

WEDDING BELLS STATE FOREST SUPPORTING REPORT

Dailan Pugh, North East Forest Alliance, July 2011

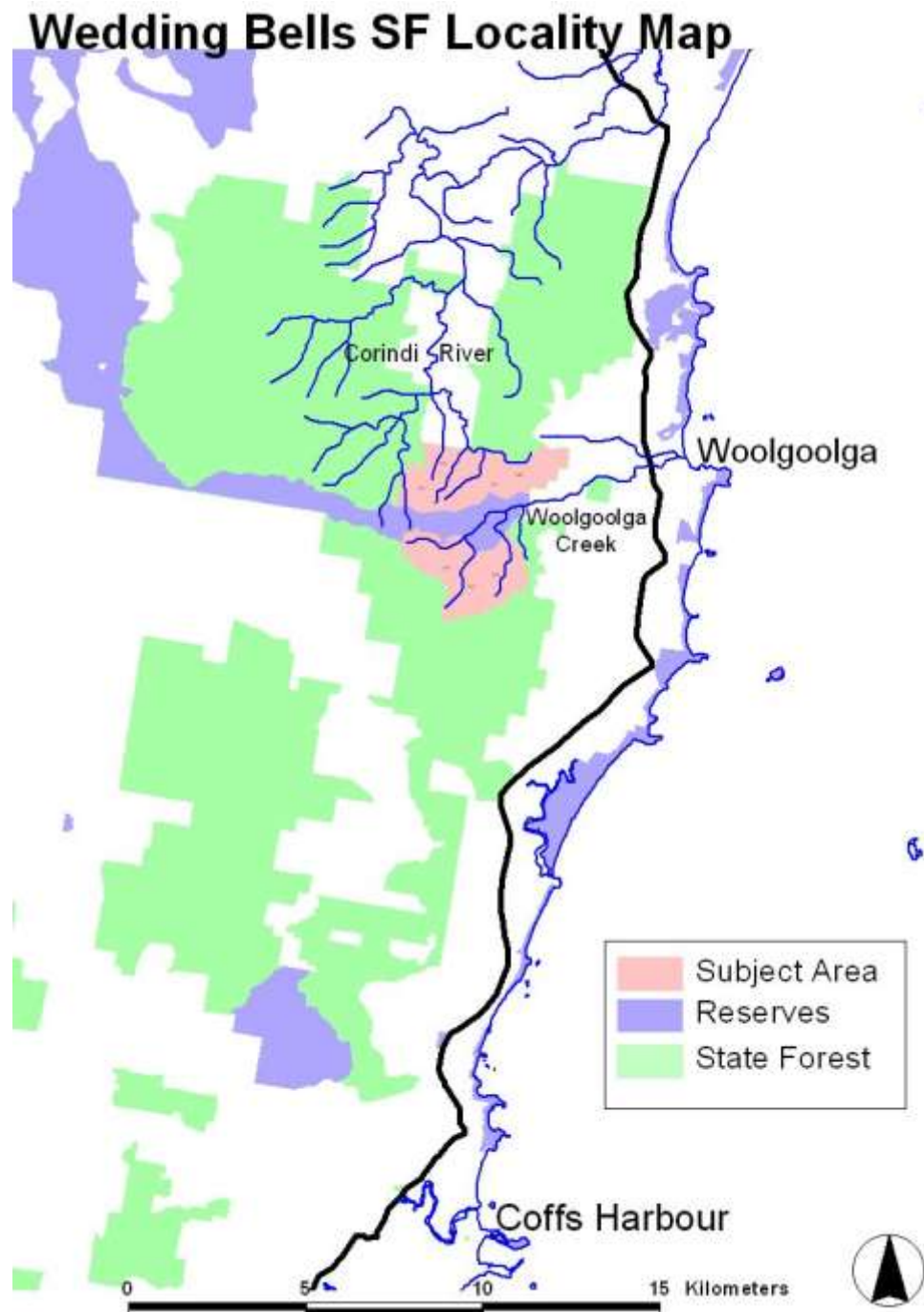


This may look like more than 90% canopy removal, but has been supposedly logged on the basis of limiting basal area removal to less than an average of 40% and not creating gaps using Single Tree Selection. This sort is now common practice.

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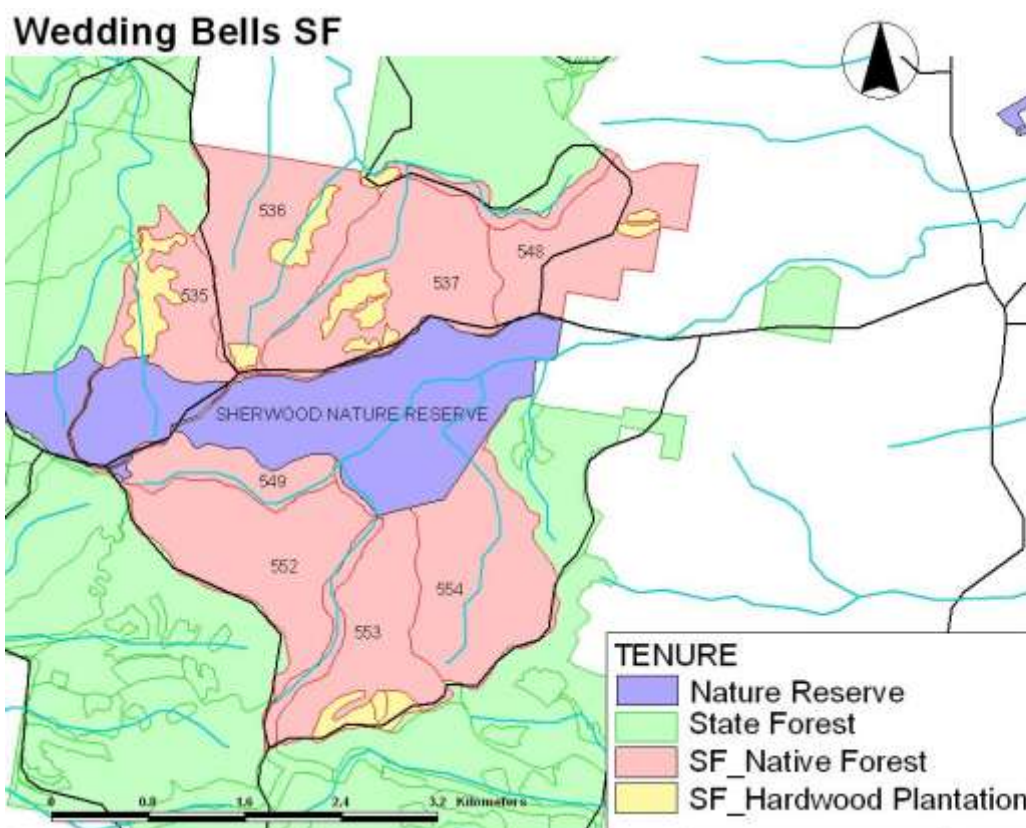
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This desktop assessment has revealed fundamental planning failures on behalf of Forests NSW to deal responsibly and legally with Endangered fish, Endangered Ecological Communities, Endangered plants and the Vulnerable Koala. These failures are systemic in Forests NSW's planning processes, have been going on for years over thousands of logging operations and have been overlooked and facilitated by the supposed independent regulators, despite a variety of complaints over the past 18 months.

This desktop assessment has been undertaken as a supplement to the June 2011 assessment by Mathew Sparks of compartments 548, 552 and 553 of Wedding Bells State Forest (Appendix 1). It involved a brief inspection with two botanists on 10 July to inspect a number of the breaches identified by Sparks. This expands on some of the issues identified in that report within the context of the planning documents for Compartments 535, 536, 537, 548, 549, 552, 553 and 554 of Wedding Bells State Forest.



It is apparent from this review that Forests NSW's systemic and deliberate breaches of NSW's environmental laws to protect Endangered Ecological Communities, Endangered and Vulnerable species, and water quality continue unabated, presumably because it is profitable for them and because the supposed regulators refuse to bring them to account. Issues identified herein of particular concern are:

1. Intentional failure to prepare Pre-Logging and Pre-Roading Aquatic Habitat Assessments within the catchment of known and potential habitat for the Endangered Oxleyan Pygmy Perch (Breaches Clauses 9.1(a) and 9.1(c) of the Fisheries Licence. It is also apparent that assessments were not undertaken in accordance with conditions 9.4(a), 9.4(b), and 9.5);
2. Failure to exclude unmapped drainage lines from logging and roading to protect downstream habitat of the Oxleyan Pygmy Perch (Breaches Fisheries Licence conditions 7.1(b), 7.1(c), 7.4(b), 7.4(c), 7.4(d), 7.4(e), 7.5(b), 7.5(c), 7.5(d), 7.6(a), 7.6(b), 7.7(b), 7.7(c), 7.8(a), 7.8(b), 7.9(a), 7.9(b), 7.9(c), 7.9(d), 7.9(e), 7.9(f), 8.1(b), 8.4(a), 8.4.1(a), 8.4.1(b), 8.4.2(a), 8.4.2(b), 8.4.3(a), 8.4.3(b), and 8.4.3(c));

3. Deliberate and systemic refusal to review and allocate FMZ 8 areas to the appropriate zone (Breaches Integrated Forestry Operations Approval 9, Forest NSW's 2005 ESFM Plan for UNE);
4. Intentional and repeated failure to adequately identify, assess and exclude from logging the Endangered Ecological Communities "Lowland Rainforest in the NSW North Coast Bioregion" and "River-Flat Eucalypt Forest on Coastal Floodplains of the NSW North Coast" (Breaches the National Parks and Wildlife Act 1974 Sections 118A and 118D, Threatened Species Licence conditions 5.1 (a) (i), (ii), (iii), 5.1 (g), 5.1 (f));
5. Intentional and systemic refusal to recognise the presence of the Vulnerable Koala and compile relevant records (Breaches Threatened Species Licence condition 8.5 (a)(i), (b)(vi)(viii)), or to take any specific action to protect populations within the area;
6. Intentional and systemic refusal to recognise the presence of Vulnerable and Endangered plants, compile relevant information (Breaches Threatened Species Licence condition 8.5 (a)(i), (b)(vi)(viii)), or consider the results of monitoring for key species;
7. Intentional maximisation of ground and understorey disturbance within the net logging area contrary to requirements to minimise disturbance to understorey and ground cover (Breaches Threatened Species Licence condition 5.17);
8. Failure to mark a Yellow-bellied Glider feed tree, mark and retain 15 feed trees within 100m, minimise damage and remove debris (Breaches Threatened Species Licence conditions 5.6(f)(iv), 5.6 (g) (ii), 5.6 (g) (iii), 6.17(f), 6.17(g)(i), 6.17 (g)(l)); and,
9. Failure to limit basal area removal to an average of 40% and avoid the creation of gaps using the IFOA approved Single Tree Selection silvicultural methods. While we recognise that the wording in the IFOA allows for leeway, we are concerned that the 80-90% basal area removal and short return times (down to 4 years here) now being practiced over large swathes of forest are a deliberate rorting of the intent of the IFOA.

The evidence is that Forests NSW will not willingly take any action to minimise their environmental impacts, nor comply with the intent of legislation, unless they are forced to by the letter of the law and rigorous enforcement. Unfortunately Fisheries NSW have proven themselves unwilling to require their colleagues in the Department of Primary Industries to comply with their legal obligations and have colluded with them to avoid many of the requirements of the Fisheries Licence (FL) for the past 12 years. There was just one FL audit/complaint dealt with in the Upper North East over the 10 years 1999/2009, and no enforcement action was taken. Our recent audits prove that the FL is being regularly breached, the problem is that there is no enforcement.

