEFR does acknowledge the lack of resources in the past of the Forestry Unit in the EPA as part of the problem with the time taken to investigate breaches of the IFOA. This report is in no way a personal attack on those officers but more the bureaucracy and politicians that decide on the allocation of resources for the Forestry Unit.

Notwithstanding the last paragraph, the handling of the Yambulla breach reports has been a complete debacle by the EPA. The time taken to investigate these breaches, the fact that only one site inspection was made and the failure to stop further breaches by FCNSW, all reflect very poorly on the EPA.

2.4 Contractor negligence

The logging contractors engaged by FCNSW are supposed to know and abide by the conditions of the IFOA licences. The harvest plan states all operations must comply with the IFOA, and the contractors sign off that they have received the plan and that they understand the conditions contained within the plan. The plan also states any non-compliance of conditions may lead to the issuing of penalty notices, licence suspension or prosecution.

There have been many instances where contractors have said to SEFR that they do not know, and do not need to know the licence conditions and rely on FCNSW to mark the compartment, and they just cut between the lines (*pers. com.*). Ignorance of the conditions is not a defence for non-compliance. Contractors have also said to SEFR, that they do not like driving their machines over rocks (R. Innes *pers. com.*). When the contractors see a large area of rock that has not been marked with an exclusion zone, they should immediately get the SFO to check that it is not a rocky outcrop before continuing.

Rather than just focusing on FCNSW with non-compliance issues, the EPA should also use their enforcement powers on the contractors as well. This would send a clear message that the contractors need to know and abide by the conditions of the IFOA and not just rely on FCNSW to mark the compartment properly.

3. Conclusion

Rocky outcrops provide important habitat for threatened species of fauna and flora and as such need to be protected from forestry operations. As shown in section 1 of this report, there is a complete lack of compliance with condition 5.11 of the IFOA-TSL by FCNSW and their contractors. The fact that prior to this condition coming into force, rocky outcrops have been damaged by forestry operations, these continuing breaches are compounding the harm that has already been caused.

Over the past five years the EPA has issued eight warning letters to FCNSW (sections 1.2, 1.3, 1.4, 1.5, 1.7, 1.8, 1.9 and 1.10) and one official caution (section 1.11), in relation to breaches of condition 5.11 of the TSL. This has resulted in no improvement in compliance with this condition. It is obvious that greater regulation and enforcement is required to address this situation. The time for warning letters has passed and future action must be in the form of prosecution of both FCNSW and their contractors.

The unsustainable logging of the forests in the Eden region that is one reason for the level of non-compliance also needs to be urgently addressed. Allowing this situation to continue will only mean there are more breaches on the ground, resulting in environmental damage. This applies to not only condition 5.11 but the IFOA as a whole.

The report on compliance of forestry operations by NEFA (Pugh 2011), and this report confirm a systemic and statewide failure by FCNSW to abide by the license conditions contained in the IFOA.

This report, while focusing on condition 5.11 of the TSL, is a microcosm of the failure of the IFOA as a whole, to protect threatened species and their habitat from the damage caused by forestry operations. There are many other conditions that also suffer the same level, and even greater levels of non-compliance, by FCNSW and their contractors. The IFOA only mitigates the damage, it does not stop the damage caused by forestry operations. Any non-compliance of the IFOA will therefore cause harm to the environment.

The entire regulation and enforcement regime of forestry operations must be completely overhauled and improved immediately. There has already been too much damage to the environment by forestry operations due to the lack of compliance with the IFOA.