The Environmental Pollution Licence, which is meant to protect water quality, was amended in 2004 to exclude over 90% of forestry operations from its ambit, primarily to allow unmapped drainage lines to be logged. The outcome has been increasing laxity with implementation of the now unenforceable conditions. Before it was altered to exclude most operations the EPL appeared to be the only licence that was actively enforced.

The Office of Environment and Heritage (OEH) have similarly allowed lax interpretation of legal requirements to protect Endangered Ecological Communities and Endangered and Vulnerable species and proved themselves reluctant regulators. In the seven years 2002/2009 OEH (DECCW) undertook an average of 2.3 audits a year of the Threatened Species Licence in the Upper North East region, identified an average of 7 breaches per year, issued only 2 Penalty Infringement Notices (due to complaints) over the whole time, and undertook no prosecutions. Of most concern to NEFA is that despite verification of a number of our complaints made over Doubleduke SF in June and November 2010, and over Girard in August 2010, OEH have so far refused to take any disciplinary action what-so-ever.

Forests NSW have proven that they will not willingly comply with the intent of the environmental rules governing logging in north-east NSW. Both Fisheries NSW and the

Office of Environment and Heritage have failed to undertake their duties as regulators. After twelve years the regulatory process has failed to make Forests NSW achieve many basic legal requirements, let alone the intent of environmental regulation.

The NSW Government cannot go on sweeping this inept implementation of the Integrated Forestry Operations Approval under the carpet. Now is the time for the new Government to fix the problem, before they assume ownership of the problems created by the previous Government.

Compartments 535, 536, 537 and 548 are in the headwaters of the Corindi River (Bark Hut Creek) and 549, 552, 553 and 554 are in the headwaters of Woolgoolga Creek. The Corindi River encompasses known, critical and potential habitat of the nationally Endangered Oxleyan Pygmy Perch.

The Sherwood Nature Reserve was expanded in 2003 to include the Woolgoolga Creek Flora Reserve, which is central to these compartments.

The Department of Water And Energy (DWE 2009) has prepared a "Water Sharing Plan – Coffs Harbour unregulated and alluvial water sources – Background document". A DWE expert panel identified Woolgoolga Creek as one of the most vulnerable streams, having high sensitivity to both high and low inflows. It is also identified as having 5 threatened frog species, 6 threatened bird species, 1 threatened wet flora species, high recreation value and relatively high irrigation value. Both Woolgoolga Creek and Corindi River are identified as having "*high instream values*" and having a "*high risk to instream values*". Both are identified as providing a high contribution to the objectives of: *protect pools in dry times, protect natural low flows, protect important rises in water levels, maintain wetland and floodplain inundation, maintain natural flow variability, maintain natural rates of change in water levels, and maintain or rehabilitate estuarine processes and habitats.*

The wanton and deliberate environmental vandalism inflicted by Forests NSW on the headwaters of both Woolgoolga Creek and Corindi River, and the threatened species and ecosystems that occur there, must not be allowed to continue.

1. Fisheries Habitat Assessment

Forests NSW maintain that neither the Environmental Protection Licence nor the Fisheries Licence apply to these operations so as to allow them to log unmapped drainage lines. Contrary to these claims the Fisheries Licence does apply. The decision not to comply with the Fisheries Licence came days after a NEFA complaint of a similar failure to undertaken the required assessments and recognise the existence of the Oxleyan Pygmy Perch in Doubleduke State Forest. It thus appears to be deliberate.

Mathew Sparks identifies 8 trees felled in and across exclusion and buffer zones of drainage lines, 2 trees felled in first order buffer zones, 1 tree felled in second order buffer zone, as well as a variety of other breaches of unmapped drainage lies including 3 snig track crossings, machinery disturbance and inadequate drainage. Undoubtedly such breaches are far more widespread than identified in Sparks' sample. Some of these breaches occurred upstream from known and potential habitat of a nationally endangered fish species. As part of this review a number of breaches identified by Sparks were inspected and confirmed.



Snig track crossing of drainage line, 548. Logged drainage line 554.

The conclusions from the following discussion are:

- Since the Fisheries Licence was issued Fisheries NSW has failed to provide comprehensive records and maps of likely habitat of a range of Endangered fish, including the Oxleyan Pygmy Perch, to Forests NSW as required by the Fisheries Licence;
- For over a decade Forests NSW have failed to identify and protect habitat of Oxleyan Pygmy Perch, and this failure has been repeatedly condoned by Fisheries NSW;
- For over a decade Forests NSW have failed to prepare the required Fisheries Habitat Assessments for most logging operations, and when they do, they do not meet minimum standards;

- Forests NSW's planning 'Checklist to ensure Fisheries Licence Requirements Met' is fundamentally flawed and does not comply with the Fisheries Licence;
- It is evident that Forests NSW failed to give due regard to the limited information on Oxleyan Pygmy Perch belatedly provided to it by Fisheries NSW following NEFA's previous complaint, and thus failed to identify 4 compartments as Class 2 habitat, exclude logging from unmapped drainage lines or prepare required Aquatic Habitat Assessments;
- Despite Forests NSW claiming that NSW Fisheries provided maps showing potential habitat for the Endangered Eastern Freshwater Cod downstream from all the proposed operations, Forests NSW failed to identify the compartments as Class 2 habitat;
- Forests NSW refuse to recognise that their logging within, and construction of snig tracks across, unmapped drainage lines constitute "in stream works" and required a Aquatic Habitat Assessment to be undertaken; and,
- Forests NSW refuse to acknowledge that their undertaking of extraction operations within the required exclusion zones of unmapped drainage lines contravenes requirements of the Fisheries Licence.

It is revealing that since at least 2004 the Roads and Traffic Authority has been acknowledging the potential habitat of the Oxleyan Pygmy Perch in Wedding Bells State Forest in its planning processes, yet in 2011 Forests NSW are still trying to pretend it doesn't exist. If they continue with their wanton disregard for this species they may not have to pretend for much longer.

The Oxleyan Pygmy Perch is identified as Endangered under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* and the NSW *Fisheries Management Act 1994*. Actual and Potential habitat for this species has been identified downstream of the compartments. Threats to this species include runoff and sediment from stream crossings, logging operations and post-logging burns. Under the Fisheries Licence this species should have triggered an Aquatic Habitat Assessment and protection of unmapped drainage lines.

The 2005 recovery plan for the Oxleyan Pygmy Perch states:

Oxleyan pygmy perch have a restricted and patchy distribution. They are found in the swamps, streams and lakes of coastal lowland wallum heathlands, from Fraser Island and the Tin Can Bay area in south-east Queensland to Corindi (north of Coffs Harbour) in northern NSW.

Below is an extract from the report Preliminary Identification of Critical Habitat for the Oxleyan Pygmy Perch by NSW Department of Primary Industries (2010):

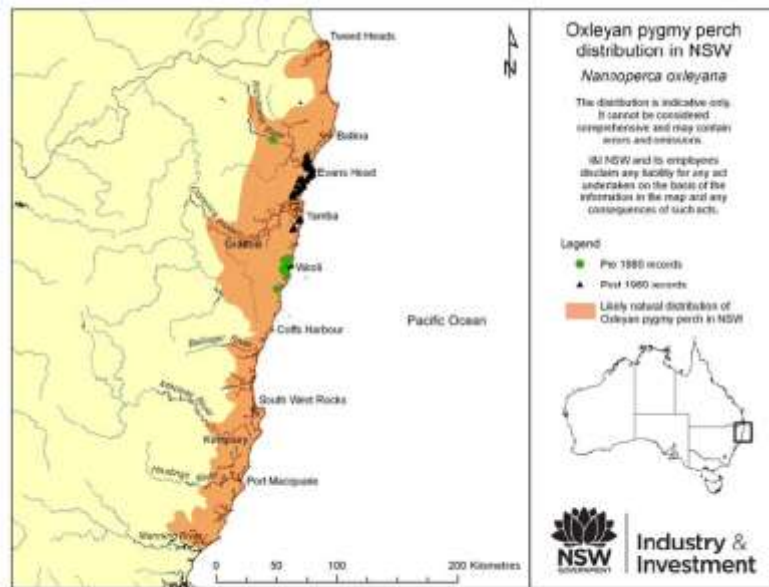
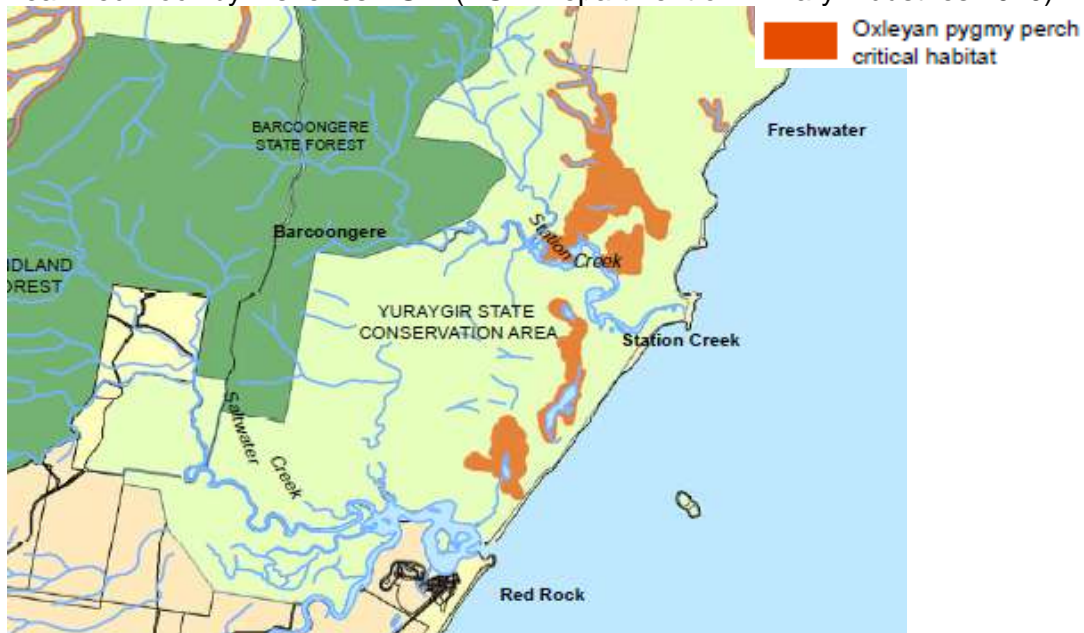


Figure 1: Existing records and likely natural distribution of Oxleyan pygmy perch in NSW.

Note that while it is poor resolution, this map identifies a pre-1980 record in the vicinity of Corindi (see actual habitat on the Corindi River map).

Proposed critical habitat has been mapped at one site on the lower Corindi River system near Red Rock by Fisheries NSW (NSW Department of Primary Industries 2010):



The RTA (2006) “Pacific Highway Upgrade – Woolgoolga to Wells Crossing Preferred Route Report” state:

The endangered fish species Oxleyan Pygmy Perch (Nannoperca oxleyana) is known to be present in streams in wallum swamps north of Forster ... Mapping provided by the Department of Primary Industries (NSW Fisheries) indicates that Redbank Creek and Cassons Creek within the study area is known habitat for the Oxleyan Pygmy Perch, while some of the upper tributaries of the Corindi River ... are potential habitat (Figure 3.14).

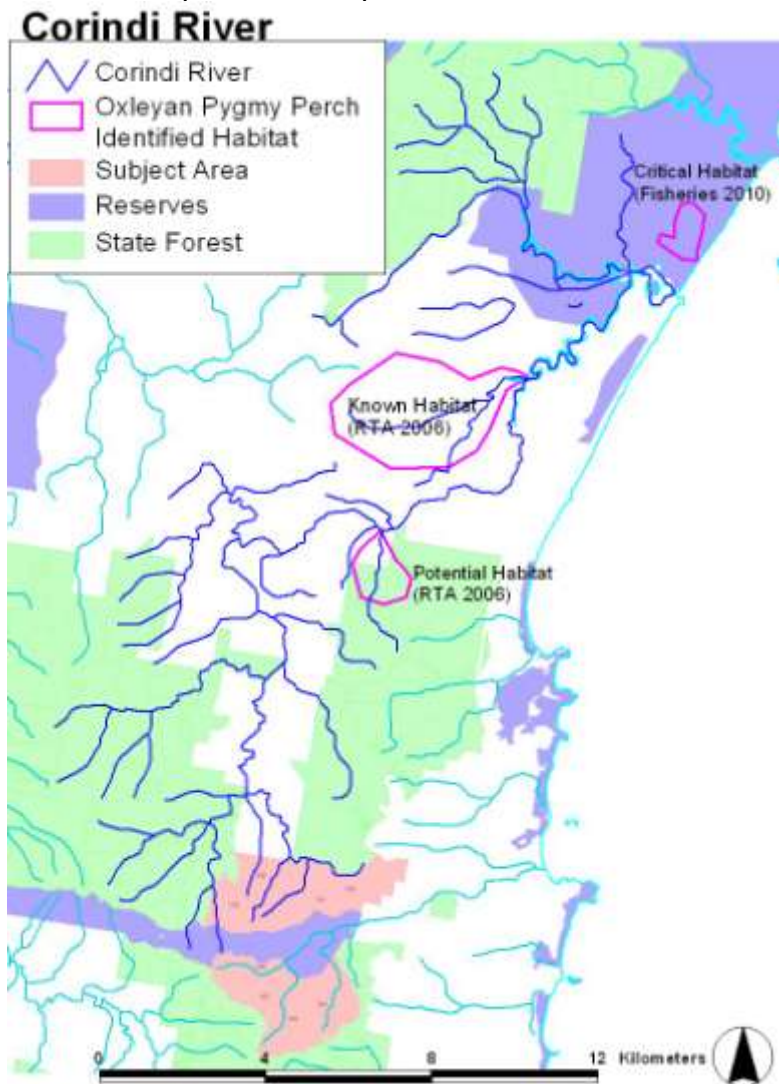
The RTA’s Figure 3.14 doesn’t cover the compartments in question, though it identifies known habitat for the Oxleyan Pygmy Perch on Redbank Creek and potential habitat on another creek within Wedding Bells SF, both of which flow into the Corindi River downstream from the compartments (see next map).

There is likely to be other streams within the Corindi River catchment that constitute potential habitat, and the river linking these areas has to also be potential habitat.

It is also likely that there is potential habitat downstream on Woolgoolga Creek. In relation to the Oxleyan Pygmy Perch the RTAs (2004) “Coffs Harbour Highway Planning, Sapphire to Woolgoolga, Ecological Assessment of Options C1 and E” states:

Option E has the potential to impact on the habitats of this species in the north of the study area, particularly in the vicinity of watercourses lined by Paperbark and the Paperbark Forests in Wedding Bells State Forest. While the occurrence of this species is considered less likely, a detailed assessment would be required to determine if Option E is likely to impact this species.

The restriction or absence of sandy soils (Milford 1999) and the presence of cleared / developed areas indicates that this species is not likely to occur to the south outside of Wedding Bells State Forest along Option C1. Nonetheless, the Oxleyan Pygmy Perch may occur in streams receiving runoff from Options C1, and as such the adoption of appropriate water quality controls would be required to minimise the potential for indirect impacts to this species.



The Department of Water And Energy (2009) “Water Sharing Plan – Coffs Harbour unregulated and alluvial water sources – Background document” identifies that the Oxleyan Pygmy Perch is “known or expected” to occur in the Corindi River.

The Fisheries Licence is “*Terms of Licence under section 220ZW of the Fisheries Management Act, 1994 to harm threatened fish species during undertaking of forestry related activities. Upper North East Region*”. The Licence establishes two critical questions for forestry operations:

1. Does Class 1 or Class 2 habitat occur in the area being proposed for logging?
2. Is a Pre-Logging and Pre-Roading Aquatic Habitat Assessment required to be prepared?

For this review Forests NSW were requested to provide any “Pre-Logging and Pre-Roading Aquatic Habitat Assessments” they had prepared. They provided “Schedule 5 – Checklist to ensure Fisheries Licence Requirements Met” prepared by Forests NSWs Harvest Planner for compartments 535, 536, 537 and 548 (15/11/2010), and 549, 552, 553 and 554 (21/10/2010). Aside from the dates, these checklists are identical, so one is presented in Appendix 2 for reference (note that the database attachments are omitted – see below for a description).

Forests NSW (29/11/2010) emailed NSW Fisheries informing them of their intent to undertake forestry operations, providing them with the operational plans, and stating that “*there are no new or replacement crossings proposed*” and that “*the Fisheries Licence does not apply at these sites*”.

It is not known if Fisheries NSW bothered to reply, though it is evident that they failed to recognise that the Endangered Oxleyan Pygmy Perch had not been duly considered and that the apparent identification of potential downstream habitat for the Endangered Eastern Freshwater Cod by them had been ignored. The Fisheries Licence did apply, though the supposed regulator did not recognise this.

Does Class 1 or Class 2 habitat occur in the area being proposed for logging?

In this case, a review of the information publicly and readily available over the internet (presented above) establishes that there is actual (including critical) and potential habitat for the Oxleyan Pygmy Perch identified within 100km downstream of Compartments 535, 536, 537 & 548 of Wedding Bells State Forest. Anyone with any expertise in freshwater fish would have identified this immediately.

Condition 7 of the Fisheries Licence states:

Class 2 aquatic habitat is defined as that part of a watercourse, wetland or other water body ... where the pre-logging and pre-roading assessment has determined that potential habitat of threatened species does occur within 100km downstream of the site of the proposed works, provided that the threatened species in question is likely to permanently, periodically or occasionally be present in fresh or estuarine waters.

Compartments 535, 536, 537 & 548 of Wedding Bells State Forest, while not identified in a pre-logging and pre-roading assessment, qualify as Class 2 habitat for the Oxleyan Pygmy Perch. Further assessment is required to identify whether other potential habitat occurs within the Corindi River catchment, which appears likely, or within the subject compartments. Further assessment is also required to identify whether potential habitat occurs within the Woolgoolga Creek catchment, downstream from 549, 552, 553 and 554, which also appears likely.

Aside from this, Forests NSW’s own checklists (Appendix 2) for both areas identify that “*NSWF supplied maps indicate potential distribution within 100km downstream of compartment*” for Eastern Freshwater Cod (EFC) only. While I doubt that actual habitat for the Endangered Eastern Freshwater Cod does occur downstream (unless stocked) this is irrelevant as this documented claim alone should have been sufficient for Forests NSW to

classify both groups of compartments 535, 536, 537 & 548 and 549, 552, 553 and 554 as Class 2 habitat.

Clause 7.1. of the Fisheries Licence applies to Class 1 and Class 2 habitat, with further divisions into hazard levels 1, 2 and 3. For unmapped drainage lines the requirement is to exclude logging from within 10m of unmapped drainage lines in both classes.

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

Even Forests NSW’s own guidelines for logging unmapped drainage lines 'Management of Filter Strips on Unmapped Drainage Lines' makes it clear that logging is not permitted in Class 1 or 2 habitat:

1.2.2. *Tree felling within the modified harvest zone*

h) *Trees must not be felled from within or into the modified harvest zone where:*

...

The unmapped drainage line is continuous with a mapped drainage line on which FL class 1 or 2 habitat occurs.

It is clear that if Forests NSW had of followed any correct and systematic planning process they would have identified at least Compartments 535, 536, 537 & 548 as Class 2 habitat for the Oxleyan Pygmy Perch and imposed exclusion zones on unmapped drainage lines.

Aside from this, Forests NSW’s own checklists (Appendix 2) for both areas identify that “NSWF supplied maps indicate potential distribution within 100km downstream of compartment” for the Eastern Freshwater Cod and that this alone should have been sufficient to classify both compartment groups 535, 536, 537 & 548 and 549, 552, 553 and 554 as Class 2 habitat. Please note that NEFA finds it hard to believe that Fisheries would have done this as it is unlikely that potential habitat of Eastern Freshwater Cod occurs downstream – though irrespective of our incredulity it is evident that for their planning processes Forests NSW assumed there was potential habitat downstream and failed to take the required action.

Is a Pre-Logging and Pre-Roading Aquatic Habitat Assessment required to be prepared?

The Fisheries Licence requires in Section 9 for Forests NSW to prepare “Pre-Logging and Pre-Roading Aquatic Habitat Assessments” (AHAs):

9.1 *General Requirements*

a) *Specified forestry activities must not be undertaken in any compartment unless a pre-logging and pre-roading aquatic habitat assessment has been conducted. This condition applies to all harvest operation planning not yet commenced.*

While this appears to establish a clear requirement, it is interpreted to mean that an Aquatic Habitat Assessment (AHA) is only required for instream works, it is assumed that the basis for this interpretation is 9.1(c):

c) The purpose of the pre-logging and pre-roading aquatic habitat assessments, relevant to this licence, is to establish if there is a requirement for a road to be constructed or re-opened or extraction operations to take place within the exclusion zone of a watercourse, and then to classify the aquatic habitat at the relevant site as class 1 or class 2, pursuant to condition 7.

While clause (c) does not appear to limit (a), in practice Forests NSW only undertake such assessments when “in stream works” are proposed (i.e. see Appendix 2). The Licence defines “*In stream works*” as “*Any activity being carried out within the incised channel or, where there is no defined bank, between the apparent edges of any watercourse*”. For some reason Forests NSW and Fisheries NSW narrow this down further by taking “in-stream works” to only involve the construction of a stream crossing. Though clause (c) is broader than just in-stream works in that it includes extraction operations within the exclusion zone of a watercourse.

Mathew Sparks’ assessment identified a range of in stream works, including the construction of 3 snig tracks across unmapped streams, and extraction operations that were undertaken within what should have been exclusion zones on watercourses, that were intentionally undertaken. So even with Forest NSW’s interpretation that (c) over-rides (a), according to Clause 9.1. a Pre-Logging and Pre-Roading Aquatic Habitat Assessment should have been undertaken.

Aside from this there is a chicken and egg argument if Forestry’s interpretation is correct:

- An AHA is required to be undertaken to identify Class 1 and 2 habitat (Condition 7)
- Exclusion zones are only required in identified Class 1 and 2 habitat (Condition 7)
- Therefore an AHA only needs to be prepared if extraction operations are to be undertaken within an exclusion zone identified in an AHA.

Forestry NSW seems have to used this contorted logic to limit the preparation of AHAs and the identification of Class 1 and 2 habitat to where crossings of mapped streams are proposed. Their planning “Checklist to Ensure Fisheries Licence Requirements Met” (Appendix 2) only triggers the need for AHA and the identification of Class 1 and 2 habitat where “*in stream works’ consisting of new/replacement or significant upgrade proposed*”. If such works are not proposed the checklist states “*no further assessment required*”.

Despite Forests NSW’s interpretation I have no doubt that the clear intent of the Fisheries licence is to require the preparation of Pre-Logging and Pre-Roading Aquatic Habitat Assessments (AHAs) on a routine basis, and certainly where there is known or potential habitat of threatened fish within 100km downstream. Forests NSW did identify potential habitat within 100km downstream for the Eastern Freshwater Cod and should have identified it for the Endangered Oxleyan Pygmy Perch, and did propose undertaking forestry activities within what should have been exclusion zones in Class 2 habitat. There can be no doubt that they should have prepared Pre-Logging and Pre-Roading Aquatic Habitat Assessments for both operations in accordance with Clauses 9.1 (a) and 9.1 (c) of the Fisheries Licence.