Recommendations

- 1. That the EPA enforces the license conditions of the IFOA by way of prosecuting FCNSW to the fullest extent possible. The time for ineffective warning letters has way passed.**
- 2. The government provides extra money and resources to the EPA to enable the EPA to properly regulate FCNSW.**
- 3. The IFOA be amended to enable stop work orders by the EPA when breaches are identified to enable compensatory habitat in the logging compartment to be identified and protected.**
- 4. The Forestry Act be amended to reinstate third party rights to prosecute FCNSW.**

References:

Daines, S (2010), *ESFM? Ecologically sustainable forest management or ecologically she's finished mate: A report on the unsustainable logging of the Eden region*. South East Forest Rescue May 2010

Michael, D.R., Lindenmayer, D.B., Cunningham, R.B. (2010), *Managing rock outcrops to improve biodiversity conservation in Australian agricultural landscapes*. Ecological management and restoration, vol. 11, NO 1, p 43-50, April 2010

New South Wales Government (1999). *Integrated Forestry Operations Approval for the Eden Region*, December 1999, NSW Department of Urban Affairs and Planning, Sydney.

Pugh, D (2011), *Audit of compliance of forestry operations in the upper north east NSW forest agreement region*. North East Forest Alliance February 2011

State Forests of NSW & Bureau of Resource Sciences (1998). *Eden Forest Resource and Management System Report, A report undertaken as part of the NSW Comprehensive Regional Assessments*, Resource and Conservation Division, Department of Urban Affairs and Planning, Sydney.

Appendix A

Table of rocky outcrop breaches 2008-2013

Date	Compartment	Breach details	Action taken
21/4/08	Nullica 713-1,3	Unmarked outcrop and exclusion zone logged	Warning letter
17/8/08	Nullica 711-2	Unmarked outcrop and exclusion zone logged	Warning letter
3/11/08	Glenbog 2314-1, 2315-7	RO1 Unmarked outcrop and exclusion zone logged in 2314-1. RO2-4 unmarked outcrops and exclusion zones logged in 2315-7	Warning letter. FNSW self-audited, only confirmed RO2 as breach. FNSW to produce SFO field guide
25/4/10	Tantawangalo 2433-2,4	RO1-4 Unmapped outcrops and exclusion zones logged. RO5 40m exclusion zone logged	DECCW only audited RO1 to RO3. RO2 not a breach. Warning letter.
2/5/10	Mumbulla 2133	RO1-2 Unmapped outcrops and exclusions logged.	DECCW only audited RO1 and found no breach
8/5/10	Mumbulla 2135	Unmapped outcrop and exclusion zone logged.	Warning letter
19/9/10	Tantawangalo 2434-2	RO1-5 Unmapped outcrops and exclusion zones logged.	Warning letter.
19/9/10	Tantawangalo 2432-2	RO1-3 Unmapped outcrops and exclusion zones logged. RO4 unmapped exclusion zone logged.	Warning letter.
3/10/10	Glenbog 2363-1	Unmapped outcrop and exclusion zone logged.	Warning letter
3/11/10	Yambulla 450-1	Unmapped exclusion zone logged.	Official caution.
3/11/10	Yambulla 446-1	Unmapped outcrop and exclusion zone logged.	Official caution.
2/6/11	Yambulla 446-1	RO1-2 Unmapped outcrops and exclusion zones logged. RO 3 mapped 40m exclusion zone logged.	Official caution. OEH classed these 3 breaches as the same outcrop.
18/1/12	Yambulla 444-3	RO1-4 Unmapped outcrops and exclusion zones logged. OEH found 1 outcrop not identified by SEFR.	Official caution. OEH only investigated RO2
23/11/12	Tantawangalo 2405	RO1-2 Unmapped outcrops and exclusion zones logged	Awaiting outcome.
23/11/12	Tantawangalo 2407	Unmapped exclusion zone logged	Awaiting outcome.
23/11/12	Tantawangalo 2408	RO1-2 Unmapped outcrops and exclusion zones logged.	Awaiting outcome.
6/2/13	Tantawangalo 2405	RO3-4 Unmapped outcrops and exclusion zones logged	Awaiting outcome.

Total number of outcrops: 40

Total breaches: 21, 1 EPA (31- including 3 FNSW non breaches and 6 not investigated)

Not breaches: 3 FNSW, 2 EPA

Awaiting outcome: 7

Not investigated: 6