The Harvesting Plans for compartments 549, 552, 553 & 554 and 535, 536, 537 & 548 are plainly wrong to claim that “*Conditions of the Fisheries Licence do not apply in these compartments*” and that “*Unmapped drainage line harvesting is permitted in accordance with Best Management Practise*”.

Forests NSW’s checklists for compartments 535, 536, 537 and 548, and 549, 552, 553 and 554 state (see Appendix 2):

In accordance with Clause 9.2. of the licence ... FNSW has consulted the FNSW Fauna Atlas, the NPWS Wildlife Atlas, Information provided by NSW Fisheries under clause 5.1 of the licence and the database of the NSW Rivers Survey.

The results of the desk top review resolved that there were no species listed under Schedule 4 or 5 of the Fisheries Management Act 1994 in the relevant planning area. No known or potential habitat was identified in the area as determined in accordance with clause 9.2 or 9.3 of the Threatened Fish Licence.

Attached to the checklist are records for Eastern Cod and Oxleyan Pygmy Perch from Fisheries NSW's website (which are limited to Fisheries own limited records) and a copy of the relevant sheet of Fisheries' "Oxleyan Pygmy Perch Critical Habitat" from NSW Department of Primary Industries (2010). Given that the DPI (2010) report identifies an Oxleyan Pygmy Perch record from near Corindi (at poor resolution – see above) and that "critical habitat" occurs downstream on the Corindi River (see above) it is surprising that the checklist did not pick this up (as I did). There were apparently no records for threatened fish anywhere near these catchments in the FNSW or NPWS databases.

Section 9.2 "Desktop Review of Proposed Operation(s)" of the Fisheries Licence requires that a desktop review of proposed operations must be conducted prior to pre-logging and pre-roading aquatic habitat assessments and lists the range of data to record. It is evident that Forests NSW only made a minimal attempt to collate required data, though in part this failure is due to NSW Fisheries failure to provide required data to them. Clause 5.1 of the FL states:

NSWF will provide to SFNSW;

- i. maps, in appropriate digital format, of potential distribution,*
- ii. a database of records, and*
- iii. a written summary of distribution, species description and habitat preferences (as appropriate)*

for each of the species, populations or ecological communities listed on schedules 4 or 5 of the FM Act.

In November 2010 NEFA prepared the report "Preliminary Audit of Doubleduke State Forest Compartments 144, 145 and 146, Supplementary Report" that identified that the "Assessment of Proposal for In-stream Works in Aquatic Habitats" for compartment 144 was approved by Fisheries NSW, and it did not even recognize the existence of Oxleyan Pygmy Perch despite the compartments encompassing potential habitat and the apparent presence of actual habitat within 5 km downstream. There was no attempt to prepare an assessment for compartment 145 despite illegal in-stream works subsequently being undertaken. Our complaint stated:

Forests NSW apparently made no attempt to prepare a Pre-Logging and Pre-Roading Aquatic Habitat Assessment for Compartment 145, and the one prepared for compartment 144 is patently inadequate.

*The audited compartments occur within the identified "likely natural distribution" of the Oxleyan Pygmy Perch *Nannoperca oxleyana*, with a pre 1980 record of this species apparently in the vicinity of the junction of Jackybulbin Creek and Bungawalbin Creek, in or near Compartment 145 ...*

...

In contravention of [section 9.2] the assessment has not included a database search, has not identified and described records of Oxleyan Pygmy Perch, and has not included maps of the distribution of Oxleyan Pygmy Perch or Eastern Freshwater Cod. Section 9.2 has been clearly breached,

...

For compartment 144 the aquatic assessment was undertaken by Forester Flavio Bugno. The fact that he is apparently unaware of the existence of the Oxleyan

Pygmy Perch is proof enough that he is not suitably experienced and trained. It is apparent that Condition 9.5 of the Fisheries Licence has been breached.

...
There was no pre-logging and pre-roading assessment undertaken in compartment 145 to determine whether the potential habitat of threatened species does occur within the wetland and other potential Class 1 habitat subject to forestry operations. This makes the incursions into the wetland and unmapped drainage line identified above even more significant

When NEFA complained we were told by Forests NSW (J. Murray pers. com., November 2010) that they didn't need to consider the species because Fisheries NSW had not provided them with the required information. They considered that under the Fisheries Licence they only need to consider a species if records and data are first provided by Fisheries NSW, and that an Aquatic Habitat Assessment for compartment 145 was not required because in-stream works were not proposed. At that time Fisheries NSW agreed with this interpretation. NEFA do not agree that this is a valid interpretation.

Despite us discussing our concerns with both agencies and submitting a written complaint, Fisheries NSW refused to take any legal action against Forests NSW – not even a warning letter. It is extremely concerning that within days of our complaints over Doubleduke SF Forests NSW did their shoddy checklist for Wedding Bells, again failed to prepare an Aquatic Habitat Assessment and again ignored the presence of Oxleyan Pygmy Perch downstream.

Forests NSW and NSW Fisheries have colluded for over a decade to avoid preparing Aquatic Habitat Assessments and to not take any action to implement legal requirements to protect a number of Endangered fish on the pretext that the Fisheries NSW have not provided the required data to Forests NSW.

Clause 9.3 "Known and Potential Habitat" establishes a separate trigger for an AHA (9.3(a)) "where specified forestry activities are to be conducted within an exclusion zone that is known or potential habitat" of a threatened species, and 9.3(e) requires that:

Where no previous reliable surveys or assessments for those species listed in schedules 4 or 5 of the FM Act have been conducted in similar habitat in adjacent compartments in the previous ten years, aquatic habitat assessments of known or potential habitat must be conducted within the compartment.

Though 9.3(c) establishes that "potential habitat" is that "presented in documents provided to SFNSW by NSW". This is apparently partially relied upon by Forests NSW and Fisheries NSW to do nothing to protect Endangered species where Fisheries NSW have failed to provide maps of potential habitat to Forests NSW. This raises two key questions "Why have Fisheries NSW failed to provide the required data on threatened fish to Forests NSW for over 12 years?", and "Why does Forests NSW not act responsibly and take action to protect a nationally endangered species unless forced to by the letter of the law?"

The data on Oxleyan Pygmy Perch was meant to be provided to Forests NSW six years ago, as stated in the 2004/5 RFA report:

Preparation of distribution data for the Oxleyan pygmy perch (Nannoperca oxleyana), a species occurring in coastal areas of northern New South Wales, and Macquarie perch (Macquaria australasica) occurring in streams of the southern highlands and slopes, is complete. Both species could be affected by forestry operations and the distribution data is expected to be provided to Forests NSW shortly.

In November 2011, when complaining about Doubleduke, I was verbally assured by Fisheries NSW that the problem had been fixed by provision of the required data to Forests NSW and would not occur again. It now appears that only the report *Preliminary Identification of Critical Habitat for the Oxleyan Pygmy Perch* by NSW Department of Primary Industries (2010) was provided – though in this case the presence of proposed critical habitat

on the lower Corindi River and a low resolution map showing the Corindi record should have been enough to classify the headwaters of the river as Class 2 habitat or at least rate consideration.

As of June 2010 Fisheries NSW had still not provided the full documentation to Forests NSW. This oversight means that for the Oxleyan Pygmy Perch, which was listed as endangered over a decade ago and has been a specific target of the Fisheries Licence since 1999, Forests NSW has used their feigned ignorance to justify not taking any specific action to protect it for the past 12 years.

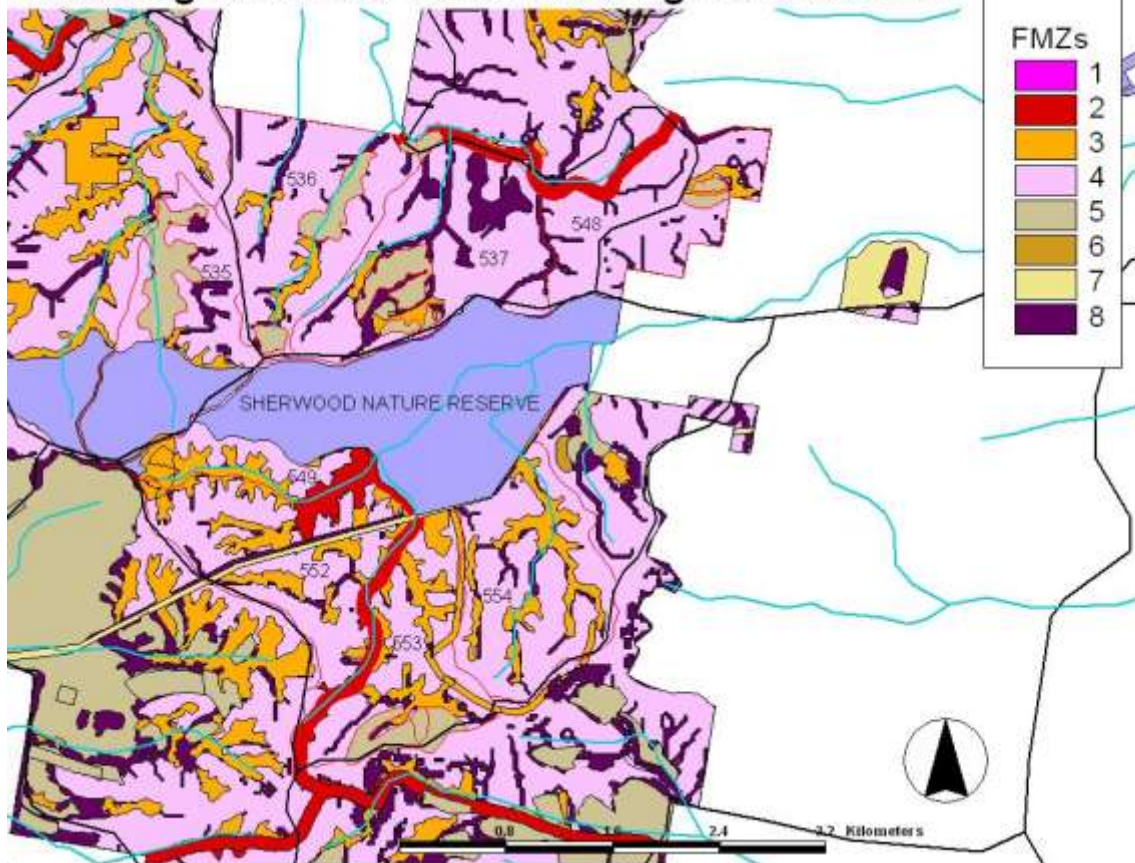
Fisheries NSW has also failed to provide records of the Endangered Purple Spotted Gudgeon to Forests NSW despite its being listed in January 2008, so it has been similarly ignored. It is also apparent that the last records of the Endangered Eastern Freshwater Cod were provided in 2002 and are in need of updating. This is a significant failure on behalf of Fisheries NSW.

The Fisheries Licence 9.4 (a)(b), details the data to be recorded in AHAs, most of which was not complied with in the checklist. Similarly 9.5(a) requires a minimal level of expertise for those undertaking AHAs, which was also clearly not the case with the person preparing the checklist. Even when they did prepare an Aquatic Habitat Assessment for one of a number of compartments at Doubleduke SF it was prepared by a Forester with no appropriate expertise and without fulfilling requirements (see above). This refusal by Forests NSW to employ anybody with expertise in freshwater fish to advise them or undertake Aquatic Habitat Assessments is an obvious problem that must be addressed.

2. Forest Management Zone 8

The Forest Management Zone 8 (FMZ 8) is meant to be an interim zoning and incorporates modelled streams, steep land and other attributes that are supposed to be subject to ground-truthing when preparing Harvest Plans and allocated to the appropriate FMZ. NEFA audits have failed to find any instances where this has been done. Despite NEFAs repeated complaints nobody seems to care. While OEH (DECCW) claim to have carriage of implementation of the IFOA our complaints of this don't rate a mention. Wedding Bells demonstrates that nothing has changed.

Wedding Bells SF: Forest Management Zones



The Integrated Forestry Operations Approval for Upper North East Region, made pursuant to Part 4 of the *Forestry and National Park Estate Act 1998*, states:

9. Forest Management Zoning System

(1) *In carrying out, or authorising the carrying out of, forestry operations in State forests, SFNSW must give effect to the document entitled, "Forest Management Zoning in State Forests" (State Forests of New South Wales, December 1999).*

In the 1999 Forests NSW document "Managing our forests Sustainably: Forest Management Zoning in NSW State Forests" FMZ 8 is described as:

An interim zoning of areas where field investigation is required to determine final Forest Management Zone classification. Field investigation will be undertaken as part of pre harvest planning.

These areas require field validation before allocation to a specific Forest Management Zone and are:

- i. Areas where there are gaps and/or known or suspected errors in 'forest type' or 'growth stage' GIS layers.*
- ii Areas of modelled GIS data where field verification is required to accurately map the features.*

The correct information will be mapped onto the harvesting plan, updated in the GIS data layers and then used to classify the area into the appropriate Forest Management Zone.

Management will be for protection under the same requirements as FMZ 3A until field investigation allows determination of final FMZ classification.

Forest NSW's 2005 ESFM Plan for UNE reiterates: *FMZ 8 areas require field assessment to identify into which of the seven FMZ they should be placed. This is normally done at the time of assessment for harvest planning.*

Forests NSW Sustainability Reporting Supplement 2009-10 states:

FMZ 8: *Land for further assessment - An interim zoning of areas where field investigation is required to determine final Forest Management Zone classification. Field investigation will be undertaken as part of pre-harvest planning. Management will be for protection under the same requirements as zone 3a until field investigation has taken place.*

In these compartments, the obvious intent was for Forests NSW to assess the FMZ8 areas (mostly unmapped streams) include the results in refined maps in the harvesting plans, and appropriately rezone the refined areas (presumably to FMZ3A). These are also required to be marked in the field as exclusion areas.

This planning failure to remap FMZ 8 areas is systemic and deliberate and has the effect of counting trees in what should be exclusion areas towards satisfying retention requirements in the nett logging area. It also increases the likelihood that they will not be identified and appropriately protected during logging. Obviously Forests NSW have no intent to zone any unmapped drainage line or any other FMZ8 area for protection, and have apparently got away with ignoring this requirement for over a decade. This failure represents a breach of the IFOA and a refusal by Forests NSW to implement a requirement of their own Management Plan.

3. Endangered Ecological Communities

Despite logging of Endangered Ecological Communities (EECs) being expressly excluded from the Threatened Species Licence (TSL) and thus a direct breach of the NPW Act, Forests NSW intentionally fail to identify their presence and extent in many harvesting plans and apparently have no protocols for delineating them in the field. As a consequence they have been found to repeatedly log them. Despite previous complaints of logging of EECs at Doubleduke and Grange over a year ago, OEH are yet to take any action. It is thus no surprise that Forests NSW still refuse to deal with EECs responsibly.

Forests NSW have identified the likely presence of the EEC Lowland Subtropical Rainforest in one harvesting plan, but not the other. The EEC Grey Box-Grey Gum Wet Sclerophyll Forest in the NSW North Coast Bioregion is identified as unlikely to occur in both harvesting plans. The EEC River-Flat Eucalypt Forest on Coastal Floodplains of the NSW North Coast was listed in 2004 and has been extensively mapped adjacent to compartment 548 in Coffs Harbour Council's Shire Wide Vegetation Mapping, though it is not considered by Forests NSW.

Forests NSW's mapping for these compartments identify three rainforest types from their "Subtropical Rainforest League", with most stands being typed as the combination 2/3:

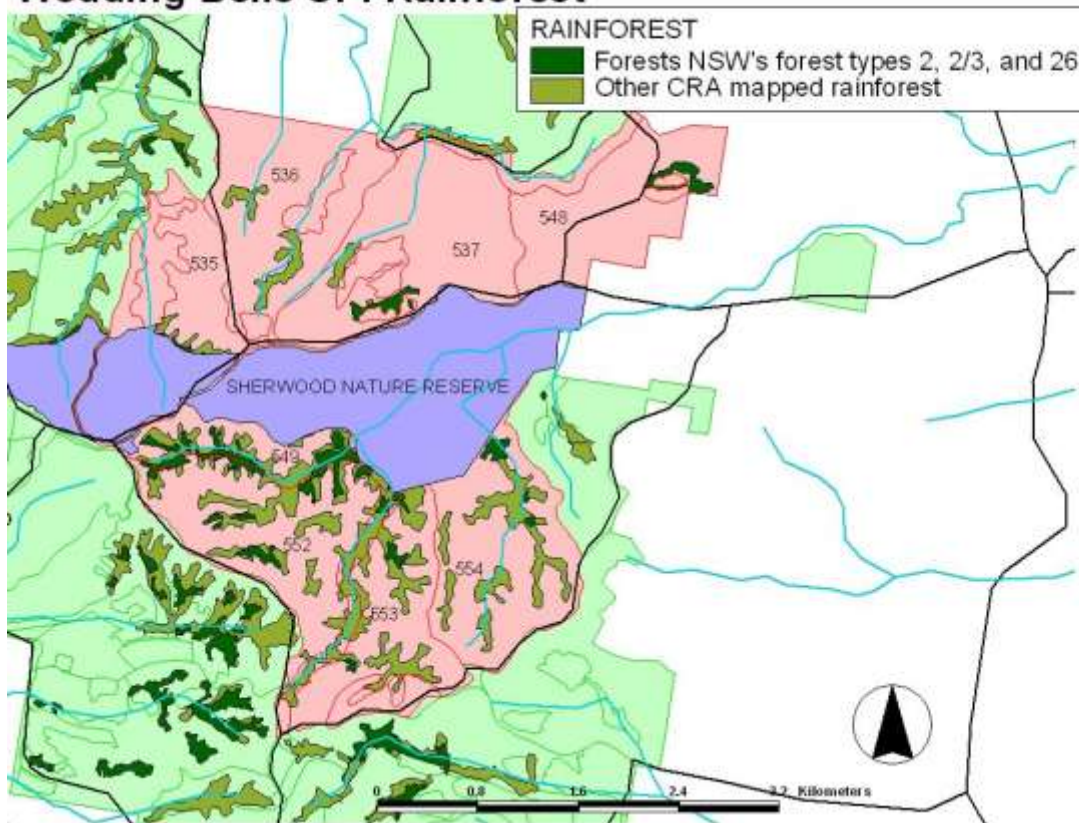
FT 2: Yellow Carabeen, commonly with Rosewood, Giant Stinger, Prickly Ash and Red Cedar.

FT 3: Crabapple-Sassafras-Corkwood-Silver Sycamore, commonly with Prickly Ash, Tamarind, Brown Beech, Yellow Carabeen, Rosewood, Red Cedar, Flame Tree, Eugenia, Socketwood and Silky Ash.

FT 26: Viney Scrub

Outside Forests NSW's mapped rainforest there is additional rainforest that has been mapped but not typed (CRAFTI). It can be assumed that its floristics is similar to the typed rainforest.

Wedding Bells SF: Rainforest



The Harvesting Plan for compartments 549, 552, 553 & 554 identifies that the Endangered Ecological Community “Lowland Rainforest in the NSW North Coast Bioregion” is “*likely to be present*” and recommends that FNSW should “*Identify and mark in field to exclude specified forestry activities*”.

The Harvesting Plan for compartments 535, 536, 537 & 548 fails to identify that the Endangered Ecological Community “Lowland Rainforest in the NSW North Coast Bioregion” may occur. This is despite Forests NSW’s FT 2/3 and more extensive areas of CRAFTI rainforest being present in the area.

Of those species identified by Forests NSW as comprising the above rainforest types, the Scientific Committee identifies most as being characteristic of Lowland Rainforest: Yellow Carabeen (*Sloanea woollsii*), Rosewood (*Dysoxylum fraserianum*), Giant Stinger (*Dendrocnide excelsa*), Red Cedar (*Toona ciliata*), Crabapple (*Schizomeria ovata*), Sassafras (*Doryphora sassafras*), Corkwood (*Endiandra* spp.), Tamarind (*Diploglottis australis*), Flame Tree (*Brachychiton acerifolius*), Socketwood (*Daphnandra* spp.), and Silky Ash (*Ehretia acuminata*).

The scientific committee identifies some of the rainforest alliances encompassed as:

- 6. *Archontophoenix - Livistona* suballiance
- 14. *Doryphora sassafras - Daphnandra micranthus - Dendrocnide excelsa Ficus*-spp.
- *Toona* suballiance
- 15. *Ficus* spp. - *Dysoxylum fraserianum - Toona - Dendrocnide* suballiance

Based on the above there can be little doubt that the rainforest identified as occurring in the compartment is indeed an EEC. On our brief inspection two botanists confirmed that logging had extended into the EEC “Lowland Rainforest in the NSW North Coast Bioregion”. There did not appear to have been any attempt to mark the boundary of this EEC as an exclusion zone. Therefore it is likely that all the 4 rainforest breaches identified by Mathew Sparks are

intrusions into the EEC “Lowland Rainforest in the NSW North Coast Bioregion”, and from our brief inspection it appears that many more breaches also occurred. Forests NSW’s failure to properly mark the boundaries of this EEC and exclude them from logging are thus breaches of Sections 118A and 118D of the National Parks and Wildlife Act 1974.



Logging and burning of the Endangered Community Lowland Subtropical Rainforest was found to be widespread.

The claim by Forests NSW that this EEC is “likely to be present” when, by their own mapping, it obviously is, is a failure to treat this EEC seriously. As it is obviously present, Forests NSW should have identified a protocol to delineate it in the field and applied this scrupulously. It is obvious that it is likely to extend outside mapped rainforest and that the existing rainforest protocol, if anybody bothered to apply it, is inappropriate for this EEC.

The Harvesting Plan for 435, 436, 437 & 548 identifies that:

Unmapped rainforest is to be identified and marked for retention in accordance with Forest Practices Circular 2005/02

The methodology specified in *Forest Practices Circular 2005/02* is not appropriate for this EEC as it does not encompass its full extent. We observed no evidence that rainforest had been delineated outside that mapped.

The undertaking of forestry operations within an EEC and the “picking” of trees within it for commercial gain is a clear breach of the NPW Act. It is evident that Forests NSW knew the EEC Lowland Subtropical Rainforest should have been excluded from logging, yet has made no attempt to identify it, in its own right, on the Harvesting Plan or apparently made any attempt to mark it in the field where it extends beyond mapped rainforest and exclude it from logging. Given that Forests NSW has already been identified as undertaking logging in this EEC in Grange SF it is apparent that they are unrepentant and have not tried to rectify their previous failures.

The EEC River-Flat Eucalypt Forest on Coastal Floodplains of the NSW North Coast occurs on periodically inundated alluvial flats, drainage lines and river terraces associated with coastal floodplains, generally below 50 m elevation, but may occur on localised river flats up to 250 m above sea level. The Scientific Committee identifies characteristic species as including Flooded Gum (*Eucalyptus grandis*) and Sydney Blue Gum (*Eucalyptus saligna*). The forest types Flooded Gum (48), Sydney Blue Gum (46), and Tallowood-Sydney Blue Gum (47) occur down to 30-40m elevation on the coastal floodplain to the east of compartment 548, and thus should have been identified by Forests NSW as an EEC. Coffs Harbour Council’s Shire Wide Vegetation Mapping identifies this EEC as being contiguous on private land. The Scientific Committee identifies that this EEC “*may adjoin or intergrade with several other endangered ecological communities, which collectively cover all remaining*

native vegetation on the coastal floodplains of New South Wales". Once again this expressed intent by the Scientific Committee to encompass all floodplain forests was highlighted to Forests NSW and OEH at Doubleduke, and yet Forests NSW still refuse to identify the presence of coastal floodplain forests in their planning processes or exclude them from logging. This area was not inspected, though the harvesting plan identifies it for logging, thus it is apparent that breaches are highly likely to have also occurred here.

The Threatened Species Licence states:

This licence does not authorise the carrying out of an activity that is likely to:

- 1. Harm an endangered population or an endangered ecological community (as far as animals are concerned);*
- 2. Result in the picking of a plant that is part of an endangered population or endangered community;*
- 3. Damage critical habitat; or*
- 4. Damage to the habitat of an endangered population or endangered community.*

The failure to exclude logging and machinery from the Lowland Rainforest in the NSW North Coast Bioregion and River-Flat Eucalypt Forest on Coastal Floodplains of the NSW North Coast Endangered Ecological Communities are breaches of TSL 5.1 (a) (i), (ii), (iii), 5.1 (g). The failure to mark the boundary of these EEC exclusion areas are breaches of TSL 5.1 (f).

It is over a year since intrusions into an EEC at Doubleduke were reported to OEH (DECCW) and still no action has been taken. It is no wonder that Forests NSW believe they can get away with this illegal logging.

4. Flora and Fauna Assessment

For some time we have been raising our concerns with OEH (DECCW) that Forests NSW are failing to consider a variety of species in their Pre-logging and Pre-roading Survey Reports, and consequently in logging operations. OEH has not responded to our concerns. We are particularly concerned that nothing seems to be being done to identify and protect Koalas and a range of threatened plants.

The Threatened Species Licence 8.4 "Survey documentation and reporting" requires:

- a) SFNSW must prepare a pre-logging and pre-roading survey report that must include the following:*
 - i. Information relating to all of the "Data to Record" sections referred to in this condition.*
 - ii. All raw data sheets.*
 - iii. Details of previous reliable surveys including, but not limited to, survey methodology, sampling intensity, sample placement and distribution, season of survey and weather conditions.*

The Threatened Species Licence 8.1 (d) requires that Pre-logging and pre-roading surveys must be conducted for those species that require the implementation of species-specific and site-specific prescriptions as per condition 1.2 and condition 6 (unless condition 7 is implemented for those species).

The standard format of the Pre-logging and Pre-roading Survey Reports in Part A fail to consider a range of species identified in Section 6 of the TSL as requiring species-specific prescriptions: Koala (6.14), Wombat (6.18), Common Blossum Bat (6.19), Spotted-tailed Quoll (6.15) and all threatened plants (6.22, 6.23, 6.24, 6.25, 6.26, 6.27). They also fail to consider maternity roosts of *Miniopterus australis* and *Miniopterus schreibersii* as identified in Section 1.2 (a) of the licence.

Clause 8.5 “Data compilation” makes it clear that these species should be considered:

- a) *The following data must be compiled prior to pre-logging and pre-roading surveys:*
 i. *All records of threatened species requiring species-specific or site-specific prescription held by, or available to, SFNSW. ...*

This is reinforced by Appendix B, Schedule 5, Table 2 “*Threatened fauna species which require the implementation of Species-specific conditions*”, which lists Koala, Common Blossum Bat, and Spotted-tailed Quoll.

The “Pre-logging and Pre-roading Survey Report for compartments 549, 552, 553 and 554” and the “Pre-logging and Pre-roading Survey Report for compartments 535, 536, 537 and 548” fail to comply with 8.5 (a)(i) in that they omit any consideration of Koala, Common Blossum Bat, Spotted-tailed Quoll, threatened plants, maternity roosts of *Miniopterus australis* and maternity roosts *Miniopterus schreibersii* in the tables “*Pre-survey assessment of threatened species “known habitat” or “potential habitat”, survey types and notification requirements for the planning area*” which are claimed to include “*Results of fauna and flora records databases search: species recorded within 2 km or 5 km*”.

For fauna *known habitat* is within 2 km of a record of a species (or 5 km of Spotted-tailed Quoll and microchiropteran bats). *Potential habitat* means suitable habitat within the species’ distribution.

Outside rainforest, all the forest types in these compartments are identified as “Preferred forest types” for Koalas, with primary browse trees being dominant in the widespread forest types 47 and 74. In the 1998 CRA data there are numerous records of Koalas within 2 km of these compartments:

- Cmpt 551 some 500 m from 551 (reliability of 5),
- Cmpt 550 some 1.2km from 535 (reliability of 5)
- Cmpt 557 some 1km from 553 (reliability of 5 – SF EIS data)
- Cmpt 557 some 310m from 553 (reliability of 5)
- Cmpt 561 some 1.2km from 553 (reliability of 5)
- Cmpt 559 some 1.2km from 553 (reliability of 5)

In the data available to us there are 6 other Koala records within 5 km. It can also be expected that there have been many subsequent records. The Coffs Harbour Koala Habitat mapping shows extensive areas of secondary and tertiary Koala habitat adjoining preferred forest type 47 -Tallowwood-Sydney Blue Gum - in compartment 548. Within this compartment the preferred feed tree Tallowwood seems to have been preferentially targeted for logging and a number of Grey Gums were observed with Koala scratch marks. Despite this, neither report identifies that these compartments contain known Koala habitat and there is no evidence that anything was done to reduce impacts on this species.

This refusal to consider Koalas has been a common problem in all our audit areas, yet our complaints have been ignored by OEH (DECCW). The Office of Environment and Heritage needs to ensure that the Koala is duly considered by identifying where it occurs and ensure that actions are taken to reduce impacts on their home ranges. Aside from this repeated failure to report the presence of Koalas, it appears that either the required searches for scats are not being undertaken or the prescription is simply inadequate. It is also evident that even where Koalas are found within the logging area (ie Yabbra SF) that Forests NSW are not complying with requirements to mark and protect feed trees. OEH don’t appear to care that the current process is being rorted and is ineffective.

Modelled habitat for Common Blossum Bat occurs within the compartments . Given the presence of mine shafts and nearby records of *Miniopterus australis* and *Miniopterus schreibersii* the potential for maternity roosts also exists. Without providing any details the Harvesting Plan for compartments 535, 536, 537 and 548 identifies that “*recent and reliable*

records exist within close proximity of the compartments" for Koala and Spotted-tailed Quoll. It is thus evident that all these species should have been duly considered in the Pre-logging and Pre-roading Survey Reports.

For flora, known or potential habitat means a compartment within which the species has been recorded, or "likely habitat" within the species "distribution as described in Schedule 2".

Part A of the Pre-logging and Pre-roading Survey Reports fail to identify any threatened plant species, despite there being at least 6 threatened plant species recorded within 5 km of the compartments, for at least 4 of which these compartments represent "potential" habitat within the meaning of the TSL. We do not have up to date data, though from what is available it is evident that:

- *Marsdenia longiloba* is an Endangered climber. Condition 6.23, that requires 20m exclusion zone around all individuals, applies. Schedule 2 identifies that it has a wide distribution and that likely habitat is wet sclerophyll forest, with rainforest species in understorey, which makes the compartments potential habitat. Quinn *et al.* (1995) identify "This species usually occurs in lowland wet sclerophyll forest, in ecotones between rainforest and WSF, and sometimes in areas with rock outcrops. It also occurs in subtropical RF and warm-temperate RF. It grows mostly below 200m altitude". Part D of the report for Cmpts 549, 552, 553 and 554 identifies that it has been recorded in 549 in 2001 – it is thus surprising it was not identified in Part A of both reports.
- *Quassia* sp. Moonee Creek is an Endangered shrub. Condition 6.25, that requires 20m exclusion zone around 90% of individuals, applies. Schedule 2 includes wet sclerophyll forest and tall dry sclerophyll forest as likely habitat and gives Wedding Bells SF as a locality which defines the compartments potential habitat. Quinn *et al.* (1995) identify its habitat as tall open forest (WSF) and disturbed WSF, on clay soil over metasediments, also dry open forest, 5-500m. There are old records 3.4 and 4.8 km from 535, and 4.2km from 536.
- Rusty Plum (*Amorphospermum whitei* - Southern Metapopulation Unit) is a vulnerable tree. Condition 6.27, that requires a monitoring program, applies. Schedule 2 description includes the old Woolgoolga Creek FR and identifies high probability habitat as including "wet sclerophyll forest with rainforest understorey elements", which makes the compartments potential habitat. Tweedie *et al.* (1993) identify its habitat as warm temperate, littoral rainforests and wet sclerophyll forests with a well advanced rainforest understorey, forest types 47, 48, 49, 37, 53, 2/3. While there is no mention of when or where they were found, Table 2 of both reports state "numerous records within compartments". There are a large number of old records within the Flora Reserve and nearby compartments.
- Milky Silkpod *Parsonsia dorrigoensis* is a Vulnerable vine. Condition 6.27, that requires a monitoring program, applies. Schedule 2 gives distribution as from Kendall to Woolgoolga, and includes wet or dry sclerophyll forest as likely habitat, which makes the compartments potential habitat. There are old records 3.2 and 3.5 km from 535.

Only one these species (*Amorphospermum whitei*) is considered in both Pre-logging and Pre-roading Survey Reports, and no details what-so-ever are provided of records, though they are mapped in both harvesting plans. On the brief site inspection 4 individuals were found that had been killed and damaged in the logging operation, within what would have been Lowland Subtropical Rainforest, at a vicinity where Forests NSW had failed to identify their presence. The prescription for this species is effectively the "Monitoring Plan for *Amorphospermum whitei*". It is undated though appears to have been prepared around 2000, the version I looked at was provided under FOI in 2008. It clearly states that logging where

this species occurs is expected to kill a number of individuals and that therefore monitoring will be undertaken for 2 years to ascertain the numbers killed and their regeneration ability. It states that results are required to be reviewed after 2 years. It is shameful that logging is still occurring under the same two year monitoring plan, that it appears the monitoring was never undertaken and the plan has never been updated. This is “scientific logging” – logging under a monitoring program that is never implemented and the prescription is never reviewed. This is what the agencies term “adaptive management”.

The record of *Marsdenia longiloba* in 549 is detailed in Part D of that report, though not mentioned what-so-ever in the other report (as it should have been). The other two species do not rate a mention. Contrary to this, and without providing any details the Harvesting Plan for compartments 535, 536, 537 and 548 identifies that “*recent and reliable records exist within close proximity of the compartments*” for *Amorphospermum whitei*, *Boronia umbellata*, *Hicksbeachia pinnatifolia*, *Macadamia tetraphylla*, *Marsdenia longiloba*, *Parsonsia dorrigoensis*, and *Phais australis* (note that *Quassia* sp still misses out). The belated mention of these species makes one wonder why most were not considered in the Pre-logging and Pre-roading Survey Reports and thus specifically targeted in those surveys.

This failure to properly consider threatened flora is again another systemic failing of Forests NSW’s assessments which has been repeatedly ignored by OEH (DECCW). It is not only Koalas that they don’t care about.

This is a significant systemic failure to consider all required species as the same standard table as in Part A is applied in other flora and fauna reports, such as for Compartments 146 and 150 Doubleduke SF, Compartment 144 Doubleduke SF, Compartment 145 Doubleduke SF, and Compartments 44-46 and 53-55 Girard SF. It is thus astounding that OEH (DECCW) has obviously allowed Forests NSW to undertake inadequate and flawed assessments for years.

Part A of the two Pre-logging and Pre-roading Survey Reports for this area only identify as an outcome of the data compilation a “Y” or “N” for whether there is a reliable record within 2 or 5 km. This contravenes Section 8.5 *Data compilation* (b) Data to Record (vi) and (viii) of the TSL, which includes requirements for:

A summary of those threatened species records collated under condition 8.5 b) iv. and v. above, including species name, Australian Map Grid co-ordinates, date of record, type of record (eg. observed, heard, road kill, hair analysis), observer’s name, and source of record where this information is available.

Habitat descriptions from Schedule 4 of this licence.

Part D “Other Records” of the Pre-logging and Pre-roading Survey Reports does record most of the required parameters, though fails to identify the source of the records. This failure to identify the source of these records makes it hard to ascertain where they come from and why they were not considered in Part A. It is apparent that only some of the species identified as having reliable records in Part A are detailed in Part D, so it is not apparent what the relationship is.

Again these data deficiencies are common across all Pre-logging and Pre-roading Survey Reports, though go unremarked by OEH.

In compartment 548 a tree beside Knobby’s Fire Road is clearly marked with a “YBG” and points towards a nearby Grey Gum with apparent feeding marks of the Yellow-bellied Glider. The presumed feed-tree was not marked, has had its top knocked out by a falling tree, and has debris left stacked around its base. The tree itself was not marked for retention (breaches 5.6(f)(iv), 5.6 (g) (iii), 6.17(f)), the required 15 feed trees within 100m were not marked for retention (breaches 6.17 (g)(l)) and it did not appear that they were retained (apparently breaches 6.17(g)(i)), and logging slash was piled around the base without there

being any apparent attempt to remove this debris (breaches 5.6 (g) (ii)). This is consistent with what is normally found. This tree is not shown on the harvesting plan and thus was apparently identified in the pre-harvest mark-up, yet then seems to not have been marked in accordance with requirements. This indicates a breakdown in implementation processes.



In compartment 548 a sign on a tree directs attention to a presumed Yellow-bellied Glider Feed tree (centre middle photo), that has had its crown damaged by a tree felled onto it and left as debris around its base.

While they are not subject to targeted surveys it is significant that there are records of Rufous Bettong nearby and Bush Stone Curlew within the old Flora Reserve. Both these species are meant to be protected by Condition 5.17 *Ground Habitat Protection*. As noted by Mathew Sparks:

I fail to see how the license condition 5.17, ground habitat protection, and the silvicultural technique of “*mechanical disturbance aims to ensure ground disturbance is sufficient to create seed beds for regeneration. The sfo is to map areas requiring additional disturbance and encourage knock over as much non-vigorous un-merchantable material as possible.*” can be reconciled



In the field deliberate and extensive disturbance within the net logging area was common, with little natural habitat retained outside exclusion areas. Here logging has extended right up to a stream head. Soil disturbance was deliberate and intensive, and the areas that escaped were covered in logging slash ready for post-logging burning (see cover).

Condition 5.17 *Ground Habitat Protection* states:

a) SFNSW must, to the greatest extent practicable, protect ground habitat from specified forestry activities. Ground habitat includes, but is not limited to, understorey vegetation, ground cover vegetation, thick leaf litter and fallen timber.

The evidence was that within the net harvesting areas of 552, 553 and 554 ground and understorey disturbance had been intentionally maximised, as intended by the harvesting plan. I fail to see how Forests NSW's flouting of this TSL requirement provides adequate protection for numerous ground species as intended by the licence. Once again the failure to abide by this prescription has been identified elsewhere (i.e. Yabbra SF, Girard SF) but our complaints have been ignored by OEH.

5. Environmental Protection Licence

The Environment Protection Licence was amended to exclude non-scheduled activities from the licence requirements on 17 May 2004. Since then Forests NSW have been progressively excluding more and more compartments from requiring Environmental Protection Licences (EPLs). The IFOA Report for May 2011 covers 145 compartments in the Upper North East and the EPL is only identified as applicable to 4 of these compartments. Thus 97% of forestry operations are thus now being undertaken without Environmental Protection Licences.

This is primarily being done to allow access to unmapped drainage lines, and the claim is made that other conditions will still be implemented. Though the evidence is that without any external regulation or legal enforceability the standards are rapidly declining and breaches of the licence conditions are now very common.

Thus Mathew Sparks' claims that at least one compartment in Wedding Bells should have been identified as a scheduled activity and thus subject to a licence is significant. Unfortunately we did not have data on slopes to verify or otherwise his claim that at least 20% of a compartment had slopes in excess of 18 degrees. Though the office of OEH should have available data to assess all of the compartments to see if this is correct for any of them.

Mathew Sparkes assertion that more than 30 timber stems (at least 40 cm in diameter at breast height) per hectare (when averaged across the nett harvest area) were removed from compartment 553 is supported by the fact that this was proposed to be the most heavily logged compartment in the area. His assertions thus should be audited by application of 2x250m random transects within the net logging area of compartment 553 as identified for "Tree retention" in Forest Practices Circular (2003/01) "Monitoring and Measuring Compliance of Operations".

If Mathew Sparks is correct then Forests NSW have breached the Environment Protection Licence firstly by failing to notify the then DECCW of a scheduled operation and secondly of deliberately logging unmapped drainage lines in contravention of Schedule 4 D6. It appears that there are likely to be many more breaches of the EPL.

The Upper North East Environmental Protection Licence (1.1) applies to all "scheduled activities", though only "notified" non-scheduled activities. The Licence states:

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

(1) the cutting and removal of timber (being sawlog and pulplogs) from a compartment, where:

- (a) at least 20% of the compartment has a slope greater than 18 degrees, and*
- (b) at least 30 timber stems (at least 40 cm in diameter at breast height) are cut and removed from each hectare of the compartment when averaged over the net harvestable area of the compartment, or*

(2) the construction of new access roads within a compartment for cutting and removal of timber as referred to in paragraph (1), or

(3) the construction of new access roads for hauling timber from more than one compartment.

For Scheduled activities and notified non-scheduled activities Schedule 4 D6 notes:

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

The Harvesting Plans for these compartments states:

This operation is a non-scheduled operation under the Environment Protection Licence issued under section 55 of the Protection of the Environment Operations Act 1997. Roading and harvesting operations are not licensed. All EPL conditions will

apply to harvesting and roading operations except for schedule 4 condition 6 relating to filter strips, protection zones and operational zones.

Mathew Sparks alleges Compartment 553 Wedding Bells is a Scheduled operation under the Protection of the Environment Operations Act. (POEO) and should have been covered by a Environment Protection Licence (EPL).

Mathew Sparks maintains that at least 20% of the compartment has a slope greater than 18 degrees, and (b) at least 30 timber stems (at least 40 cm in diameter at breast height) were cut and removed from each hectare of the compartment when averaged over the net harvestable area of the compartment. He undertook 5 stump counts of one fifth of a ha (100x20m) each around logging dumps 19 and 23. The average of these counts was 13 which equates to 65 trees per ha being removed.

The Harvesting Plan for 549, 552, 553 & 554 identifies that 67% of the basal area will be removed over 60% of the NHA with this offset by excluding logging from 40% of the NHA: To offset the increased logging intensities *“all of compartment 549 and the northern end of compartment 552 are offset areas not to be harvested ... within compartment 554 all areas assessed from Woolgoolga Creek Road ... are offset areas not to be harvested”*.

Given the increased intensity of logging operations in compartment 553 it is likely that Mathew Sparks assertion may be correct.

NEFA is also concerned with the intentional rorting of the intent of the Integrated Forestry Operations Approval to limit basal area removal to an average maximum of 40% in the nett harvest area using the Single Tree Selection (STS) silvicultural method. This is being deliberately rorted by increasing logging intensity within part of the harvesting area and offsetting this with reduced (or no) logging in another part of the area. In this case the maximum intensity is still meant to be 67% basal area removal over 60% of the net harvest area, though it appears more like 80-90% removal in large swathes of forest. NEFA considers that while the letter of the IFOA is vague and allows for averaging, the extensive areas now subject to intensive logging is a deliberate rorting of the intent of the IFOA which was to limit the intensity of operations and stop clearfelling using STS.

There is no specified minimum return time for STS. While STS was planned to have a rotation of 15 years this is not what is happening, some of these areas were previously logged as recently as 2007. So the offset areas can be logged within a few years, and the areas subject to lower intensity logging can be re-logged at a higher intensity. Forests NSW are clearly rorting the intention of the approved silvicultural methods.



Compartment 554, note the extremely low canopy retention outside exclusion areas. Cover shows similar area in 552 after post logging burning. There has been no intent to comply with the requirement of an average of 60% basal area retention (or even the reduced 33%) over these areas.

APPENDIX 1. COMPLAINT BY MATHEW SPARKS

Matthew Joe sparks

“*Forest Services*”

Wyaliba

RE: License audit of compartments 552,553 and cpt 548 wedding bells state forest upper north east region. (5km west of the nsw town of woolgoolga)

A. I allege Compartment 553 wedding bells is a Scheduled operation under Protection of the environment operations act. (POEO) This compartment should have been covered by an Environment protection license (EPL).

B. I allege that pollution of waters as defined under the POEO has occurred in cpt 552,553 and 548. This pollution has occurred because of planned breaches of the E.P.L and the fisheries license by Forests NSW.

The Harvest plan details the intent with which fnsw have deliberately and knowingly breached this POEO act to avoid the license that would have been required by a scheduled operation.

FNSW have listed these cpts harvest plan as being singled out for the deliberate logging of unmapped drainage lines in contravention of the EPL and Fisheries licenses. This was confirmed in the field with observations. (see site specific breaches listed below)

These compartments are also listed in the plan as requiring 67% removal of basal area at a rate of 30 cubic meters per Hectare, This intensity of logging compounded the pollution issues in these cpts, the plan mentions “*mechanical disturbance aims to ensure ground disturbance is sufficient to create seed beds for regeneration. The sfo is to map areas requiring additional disturbance and encourage knock over as much No-vigorous un-merchantable material as possible.*” I allege that pollution waters has occurred as the direct result of the combination of these “silver cultural techniques”. There is no doubt in my mind that this operation will have contributed to sediment loads at the mouth of Woolgollga creek and Corindi River.

C. Fisheries license, I allege Compartment 548 wedding bells state forest. Is class 2 aquatic habitats, and should have been licensed under the Fisheries act.

This means all logging of unmapped drainage lines within Cpt 548 was in breach of the fisheries license.

I allege that potential habitat for these fish does occur in this catchment. The Fisheries mapping of critical habitat (see below) shows that critical habitat is found downstream within the catchment of cpt 548 and Inspected 4 locations at red rock, two of which fairly obviously fulfilled the criteria for potential habitat for threatened animal. (See photos and map)

Oxleyan pygmy perch is a threatened species listed on Schedule 5 of the fisheries license.

And the license states:

*Class 2 aquatic habitat is defined as that part of a watercourse, wetland or other water body where the pre-logging and pre-roading assessment has determined that potential habitat of threatened species does not occur within 2km upstream and 5km downstream of the site of the proposed works, but where the pre-logging and prerooting assessment has determined that **potential habitat** of threatened species does occur within 100km downstream of the site of the proposed works, provided that the threatened species in question is likely to permanently, periodically or occasionally be present in fresh or estuarine waters.*

D. Threatened species license. I allege deliberate documented breaches of conditions 5.6, tree retention and 5.17 Ground habitat protection.

This intended intensity of logging has resulted in what can only be viewed as a deliberate breach of condition 5.6 of the threatened species license “ tree retention” because of the resulting lack of older trees in the harvest area the only deliberately protected trees with in the harvest areas itself was the seed trees . This operation also targeted areas of tallwood and Sydney blue gum for severe treatment, not leaving much for the koalas which this area is reputed to be the heartland of. The plan mentions leaving 50m spacing’s between these seed trees I calculate that this is 15 retained trees per 2 ha not the required 20 that the T.S.L specify’s, in the field the spacing is greater than 50m.

Specifically I believe there is a lack of retained trees around dumps 17,20and 21 in cpt 553 and dumps 11 and 11a in cpt 552.

I fail to see how the license condition 5.17,ground habitat protection, and the sivercultral technique of “*mechanical disturbance aims to ensure ground disturbance is sufficient to create seed beds for regeneration. The sfo is to map areas requiring additional disturbance and encourage knock over as much No-vigorous un-merchantable material as possible.*” can be reconciled

Field locations of alleged breaches of licenses (red are breaches where pollution of waters has occurred)

Compartment 552. Woolgoolga creek catchment.

1.Map ref: 0512573/6665954 Tree cut 13.5m from second order drainage line.

2.Map ref:0512575/6665915 two trees cut 8 meters and 9 meters from 1st order drainage line.

3.Map ref: 0512254/6666255 Intrusion in to unmapped rainforest by logging machinery. 20+ palms killed

4. Map ref: 0512238/6666249 intrusion in to unmapped rainforest by logging machinery 20+ palms killed.

5. Map ref: 0512655/66649. trees felled across unmapped filter strip.

6. Map ref : 0511969/6666268 intrusion in to unmapped rainforest by logging machinery 20+ palms killed.

553 Woolgoolga creek catchments

7. Map ref: 0513881/6665658 Unmapped drainage line. Four trees cut at 1,2 and 6 meters from center. Snig track crossing at angle to DL. Skewing of tracks in filter strip. Trees felled across filter strip. snig track at 16 degrees undrained for 50m, joins this DL at its apex this track has now washed out polluting this creek.

8. Map ref: 0513881/6665658 crossing of drainage feature no rollover within 30m.

9. Map ref: 0513846/6665824 tree felled across unmapped drainage line.

10. Map ref: 0513798/6665756 sing track spoil in filter strip of unmapped Drainage line.

11. Map ref: 0513852/6665403 snig track runs undrained into filter strip.

12. Map ref 0513848/6665398 Snig track runs undrained into filter strip.

13. Map ref: 0513199/6665509 Intrusion in to unmapped rainforest by logging machinery.

14. Map ref: 0512964/6665607 tree cut in ridge and head water corridor (43m from center) earth works to 30m. (Supposed to be 50m exclusion)

15. Map ref: 0512493/6665936 trees felled across filter strip of unmapped drainage line.

16. Map ref: 0512804/6665946 120m of road (5 deg) drains in to buffer of unmapped drainage line.

17. Map ref: 0512994/6665607 45m of undrained snig track 18 degrees heads of toward drainage line buffer.

18. Map ref: 0513130/6666100 road drains through bush on to snig track then of in to unmapped filter strip.

19. Map ref: 0513900/6665800 part of dump 23 and 130m of road, undrained at 5 degrees.

20. Map ref: 0513899/6665683 120m Forman's road at 5 degrees undrained.

21. Map ref: 0510530/6664535 200m of power road inadequately drained with the use of "flaps" the use of these flaps have polluted a nearby mapped drainage line.

Compartment 548. Corindi river catchment.

22. Map ref: 0514537/6668614 tree felled 9m from center of unmapped drainage line snig track crosses drainage line at 45% angle, skewing of tracks and earthworks within filter strip.

23. Map ref 0514602/6668539 Snig track across unmapped drainage line, tree cut 2m from drainage line.

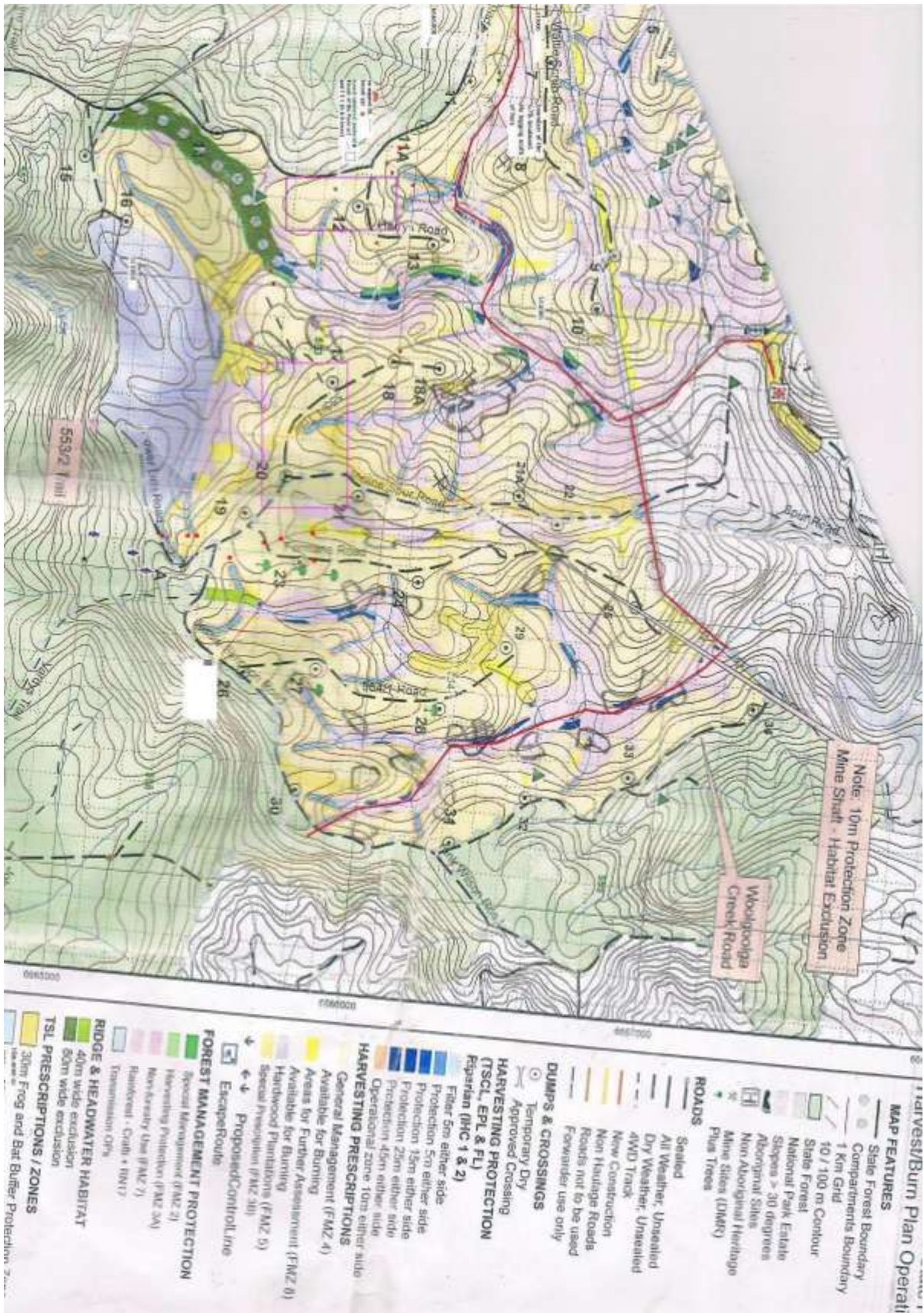
24. 0514648/6668956 tree felled in drainage line (unmapped).



Alleged, Potential habitat of the Oxleyan pygmy perch on Coridi river (near red rock



Mapref:0520726/6681513)



APPENDIX 2 FNSW AQUATIC HABITAT ASSESSMENT CHECKLIST

548, 535-537 W BELLS

FNSW – North East Region

Harvest Plan Checklists & Documentation

6. SCHEDULE 5 - CHECKLIST TO ENSURE FISHERIES LICENCE REQUIREMENTS MET

	QUESTION	Y/N /NA	FL/F ACT CONDN	COMMENTS
1	NSWF supplied maps indicate potential distribution within 100km downstream of compartment (14/5/2002 [date of latest map])	Yes	FL 5.1	EFC only
2	Exclusion, Buffer and Special Operational zones on Op. Map	Yes	FL 7.1	
3	Wetlands in cpts	No	FL 7.2	
4	Wetland exclusion zones on Op map	NA	FL 7.2	
5	Other water bodies in cpts	No	FL 7.3	
6	Other bodies exclusion zones on Op map	NA	FL 7.3	
7	Are "in stream works" consisting of new/replacement or significant upgrade proposed	No	FL 1	If NO, no further assessment required (8-13 = N/A) Skip to 14
8	Are these "in stream works" proposed within either a) 5km upstream of potential distribution of species as provided by NSWF; or b) Class 1, 2 or 3 aquatic habitat (as defined in "fish passage requirements for waterway design)	NA	FL 1,5.1 F ACT 199	If NO, no further assessment required (9-13 = N/A) Skip to 14 If b) complete aquatic habitat assessment and forward aquatic habitat assessment to NSWF (Skip to 14)
9	Aquatic habitat assessment completed	NA	FL 9	
10	Class 1 aquatic habitat of threatened species in cpts	No	FL 7	If NO, no further assessment required (11-13 = N/A) Skip to 14
11	Are "in stream works" (new/replacement crossings) proposed within Class 1 Aquatic Habitat of threatened species	No		If NO, no further assessment required (12-13 = N/A) Skip to 14
12	Design criteria and calculations complete and documented	NA	FL 8.2.1, FL 8.2.2	
13	Inspection conditions for "In Stream Works" documented in plan.	NA	FL 8.2.3	
14	Notification to NSWF provided (one month in advance of proposed works for new/replacement "in stream works" within Class 1 (Eastern Freshwater Cod or under Fisheries Act) aquatic habitat classes 1,2 or 3)	Yes	FL 8.2c), 8.2d)	
15	Is an exemption to conditions under FL 8.2 b) (relating to new and replacement crossings in Aquatic habitat Class 1 required	NA		If No – works can proceed
16	If Yes above, has NSW Fisheries approved (in writing) proposed works	NA		If Yes works can proceed

FNSW – North East Region

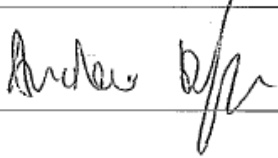
Harvest Plan Checklists & Documentation

In accordance with Clause 9.2 of the licence under 220ZW of the *Fisheries Management Act, 1994* to harm threatened fish species during undertaking of forestry related activities, FNSW has consulted the FNSW Fauna Atlas, the NPWS Wildlife Atlas, information provided by NSW Fisheries under clause 5.1 of the licence and the database of the NSW Rivers Survey¹.

The results of the desk top review resolved that there were no species listed under Schedule 4 or 5 of the *Fisheries Management Act 1994* in the relevant planning area. No known or potential habitat was identified in the area as determined in accordance with clause 9.2 or 9.3 of the Threatened Fish Licence.

¹ Harris J.H., and Gerhke P.C. (1997). **Fish and Rivers in Stress.** *The NSW Rivers Survey, Supplement A. Species Distribution and Abundance Data.* (NSW Fisheries Office of Conservation/ Cooperative Research Centre for Freshwater Ecology; Sydney/Canberra.)

Prepared by

Harvest Planner		Date: 21/10/10
Andrew Pitzen		